MaxLinear, Inc.

Delaware
(State or other jurisdiction of incorporation or organization)
5966 La Place Court, Suite 100, Carlsbad California
(Address of principal executive offices)

14-1896129
(L.R.S. Employer Identification No.)
92008
(Zip Code)

(760) 692-0711
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

<table>
<thead>
<tr>
<th>Title of each class</th>
<th>Trading Symbol(s)</th>
<th>Name of each exchange on which registered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common stock</td>
<td>MXL</td>
<td>The Nasdaq Stock Market LLC</td>
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</tbody>
</table>

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☑

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☑

Indicate by check mark whether the Registraent has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☐ No ☑

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☑ No ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

If an emerging growth company, indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant’s executive officers during the relevant recovery period pursuant to § 240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

The aggregate market value of the registrant’s common stock, $0.0001 par value per share, held by non-affiliates of the registrant on June 30, 2022, the last business day of the registrant’s most recently completed second fiscal quarter, was $2.4 billion (based on the closing sales price of the registrant’s common stock on that date). Shares held by persons who may be deemed affiliates have been excluded. This determination of affiliate status with respect to the foregoing calculation is not a determination for other purposes.

As of January 25, 2023, the registrant had 78,745,852 shares of common stock, par value $0.0001, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Information required by Part III of this Form 10-K is incorporated by reference to the registrant’s proxy statement or the Proxy Statement, for the 2023 annual meeting of stockholders, which proxy statement will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year covered by this Form 10-K.
MAXLINEAR, INC.

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PART I  

Forward-Looking Statements  

The information in this Annual Report on Form 10-K for the fiscal year ended December 31, 2022, or this Form 10-K, contains forward-looking statements and information within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, which are subject to the “safe harbor” created by those sections and involve substantial risks and uncertainties. These forward-looking statements include, but are not limited to, statements concerning our strategy, future operations, future financial position, future revenues, projected costs, prospects and plans and objectives of management. The words “anticipates,” “believes,” “estimates,” “expects,” “intends,” “may,” “plans,” “projects,” “will,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, we may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make.

These forward-looking statements include, but are not limited to, statements concerning the following:

- statements relating to the pending merger with Silicon Motion, including but not limited to the effect that the merger with Silicon Motion or failure to consummate the merger will have on our operations and financial condition, including indebtedness, the anticipated benefits and potential synergies of the potential merger with Silicon Motion, our ability to obtain the government authorizations necessary to consummate the merger, the anticipated timing of the People’s Republic of China’s State Administration for Market Regulation, or SAMR, review and final determination and the anticipated closing date of the potential merger with Silicon Motion;
- our ability to maintain an adequate rate of revenue growth and our future financial performance, including our expectations regarding our revenue, gross profit or gross margin and operating expenses;
- our ability to grow our business, including to expand globally and into other markets;
- the demand for our solutions, products and services we offer;
- our future performance;
- our ability to retain and increase sales to existing customers and attract new customers;
- statements regarding our business plans;
- statements regarding our ability to service our debt;
- the sufficiency of our present cash and cash equivalents balances and cash flows;
- future trading prices of our common stock and the factors impacting such stock prices;
- the efficacy of our internal controls, policies and procedures;
- the accuracy of the assumptions underlying our critical accounting estimates;
- expectations regarding our ability to expand our product portfolio or enhance existing products;
- the capabilities of our technology;
- expectations relating to market share and market opportunity;
- expectations regarding our supply chain;
- the effects of increased competition in our market and our ability to compete effectively;
- the effects of seasonal and cyclical trends on our results of operations;
- the effect macroeconomic conditions, geopolitical changes, supply chain issues, and the COVID-19 pandemic may have on our business and industry;
- the financial and legal impact of certain laws and regulations;
- the potential information technology failures and offensives, including security breaches and cyber-attacks and our ability to respond to such incidents.
costs associated with defending intellectual property infringement and other claims and the potential outcomes of such disputes, such as any claims discussed in “Legal Proceedings”;

our expectations concerning relationships with third parties;

our ability to attract and retain key personnel;

our ability to maintain, protect and enhance our brand and intellectual property;

economic and industry trends;

estimates and estimate methodologies used in preparing our financial statements;

our belief that we have adequately reserved for loss contingencies that are probable;

the effect certain factors may have on our tax liability, including but not limited to global and domestic tax reform;

the impact of tariffs imposed by the U.S. on goods from other countries and tariffs imposed by other countries on U.S. goods; and

our ability to identify, complete and realize the benefits of future acquisitions of or investments.

These forward-looking statements involve risks, uncertainties and assumptions that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in Part I, Item 1A, “Risk Factors” in this Form 10-K.

The forward-looking statements made in this Form 10-K relate only to events as of the date on which the statements are made. We do not assume any obligation to update any forward-looking statements made in this Form 10-K to reflect events or circumstances after the date of this Form 10-K or to reflect new information or the occurrence of unanticipated events, except as required by law.

These forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

ITEM 1. BUSINESS

Corporate Information

We incorporated in the State of Delaware in September 2003. Our executive offices are located at 5966 La Place Court, Suite 100, Carlsbad, California 92008, and our telephone number is (760) 692-0711. In this Form 10-K, unless the context otherwise requires, the “Company,” “we,” “us” and “our” refer to MaxLinear, Inc. and its directly and indirectly wholly-owned subsidiaries. Our website address is www.maxlinear.com. The contents of our website are not incorporated by reference into this Form 10-K. We provide free of charge through a link on our website access to our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as amendments to those reports, as soon as reasonably practical after the reports are electronically filed with, or furnished to, the Securities and Exchange Commission, or SEC. Refer to Intellectual Property Rights section below for a list of our trademarks and trade names. All other trademarks and trade names appearing in this Form 10-K are the property of their respective owners.

Overview

We are a provider of communications systems-on-chip, or SoC, solutions used in broadband, mobile and wireline infrastructure, data center, and industrial and multi-market applications. We are a fabless integrated circuit design company whose products integrate all or substantial portions of a high-speed communication system, including radio frequency, or RF, high-performance analog, mixed-signal, digital signal processing, security engines, data compression and networking layers, and power management. In most cases, these products are designed on a single silicon-die using standard digital complementary metal oxide semiconductor, or CMOS, processes and conventional packaging technologies. We believe this approach enables our solutions to achieve superior power, performance and cost relative to our industry competition. Our customers include electronics distributors, module makers, original equipment manufacturers, or OEMs, and original design manufacturers, or ODMs, which incorporate our products in a wide range of electronic devices. Examples of such devices include cable Data Over Cable Service Interface Specifications, or DOCSIS, fiber and DSL broadband modems and gateways; Wi-Fi and wireline routers for home networking; radio transceivers and modems for 4G/5G base-station and backhaul infrastructure; fiber-optic modules for data center, metro, and long-haul transport networks; as well as power management and interface products used in these and many other markets.

Our highly integrated semiconductor devices and platform-level solutions are primarily manufactured using low-cost CMOS process technology. CMOS processes are ideally suited for large digital logic implementations targeting high-volume
and low-cost consumer applications. Importantly, our ability to design analog and mixed-signal circuits in CMOS allows us to efficiently combine analog functionality and complex digital signal processing logic in the same integrated circuit. As a result, our solutions have exceptional levels of functional integration and performance, low manufacturing cost, and reduced power consumption. In addition, our proprietary CMOS-based radio and digital system architectures also enable shorter design cycles, significant design flexibility and low system-level cost across a wide range of broadband communications, wired and wireless infrastructure, and industrial and multi-market customer applications.

**Industry Background**

Over the last two decades, ubiquitous internet connectivity has driven exponential growth in data content, delivery, distribution, and consumption. We expect this trend to continue owing to:

- The rapid rise of social media and crowd-sourced real-time content;
- The proliferation of on-demand Over-The-Top, or OTT, video services such as Netflix and Amazon Prime;
- Rapid growth in data center and cloud-based services such as Amazon Web Services, Google Search and Apps, and AI/machine learning;
- The “remote economy” accelerated by the COVID-19 pandemic, the shift to work-from-home, and increasing dependence on video conferencing services such as Zoom;
- The proliferation of “Internet of Things”, or IoT, including internet-connected appliances within the home, manufacturing industries, and enterprises; and
- The advent and growth of broadband 4G/5G wireless mobile internet connectivity.

We expect a strong trend of continuous upgrade of network bandwidth and latency (i.e. the delay between sender and receiver) in order to keep pace with the exponential growth of network data traffic generated by the above activities. For example, cloud-based services increasingly require stringent low latency and extremely high-speed network connections between servers and storage within a data center. Also, IoT devices are generating an increasing amount of internet traffic and require low network latency. These IoT devices include smart speakers, smart lighting and other smart appliances in the connected home; commercial air-conditioning; video surveillance equipment; manufacturing machinery; and point-of-sale asset tracking systems. The reduction of speed and latency bottlenecks throughout networks is heavily reliant on wide spectrum or broadband, high-frequency circuits, and digital signal processing algorithms that can improve spectrum utilization efficiency. These trends are key drivers across many of our target end markets:

- **Connected Home:** Competing cable, fiber and other broadband video and data service providers are offering consumers bundled video, voice, and broadband data access and whole-home internet connectivity. These home data gateway modems or access devices are required to simultaneously receive, demodulate, and decode multiple signals, which are spread across several channels of frequency bandwidth over a wide frequency range and propagate on coaxial cable, copper, optical fiber or airwaves. Further, each gateway distributes content throughout the home using a broadband communication transceiver and network processor SoC based on Wi-Fi, Ethernet, Multimedia over Coax, or MoCA, and other wireline home data connectivity standards. As a result, the number of transceivers required in each home, whether for wireless or broadband wireline access and distribution, is greatly increased. For example, cable multiple-system operators, or MSOs, have ramped up deployments of multi-gigabit DOCSIS 3.1 home equipment and services, which “bond” multiple channels of frequency bands on a coaxial cable, to provide a higher aggregate “sum-of-the-channels” bandwidth to home subscribers. For example, within the home, Wi-Fi 6 uses wider bandwidth channels and channel-bonding, as well as more sophisticated means of wireless spectrum sharing by users, to provide seamless whole-home coverage.

- **Data Center Infrastructure:** Inside hyperscale data centers operated by Amazon, Google and others, high-speed optical transceivers connect racks of servers and storage through a hierarchical network of switches and routers. Cloud services and machine learning are dependent upon the ability to interconnect vast numbers of servers and storage inside a data center with extremely low latency and highest bandwidth to enable the entire data center to act as a single computing or data processing unit. Consequently, the data traffic growth inside the data center has significantly outstripped the data traffic flowing to and from the data center. Currently, while server connections are transitioning from 10Gbps to 25Gbps or 100Gbps links, router and switch connections are moving from 100Gbps to 400Gbps speed interconnections. The physical limits and challenges of removing the heat dissipated by these optical transceivers and switches are the primary barriers to even higher interconnect
Challenges Faced by Providers of Systems and RF Transceivers and Optical Interconnects

Designing and implementing high-frequency, high-bandwidth RF transceiver systems is extremely challenging owing to the high operating frequency ranges and wide frequency bands across which the communication signal is transmitted. As a result, system designers must contend with significantly more sources of interference and signal impairments than in the case of traditional narrow band, low-frequency communication systems. These narrow band single-channel RF transceivers often use conventional radio system architectures that require expensive discrete components, and are fabricated in costly special-purpose semiconductor technologies, such as silicon germanium, gallium arsenide, and RF enhanced CMOS process technologies.

The key challenges of capturing and processing high quality broadband communications signals include:

- **Receiving single or multiple RF/digital communications signals spanning multiple frequency bands over a wide spectrum.** Many of the advanced high-data-rate applications require the simultaneous RF reception of multiple channels or frequency bands in order to first aggregate, and then subsequently demodulate, the data signal, which is spread over discrete disparate frequency bands. Likewise, data transmission is achieved by disaggregating the user’s data signal and transmitting it over multiple available frequency bands spanning a wide frequency spectrum. For example, in the cable modem and broadband gateway markets, it is necessary to support the simultaneous reception of multiple channels of high-definition video, voice, and data applications in many system designs. OEMs meet these stringent requirements via multiple narrow- or wide-band RF receivers, each of which is dedicated to the reception of a single frequency band. An alternate, but highly challenging, approach involves Full Spectrum Capture, or FSC™, receiver SoCs, which can receive and digitize the entire available RF frequency spectrum in the transmission medium. They can then select and aggregate the relevant frequency bands over which the data is spread using analog and mixed-signal digital co-processing techniques. In contrast, use of multiple discrete conventional narrowband RF receivers is impractical due to increased design complexity, overall cost, circuit board space, power consumption and heat dissipation limitations. In addition, such narrowband receiver implementations suffer from signal integrity issues, reliability, and thermal challenges owing to the proximity of sensitive multiple RF receivers and discrete components in a limited PCB footprint.

The development of broadband, low power, integrated communication SoC solutions is at the heart of competitiveness across a range of different businesses spanning broadband wireline access, mobile data services, hyperscale cloud data centers, and cloud computation and storage markets. Additionally, the proliferation of increasingly complex high frequency, high bandwidth and low-power applications has led to a rapid increase in the demand for systems that require multiple RF, mixed-signal, and high-performance analog and digital signal processing transceiver SoCs.

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• **Signal Clarity Performance Requirements**: In communications systems, performance is limited by the quality of the received/transmitted signal that can be supported throughout the channel bandwidth. Signal-to-noise, or SNR, ratio measures the strength of the desired signal relative to the sum of the noise and undesired signal energy in the same channel. High capacity 5G wireless cellular data networks operate across non-contiguous wireless spectrum bands, while wired coaxial cable and power-line networks require broadband RF transceivers supporting high SNR. Optical transceivers operate across the widest bandwidths available and must preserve the necessary SNR throughout their bandwidth. These transceiver systems must isolate the desired signals from the undesired signals that are invariably present in their wide operating frequency range. The undesired signals not only include the noise generated by the natural environment, but also interference produced by home appliances, enterprise communications equipment, and other wireless networking systems. For example, in 5G mobile infrastructure applications, a radio transceiver receiving a channel at 1710MHz must cope with reflections in the environment as well as interference from a neighboring channel at 1660MHz picked up by the receiving antenna. The transceiver must also compensate for distortion introduced by the strong signals out of the transmitting antenna. Analog and digital signal processing is employed to improve SNR in the received and transmitted signals. Beamforming and MIMO of radio signals also significantly improves SNR ratio, but requires sophisticated RF, analog and digital signal co-processing, and software expertise. Broadband reception and beamforming of RF signals in mobile environments are extremely difficult to implement due to the stringent size, cost, and power consumption constraints. Also, higher order modulation of communication signals requires extremely high SNR to maximize data capacity in a finite spectrum, which greatly increases the difficulty of implementing broadband systems.

• **Power Consumption**: Power consumption has become a major concern inside communication systems, including home access gateways, wireless base-stations and data center infrastructure applications. For example, inside the home, Wi-Fi capacity and bandwidth improvement require increasing the number of transceivers per access point with greater channel bandwidths. As a result, the home Wi-Fi gateway has significant heat dissipation challenges within the system due to the increase in power consumption. Likewise, within the data center, physical limitations in the ability to remove heat efficiently from network switches, and the optical transceivers plugged into them, are the main obstacles to increasing data center network bandwidth at and beyond 400Gbps speed per optical transceiver. These switches and transceivers now consume an increasingly significant fraction of total data center power. In 5G wireless access infrastructure applications, the cost of provisioning power to base-station antenna towers and the operating cost attributable to energy consumption is high. In many multiple-transceiver system designs, a majority of the system’s overall power consumption can be ascribed to radio transceivers.

• **Size**: The size of electronic components, such as RF transceivers and digital signal processing SoCs, is a key consideration for system designers and the service providers that deploy them. In wired optical infrastructure applications inside data centers, rapidly increasing network server and switch face-plate density trends are aggressively driving reduction of the size of optical transceiver interconnects. In 5G wireless infrastructure, space on the base-station radio towers where the radios and modems are mounted, is highly constrained and is a significant portion of operating costs. The deployment of MMIMO and antenna arrays, and cell densification for 5G wireless coverage and capacity, greatly increase the number of radio transceivers required in each base station radio tower and the number of base stations in a cell. As a result, there is a growing trend and an increasing need for highly complex integrated SoCs with greater numbers of transceivers per SoC.

There are also challenges that are specific to the processing of high-speed optical interconnect signals in our target data center markets.

• **Optical Fiber Channel Impairments**: The inherent optical properties of the fiber material result in impairments to the optical signal as it propagates along the fiber. These impairments degrade signal integrity due to the loss of light intensity and other adverse modal, chromatic and polarization dispersion effects on the propagating light. Further, electrical signal impairments are introduced in the process of conversion of optical signals to electrical signals, which together reduce the maximum data throughput and limit the distance over which data can propagate over fiber. Therefore, communications SoCs present inside optical modules (often referred to as digital signal processors or DSPs) are required to correct both electrical and optical signal impairments at both ends of the fiber termination.

• **Photonics Device Technology**: Today’s state-of-the art in photonic device technology lags the rapidly increasing speed requirements of data traffic within cloud data centers and optical transport links between telecom data centers. This imposes severe limits to the high-speed conversion of electrical signals to optical signals, and vice versa, owing to the bandwidth limitations, nonlinearities, and noise properties in lasers, modulators, and photo detectors used in optical modules.

• **Form Factor**: Optical transceivers are required to conform to multi-source agreement, or MSA, standardized form factors, which in turn determine the number of transceiver ports that can fit in the face plates of standard server, storage, and switch rack units. Standardization of transceiver form factors and rack unit face plates allows data center operators to upgrade network speeds of existing installations by simply replacing older optical transceivers and switches with newer faster ones,
rather than having to overhaul installed fiber infrastructure and floorplan. The dimensions of the standard face plate impose a severe constraint on the amount of heat that can be practically removed from a rack unit. A major challenge facing optical transceiver SoCs is to support exponentially growing data rates within the standardized form factor and thermal constraints.

Our RF, Mixed-Signal and Digital SoC Platform Solutions

We are a provider of communications SoC solutions for the connected home, mobile and wireline infrastructure, data centers, and industrial and multi-market applications. Our products exemplify our core integrated circuit design and communications systems engineering capabilities:

- **Proprietary broadband/RF, analog and mixed-signal transceiver front ends:** Our analog and mixed-signal IC designers implement complex broadband radio transceiver front-ends and data converters in standard silicon CMOS processes, which enables single-die integration of a complete digital signal processing communication system. This results in state-of-the-art performance, highest energy efficiency or lowest power, smallest form factor, and the lowest manufacturing cost of a target function. For example, in cable DOCSIS3.1 data gateways, our single-chip FSC receivers digitize the entire cable spectrum and aggregate multiple frequency bands or channels using analog and digital signal co-processing to enable multi-gigabit data services. There is a 100-fold reduction in power per unit bandwidth while increasing the total data throughput by an even greater factor. Our high-performance mixed-signal design capability, which involves the high-speed conversion of signals precisely and efficiently between analog and digital domains, is core to all our products and market applications, including high-speed optical interconnect applications inside data centers, 5G Access infrastructure MMIMO radios, and millimeter wave and microwave wireless backhaul transport.

- **Advanced digital signal processing ASIC design and algorithms:** Our signal processing algorithm and digital application-specific integrated circuits, or ASIC, design expertise is at the core of our ability to employ digital signal processing to enable breakthroughs in CMOS analog RF front-end design and vice-versa. For example, impairments introduced by analog systems such as power amplifiers and photonics devices are canceled using sophisticated digital signal processing algorithms to achieve superior signal quality, reduce power consumption, and improve the speed of operation. Communication systems across a range of our current and future target markets share common signal processing functions, such as efficient error control coding, compensation for transmission medium or channel induced impairments, and digital processing of wideband signals. As such, algorithmic breakthroughs in one application are directly applicable to other product areas.

- **Embedded systems and software architecture:** Our products contain complex integrated computer processing unit subsystems. These subsystems typically include multiple low-power microprocessor cores, packet processor, bus and peripherals, memory controllers, and interrupt processing. In addition to signal processing and supervisory activity functions, we also implement multiple layers of real-time embedded firmware and protocol stacks on a single chip. We believe our expertise and track record of successfully developing widely deployed, reliable embedded protocols for networking applications are essential to the evolution of connected home products of the future. Our firmware design capability is critical to the ease of use of our products in end customer platforms.

- **Architecture and system design for highly integrated end-to-end communication platform solutions:** Our novel design techniques tradeoff individual signal path circuit level performance to optimize the overall system performance. Our holistic platform and system level design approach eliminates costly, and power-hungry overdesign of individual circuit elements. It allows us to address more complex customer problems that require a deeper understanding of the customer’s end product. Our products not only integrate the entire physical layer, or PHY, but also implement complete protocol stacks along with ready-for-use product level interface functionality and associated platform software. We also provide the most efficient and cost-effective platform level power management IC solutions that regulate and monitor the power consumption for our chips and other circuits on the platform. The integration of the entire system on a single-chip or utilizing minimal number of silicon dies reduces the number of external board-level components, decreases board space, improves performance, simplifies customers’ product design, and significantly reduces power consumption.

- **Low-power design methodology:** The superior energy efficiency of our products reflects our years of cumulative experience and research and development, or R&D, investment in system architecture, semiconductor device modeling, and integrated circuit design expertise. At extremely high data rates, when electrical signals transit on and off the chip, there is a severe penalty in speed and power consumption. Therefore, significant reduction in power consumption of a device requires minimization of signal transitions between multiple chips. Our ability to achieve the highest levels of integration of all analog/RF and digital signal processing functionality on the same chip minimizes power consumption by eliminating such signal transitions. Our solutions disproportionately impact our end-customer’s product power dissipation, such as in cable modems, cable FDX fiber nodes, 400Gbps optical transceiver modules, and large 5G antenna radio transceiver arrays. Low power
dissipation not only simplifies costly thermal design, but also eliminates the need for bulky fans and other cooling aids. This in turn improves end customer product reliability, increases the density of product features that can be supported in a compact footprint, and reduces overall system cost.

- **Scalable Platform:** Our products share common, modular components such as data converters, radio architectures, signal processing algorithms, and digital signal processing circuit architectures, which enables us to offer fully integrated broadband RF transceiver based digital communication SoC solutions across a wide variety of markets while meeting the stringent performance requirements of those end market applications and standards. This contrasts to legacy solutions that require significant customization to conform to the various regional standards, technical performance and product feature requirements. As a result, our customers can minimize their design resources required to develop applications for multiple target markets using our platform solutions. In addition, we are able to deploy our engineering resources more efficiently to both diversify and address larger communications end markets.

**Our Strategy**

Our objective is to be the leading provider of communications SoCs for the connected home, wired and wireless infrastructure, and industrial and multi-market applications. We aim to continue to leverage our core analog and digital signal co-processing competencies to expand into other communications markets with similar performance requirements. The key elements of our strategy are:

- **Extend Technology Leadership in RF Transceivers and RF Transceiver + Digital Signal Processing + Embedded Processor SoCs:** We believe that our success thus far is largely attributable to a combination of our RF and mixed-signal design capability together with advanced digital design expertise. We have leveraged this core competency to develop high-performance, low-cost semiconductor solutions for broadband communications applications spanning the connected home, wireless access and backhaul network infrastructure, and high-speed fiber-optic modules for data center, metro, and long-haul infrastructure markets. We will continue to invest in this capability and strive to be an innovation leader in this market.

- **Leverage and Expand our Existing Customer Base:** We target customers who are leaders in their respective markets. We intend to continue to focus on sales to customers who are leaders in our current target markets, and to build on our relationships with these leading customers to define and enhance our product roadmap. By solving the specific problems faced by our customers, we can minimize the risks associated with our customers’ adoption of our new integrated circuit products and reduce the length of time from the start of product design to customer revenue. Further, engaging with market leaders will enable us to participate in emerging technology trends and new industry standards.

- **Target Additional High-Growth Markets:** Our core competency is in RF analog and mixed-signal integrated circuit design in CMOS process technology. Several of the technological challenges involved in developing RF solutions for video broadcasting and broadband reception are common to a majority of broader communications markets. We intend to leverage our core competency in developing highly integrated RF transceiver and RF transceiver SoCs in standard CMOS process technology to address additional markets within broadband communications, communications infrastructure, and connectivity markets that we believe offer high growth potential.

- **Expand Global Presence:** Due to the global nature of our supply chain and customer locations, we intend to continue to expand our sales, design and technical support organization both in the United States and overseas. In particular, we expect to align our regional support to our customer base. We believe that our customers will increasingly expect this kind of local capability and support.

- **Attract and Retain Top Talent:** We are committed to recruiting and retaining highly talented personnel with proven expertise in the design, development, marketing and sales of communications integrated circuits. We believe that we have assembled a high-quality team in all the areas of expertise required at an integrated circuit design and communications systems company. We provide an attractive work environment for all of our employees. We believe that our ability to attract the best engineers is a critical component of our future growth and success in our chosen markets.

**Customers**

We sell our products, directly and indirectly, to OEMs, module makers and ODMs, and we refer to these as our end customers. By providing a highly integrated reference design solution that our customers can incorporate in their products with minimal modifications, we enable our customers to design cost-effective high-performance SoC-based solutions rapidly. A significant portion of our sales are through distributors based in Asia, who then resell our product.
A significant portion of our net revenue has historically been generated by a limited number of customers. In the years ended December 31, 2022, 2021 and 2020, ten customers accounted for approximately 65%, 69% and 68% of our net revenue, respectively. In the years ended December 31, 2022, 2021 and 2020, two of our direct customers represented 31%, 26% and 28%, respectively, of our net revenue.

Products shipped to Asia accounted for 82%, 83% and 82% of our net revenue in the years ended December 31, 2022, 2021 and 2020, respectively. Products shipped to Hong Kong accounted for 43%, 40%, and 42% of our net revenue in the years ended December 31, 2022, 2021 and 2020, respectively. Products shipped to China accounted for 16%, 12% and 17% of our net revenue in the years ended December 31, 2022, 2021 and 2020, respectively. Products shipped to Vietnam accounted for 13% of our net revenue in the year ended December 31, 2021. Although a large percentage of our products are shipped to Asia, we believe that a significant number of the systems designed by these customers and incorporating our semiconductor products are then sold outside Asia. For example, revenue generated from sales of our cable modem products during the years ended December 31, 2022, 2021 and 2020 related principally to sales to Asian ODM’s and contract manufacturers delivering products into European and North American markets. To date, all of our sales have been denominated in United States dollars.

Sales and Marketing

We sell our products worldwide through multiple channels, using our direct sales force, third party sales representatives, and a network of domestic and international distributors. We have direct sales personnel covering the United States, Europe and Asia. We also employ a staff of field applications engineers to provide direct engineering support locally to some of our customers. Our distributors are independent entities that assist us in identifying and servicing customers in a particular territory, usually on a non-exclusive basis. Sales to distributors accounted for approximately 46%, 47%, and 49% of our net revenue in the years ended December 31, 2022, 2021 and 2020, respectively.

Our sales cycles typically require a significant amount of time and a substantial expenditure of resources before we can realize revenue from the sale of products, if any. Our typical sales cycle consists of a multi-month sales and development process involving our customers’ system designers and management.

We generally receive purchase orders from our customers approximately six to twenty-six weeks prior to the scheduled product delivery date. Because of the scheduling requirements of our foundries and assembly and test contractors, we generally provide our contractors production forecasts six to twelve months in advance and place firm orders for products with our suppliers up to twenty-six weeks prior to the anticipated delivery date, in some cases without a purchase order from our own customers. Our standard warranty provides that products containing defects in materials, workmanship or product performance may be returned for a refund of the purchase price or for replacement, at our discretion.

Raw Materials

As a fabless designer of integrated circuits, we do not directly procure raw materials and instead, rely on third parties to manufacture, assemble and test, or supply, our products, as described in further detail under the below heading “Manufacturing.” To a lesser extent, we also purchase certain turnkey, or finished goods product, for resale. Raw materials used by third party foundries, assembly and test contractors and turnkey product vendors include silicon wafers, as well as lead frames or substrate materials, gold or copper wires, and molding compounds used in assembly/packaging and test of our products. We work closely with our vendors in providing a supplier forecast six to twelve months in advance to ensure they have an adequate supply of raw materials to cover our forecast.

Manufacturing

We use third-party foundries and assembly and test contractors to manufacture, assemble and test our products. We also rely on certain vendors to supply turnkey products, including, in particular, Intel Corporation, for certain products we sell. This outsourced manufacturing approach allows us to focus our resources on the design, sale and marketing of our products. Our engineers work closely with our foundries and other contractors to increase yield, lower manufacturing costs and improve product quality while maintaining a socially responsible supply chain.

Wafer Fabrication. We utilize an increasing range of process technologies to manufacture our products, from standard CMOS to more exotic processes including SiGe and GaAs. Within this range of processes, we use a variety of process technology nodes ranging from 0.18µ down to 14 nanometer. We depend on independent silicon foundry manufacturers to support our wafer fabrication requirements. Our key foundry partners include GlobalFoundries, Inc., or GF, in Singapore,
Semiconductor Manufacturing International Corporation, or SMIC, in China, Taiwan Semiconductor Manufacturing Corporation, or TSMC, in Taiwan, and United Microelectronics Corporation, or UMC, in Taiwan and Singapore. We generally do not depend on a single source for the supply of our materials. Additionally, certain of the acquired products of the Wi-Fi and Broadband assets business are supplied to us under the terms of a supply agreement with Intel.

Assembly/packaging and Test. Upon completion of the silicon processing at the foundry, we forward the finished silicon wafers to independent assembly/packaging and test service subcontractors. The majority of our assembly/packaging and test requirements are supported by the following independent subcontractors: Advanced Semiconductor Engineering, or ASE, Amkor Technology, Giga Solution Technology Co. Ltd., SIGURD Microelectronics Corp., Unisem (M) Berhad and United Test and Assembly Center, or UTAC Holdings Ltd.

Quality Assurance. We have implemented significant quality assurance procedures to assure high levels of product quality for our customers. Our operations are certified under ISO 9001:2015 standards. We closely monitor the work-in-progress information and production records maintained by our suppliers, and communicate with our third-party contractors to assure high levels of product quality and an efficient manufacturing time cycle. Upon successful completion of the quality assurance procedures, all of our products are stored and shipped to our customers or distributors directly from our third-party contractors in accordance with our shipping instructions.

Corporate Social Responsibility

As we continue to expand our presence around the world, we are mindful of our responsibility to maintain a socially responsible supply chain, reduce our carbon footprint, and give back to our local communities. Our board of directors and Nominating and Corporate Governance Committee oversees our environmental, social and governance directives.

Socially responsible supply chain. We are committed to the use of a socially responsible supply chain to reduce the risk of human rights violations and the use of conflict minerals (tin, tungsten, tantalum and gold, or 3TG) from the Democratic Republic of Congo and certain adjoining countries. Our efforts include maintaining a supplier policy which bars the use of forced or child labor and slavery and a conflict minerals policy governing the use and distribution of 3TG minerals, as well as conducting due diligence before allowing a potential supplier to become a preferred supplier. We request the return of reporting forms related to conflict minerals from our suppliers under the Responsible Minerals Initiative, or RMI, Conflict Minerals Survey. Further, we seek to remove any suppliers that continue to fail to meet our supplier and conflict minerals policies after being provided the opportunity to remedy non-compliance via implementation of a corrective action plan.

Reduce our carbon footprint. MaxLinear takes our common stewardship of the environment seriously. Among other things, we monitor our global environmental footprint, both directly and indirectly including measuring and reporting our greenhouse gas emissions and energy usage, and taking steps to reduce such usage; transitioning away from one-time use to sustainable reusable office products; and in our development efforts, our engineers are consistently focused on improving the power efficiency and thermal performance of our chips, minimizing waste, promoting recycling of reusable materials, and providing customer satisfaction through compliance with global environmental regulations as they relate to our products and operations.

As a fabless semiconductor design company, we do not manufacture our products and, with respect to the activities we conduct directly, we believe we leave a limited environmental footprint. With respect to our indirect environmental impact, we monitor the practices of our foundry partners and believe that each of them has made a public commitment to integrate sustainability and sensitivity to environmental impact into their manufacturing processes. For example, we believe that three of our largest manufacturing partners, Taiwan Semiconductor Manufacturing Corporation, Intel Corporation, and United Microelectronics Corporation, each maintain well-developed environmental management and sustainability programs that are publicly avowed and supported by the highest levels of management within those organizations. We also participate in recycling of integrated circuits and boards. Additionally, our products are compliant with the Restriction of Hazardous Substances, or RoHS, and Registration, Evaluation, Authorization and Restriction of Chemicals, or REACH, standards in the European Union, or EU.

Contributing to community. We encourage our employees to contribute to local communities. In March 2022, MaxLinear launched a relief effort contribution matching program which matches 100% of employee contributions to three organizations providing humanitarian relief to refugees of the conflict in Ukraine: Doctors without Borders, World Kitchen and Save the Children. Our efforts collectively raised approximately $60 thousand in donations to the relief organizations. In December 2022, our employees also participated in a donation, toys and goods drive to stop the cycle of child abuse and help at-risk youth.
in the community. Together with a matching corporate contribution from the Company, the campaign raised in excess of $40 thousand, benefiting Olive Crest, a U.S. child abuse prevention and treatment charitable organization.

Research and Development

We believe that our future success depends on our ability to both improve our existing products and to develop new products for both existing and new markets. We direct our R&D efforts largely to the development of new high-performance, mixed-signal RF transceivers and SoCs for the connected home, wired and wireless infrastructure, and industrial and multi-market applications. We target applications that require stringent overall system performance and low power consumption. As new and challenging communication applications proliferate, we believe that many of these applications may benefit from our SoC solutions combining analog and mixed-signal processing with digital signal processing functions. We have assembled a team of highly skilled semiconductor and embedded software design engineers with expertise in broadband RF, mixed-signal and high-performance analog integrated circuit design, digital signal processing, communications systems and SoC design. As of December 31, 2022, we had approximately 1,368 employees in our R&D group. Our engineering design teams are located in Carlsbad, Irvine, and San Jose in California; Boston, Massachusetts; Singapore; Shanghai, and Shenzhen in China; Taipei and Hsinchu in Taiwan; Bangalore and Chennai in India; and Austria, Canada, Germany, Israel, and Spain.

Competition

We compete with both established and development-stage semiconductor companies that design, manufacture and market analog and mixed-signal broadband RF receivers, optical interconnects, high-performance interface, data and video compression and encryption, and power management products. Our competitors include companies with much longer operating histories, greater name recognition, access to larger customer bases and substantially greater financial, technical and operational resources, as well as smaller companies specializing in narrow markets, to internal or vertically integrated engineering groups within certain of our customers. In addition, our industry is experiencing substantial consolidation. As a result, our competitors are increasingly large multi-national semiconductor companies with substantial market influence. Our competitors may develop products that are similar or superior to ours. We consider our primary competitors to be companies with a proven track record of supporting market leaders and the technical capability to develop and bring to market competing broadband RF receiver and RF receiver SoC, modem, and optical interconnect products. Our primary merchant semiconductor competitors include Broadcom, Inc., Qualcomm Incorporated, Realtek Semiconductor Corp., Nokia Corp., Skyworks Solutions, Inc., Xilinx, Inc., Altera Corporation, Credo Semiconductor Inc., MediaTek, Inc., Marvell Technology Group Ltd., MACOM Technology Solutions Holdings, Inc., Texas Instruments Incorporated, Analog Devices, Inc., Renesas Electronics Corporation, and Microchip Technology Inc. Because our products often are building block semiconductors which provide functions that in some cases can be integrated into more complex integrated circuits, we also face competition from manufacturers of integrated circuits, some of which may be existing customers or platform partners that develop their own integrated circuit products. If we cannot offer an attractive solution for applications where our competitors offer more fully integrated products, we may lose significant market share to our competitors. Some of our targeted customers for our optical interconnect solutions are module makers who are vertically integrated, where we compete with internally supplied components, and we compete with much larger analog and mixed-signal catalog competitors in the multi-market high-performance analog markets.

The market for RF, mixed-signal and high-performance analog semiconductor products is highly competitive, and we believe that it will grow more competitive as a result of continued technological advances. We believe that the principal competitive factors in our markets include the following:

- product performance;
- features and functionality;
- energy efficiency;
- size;
- ease of system design;
- customer support;
- product roadmap;
- reputation;

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• reliability; and
• price.

We believe that we compete favorably as measured against each of these criteria. However, our ability to compete in the future will depend upon the successful design, development and marketing of compelling RF, analog, digital, and mixed-signal semiconductor integrated solutions for high growth communications markets. In addition, our competitive position will depend on our ability to continue to attract and retain talent while protecting our intellectual property.

**Intellectual Property Rights**

Our success and ability to compete depends, in part, upon our ability to establish and adequately protect our proprietary technology and confidential information. To protect our technology and confidential information, we rely on a combination of intellectual property rights, including patents, trade secrets, copyrights and trademarks. We also protect our proprietary technology and confidential information through the use of internal and external controls, including contractual protections with employees, contractors, business partners, consultants and advisors. Protecting mask works, or the “topography” or semiconductor material designs, of our integrated circuit products is of particular importance to our business and we seek to prevent or limit the ability of others to copy, reproduce or distribute our mask works.

We have over one thousand issued patents and numerous patent applications pending in the United States. We also have issued foreign patents and pending foreign patent applications. We file U.S and foreign patent applications to protect our intellectual property. Patents generally have a duration of twenty years from filing. While the remaining duration on the individual patents in our patent portfolio varies, we believe that the duration of our issued patents is adequate relative to the expected lives of our products.

We own numerous trademarks related to our current products that have been registered in the United States and 2 pending U.S. trademark registrations. We own foreign counterparts of certain of these registered trademarks in Brazil, Canada, Chile, China, the EU, Germany, Great Britain, Hong Kong, India, Israel, Japan, Korea, Malaysia, Singapore, Taiwan, and Thailand. We also claim common law rights in certain other trademarks that are not registered. Trademark rights may continue for a limited duration or in perpetuity, provided certain requirements are met.

We may not gain any competitive advantages from our patents and other intellectual property rights. Our existing and future patents may be circumvented, designed around, blocked or challenged as to inventorship, ownership, scope, validity or enforceability. It is possible that we may be provided with information in the future that could negatively affect the scope or enforceability of either our present or future patents. Furthermore, our pending and future patent applications may or may not be granted under the scope of the claims originally submitted in our patent applications. The scope of the claims submitted or granted may or may not be sufficiently broad to protect our proprietary technologies.

We are a party to a number of license agreements for various technologies, such as a license agreement with Intel Corporation relating to demodulator technologies that are licensed specifically for use in our products for cable gateways. The license agreement with Intel Corporation has a perpetual term, but Intel Corporation may terminate the agreement for any uncured material breach or in the event of bankruptcy. If the agreement is terminated, we would not be able to manufacture or sell products that contain the demodulator technology licensed from Intel Corporation, and there would be a delay in the shipment of our products containing the technology until we found a replacement for the demodulator technology itself. We believe we could find a substitute for the currently licensed demodulator technology in the marketplace on commercially reasonable terms or develop the demodulator technology ourselves. In either case, obtaining new licenses or replacing existing technology could have a material adverse effect on our business, as described in “Risk Factors — Risks Related to Intellectual Property — We utilize a significant amount of intellectual property in our business. If we are unable to protect our intellectual property, our business could be adversely affected.”

The semiconductor industry is characterized by frequent litigation and other vigorous offensive and protective enforcement actions over rights to intellectual property. Moreover, there are numerous patents in the semiconductor industry, and new patents are being granted rapidly worldwide. Our competitors may obtain patents that block or limit our ability to develop new technology and/or improve our existing products. If our products were found to infringe any patents or other intellectual property rights held by third parties, we could be prevented from selling our products or be subject to litigation fees, statutory fines and/or other significant expenses. We may be required to initiate litigation in order to enforce any patents issued to us, or to determine the scope or validity of a third-party’s patent or other proprietary rights. We may in the future be contacted by third parties suggesting that we seek a license to intellectual property rights that they may believe we are
We have settled in the past intellectual property litigation and may face additional claims of intellectual property infringement. Current litigation and any future litigation could be time-consuming, costly to defend or settle and result in the loss of significant rights” and in “Item 3 — Legal Proceedings.”

**Governmental Regulation**

Our business and operations around the world are subject to government regulation at the national, state, provincial, or local level addressing, among other matters, applicable environmental laws; health and safety laws and regulations adopted by government agencies such as the Occupational Safety and Health Administration; laws relating to export controls and economic sanctions; securities laws; rules of industry standards bodies such as The International Organization for Standardization; and, rules or regulations promulgated by governmental agencies such as the Federal Trade Commission, among others.

We believe that our properties and operations comply in all material respects with applicable laws protecting the environment and worker health and safety. We do not manufacture our own products but do maintain laboratory space at certain of our facilities to facilitate the development, evaluation, and testing of our products. These laboratories may maintain quantities of hazardous materials. While we believe we are in material compliance with applicable law concerning the safeguarding of these materials and with respect to other matters relating to health, safety, and the environment, the risk of liability relating to hazardous conditions or materials cannot be eliminated completely. To date, we have not incurred significant expenditures relating to environmental compliance at our facilities nor have we experienced any material issues relating to employee health and safety. We cannot provide assurances, however, that issues will not arise in the future or that applicable law will not require us to incur significant compliance expenditures.

Our business is also subject to various rules and regulations and other orders relating to export controls and trade sanctions. Certain of our products and technology are subject to the Export Administration Regulations, or EAR, which are administered by the United States Department of Commerce’s Bureau of Industry and Security, or BIS, and we may be required to obtain an export license before we can export certain controlled products or technology to specified countries or customers. In addition, the EAR imposes broad controls on entities listed on sanctioned persons lists, including the BIS “Denied Persons” list and BIS Entity List. If one of our customers, suppliers, or third party with whom we do business is listed on the Entity List, BIS List of Denied Persons, or other U.S. government list of restricted persons, then we will, as a general rule, be precluded from doing business with that entity unless one of a limited number of exceptions apply.

In October 2022, the BIS issued an interim final rule to implement additional export controls which implemented additional export controls on advanced computing integrated circuits and certain related products. The primary impact of these rules is that we may be required to obtain a license to do business with certain customers, semiconductor foundries and outsource assembly and testing, or OSAT, facilities in China. The BIS rule also expanded the scope of foreign-produced items subject to license requirements when intended for certain entities located in China. BIS also added new entities in China to the EAR’s Unverified List. We have assessed the impact of the interim final rule and addition of new entities to the Entity List and the Unverified List, and we believe they do not have a material impact on our business, financial condition and results of operations.

We may experience a loss of revenues or supply while we are obtaining licenses needed to do business with certain customers, suppliers, and any other business partners who are added to the Entity List, and failure to obtain any required license could result in a reduction of anticipated revenues or supply until an alternate source of supply can be obtained. We cannot guarantee that additional export control restrictions or any sanctions imposed in the future will not restrict, prevent, or materially limit, our ability to conduct business with certain customers, suppliers, business partners or in certain countries. Although we have policies, controls, and procedures designed to maintain ongoing compliance with applicable laws, there can be no assurance that our employees, contractors, suppliers, or agents will not violate such laws or policies. Any such violations of trade laws, restrictions, or regulations can result in fines; criminal sanctions against us or our officers, directors, or employees; prohibitions on the conduct of our business; and damage to our reputation. We may be required to incur significant expense to comply with, or to remedy violations of, these regulations and laws. In addition, if our customers fail to comply with these regulations and laws, we may be required to suspend sales to these customers, which could damage our reputation and negatively impact our results of operations. The technology industry is subject to intense media, political, and regulatory scrutiny, which can increase our exposure to government investigations, legal actions, and penalties.
Human Capital

Our future success depends on our ability to retain, attract and motivate qualified personnel, and achieving those objectives requires us to maintain a work environment and culture that values diversity. As the source of our technological and product innovations, our design and technical personnel represent a significant asset. We operate across eighteen countries and are sensitive to the many cultures and backgrounds constituting our employee base. We acknowledge that we, along with the semiconductor and technology industry as a whole, can do more to advance gender and racial equality by increasing representation of underrepresented minorities as well as females in leadership and technical positions including engineering and other roles.

As of December 31, 2022, we had 1,844 full-time employees, including 1,368 in R&D, 296 in sales and marketing, 45 in operations and semiconductor technology and 135 in administration. We have employees across 18 countries: 46% are in Asia, 25% in the Americas, 17% in Europe and 12% in the Middle East. Our workforce is represented by the following race/ethnicities: 60% Asian, 32% White or Middle Eastern, 8% Latinx or Hispanic origin, with 40% Asian, 57% White or Middle Eastern and 3% two or more races in senior management. Females represented 29% of our outside directors, 10% of senior management, 13% of our technical roles, and 17% of our total workforce. Of our total employee workforce, 10% is represented by Work Councils in Austria and Germany. The Work Council groups, common to these countries, are comprised of employees elected by the general employee base. We consider our global employee relations to be good. In 2022, our employee voluntary turnover rate was 11%.

Our human capital resources objectives include, as applicable, attracting and retaining talented and experienced employees, advisors, and consultants. We utilize multiple online search tools, specialized recruiting firms, employee referral programs and university hires to ensure a varied outreach approach for candidates. We aim to increase our hiring and retention of female talent including direct hires or interns from universities. We offer this via a combination of competitive base salary, time-based equity incentives and bonus plans linked to financial performance that are designed to motivate and reward personnel with annual grants of stock-based and cash-based incentive compensation awards to our employees, some of which vest over a period of four years, plus other benefits, in order to increase shareholder value and the success of our company by motivating such individuals to perform to the best of their abilities and achieve both our short and long-term objectives. We offer competitive benefits tailored to local markets and laws and designed to support employee health, welfare and retirement; examples of such benefits may include flexible Fridays which allow employees to work from home; paid time off; 401(k), pension or other retirement plans; employee leave to support well-being of employees and their dependents; employee stock purchase plan; basic and voluntary life, disability and supplemental insurance; medical, dental and vision insurance; health savings and flexible spending accounts; relocation assistance; and employee assistance programs. Our global training and development program focuses on harassment-free workplace and diversity topics, as well as ethics and export compliance.

Our executive compensation structure aligns executive incentives with the long-term growth objectives of MaxLinear, including long-term share price appreciation. In that regard, our executive compensation programs have tended to place a relatively heavier weighting on equity compensation than our peers and include a performance-based metric to executives’ equity incentives in addition to other forms of compensation offered to all employees. For more details regarding our executive compensation, refer to information incorporated by reference from the information set forth under the captions “Executive Compensation” and “Compensation Discussion and Analysis” in either an amendment to this Form 10-K or our upcoming 2023 Proxy Statement.

In 2022, our ongoing focus on workplace safety and compliance to applicable regulations has enabled us to preserve business continuity while ensuring a safe work environment during the COVID-19 pandemic, adhering to local health authority guidelines or work-from-home arrangements for the rest of our workforce. We also comply with applicable laws and regulations regarding workplace safety and are subject to audits by entities such as the Occupational Safety and Health Administration, or OSHA, in the United States. We rely on third parties to manufacture our products and require our suppliers to maintain a safe work environment, as described in further detail under the above heading “Manufacturing.”

Seasonality

The semiconductor industry is highly cyclical and is characterized by constant and rapid technological change, rapid product obsolescence and price erosion, evolving technical standards, short product life cycles and wide fluctuations in product supply and demand. From time to time, these and other factors, together with changes in general economic conditions, cause significant upturns and downturns in the industry, and in our business in particular.
In addition, our operating results are subject to substantial quarterly and annual fluctuations due to a number of factors, such as the overall demand volatility for semiconductor solutions across a diverse range of communications, industrial and multimarket applications, the timing of receipt, reduction or cancellation of significant orders, the gain or loss of significant customers, market acceptance of our products and our customers’ products, our ability to timely develop, introduce and market new products and technologies, the availability and cost of products from our suppliers, new product and technology introductions by competitors, intellectual property disputes and the timing and extent of product development costs.

ITEM 1A. RISK FACTORS

This Annual Report on Form 10-K, or Form 10-K, including any information that may be incorporated by reference herein, contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, referred to as the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “intend,” “forecast,” “anticipate,” “believe,” “estimate,” “predict,” “potential,” “continue” or the negative of these terms or other comparable terminology. The forward-looking statements contained in this Form 10-K involve known and unknown risks, uncertainties and situations that may cause our or our industry’s actual results, level of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these statements. These factors include those listed below in this Item 1A and those discussed elsewhere in this Form 10-K. We encourage investors to review these factors carefully. We may from time to time make additional written and oral forward-looking statements, including statements contained in our filings with the Securities and Exchange Commission, or SEC. However, we do not undertake to update any forward-looking statement that may be made from time to time by or on behalf of us, whether as a result of new information, future events, or otherwise, except as required by law.

The following discussion provides information concerning the material risks and uncertainties that we have identified and believe may adversely affect our business, our financial condition and our results of operations. Before you decide whether to invest in our securities, you should carefully consider these risk factors together with all of the other information included in this Form 10-K, and in our other public filings, which could materially affect our business, financial condition or future results. Our risk factors are not guarantees that no such conditions exist as of the date of this report and should not be interpreted as an affirmative statement that such risks or conditions have not materialized, in whole or in part.

For the risks relating to our pending merger with Silicon Motion, please refer to the section of these risk factors captioned "Risks Relating to the Proposed Merger with Silicon Motion."

Risk Factor Summary

Risks Relating to the Proposed Merger with Silicon Motion

• If the merger is completed, our actual results could differ materially from any expectations or guidance, including with respect to any cost savings and other potential synergies.
• Our business relationships, including customer relationships, and those of Silicon Motion, may be subject to disruption due to uncertainty associated with the merger.
• Motivating and retaining senior management and other key personnel may be difficult in light of the pending merger.
• The merger agreement contains provisions that could require us to pay Silicon Motion a termination fee of $160 million under certain circumstances.
• Our ability to complete the merger is subject to various closing conditions, including regulatory approval by SAMR in China, which may contain burdensome conditions that could have a material adverse effect on our operation of the business following the merger.
• As a result of the transaction, the merger agreement contains covenants that could adversely affect our operating results and financial condition, as well as the market price of our common stock.
• Additional securityholder lawsuits may delay or prevent the consummation of the merger and cause us and/or Silicon Motion to incur substantial defense or settlement costs, or otherwise adversely affect us or Silicon Motion.
The fact that there is a merger pending could materially harm us or Silicon Motion and our results of operations.
• Counterparties of Silicon Motion may acquire certain rights which could negatively affect us following the merger.
• If the merger is consummated, the ownership percentage interests of our stockholders will be reduced.
• We expect to incur substantial expenses related to the merger of MaxLinear and Silicon Motion.
• The market value of our common stock could decline if large amounts of our common stock are sold post-merger.

Risks Related to Our Business

• Intense and increasing competition could have a material adverse effect on our revenue growth and market share.
• Global economic conditions, including factors such as high inflation and recession, could adversely affect our revenues, margins, and operating results.
• We will lose sales if we are unable to obtain government authorization to export certain of our products or technology and we will be subject to legal and regulatory consequences for any noncompliance with applicable export laws.
• Our business, financial condition and results could be adversely affected by the political and economic conditions of the countries in which we conduct business and other factors related to our international operations.
• Increased tariffs or imposition of other trade barriers could have a material adverse effect on our revenues and results.
• We are subject to risks associated with international geopolitical conflicts involving the U.S. and other governments.
• The loss of, or a significant reduction in orders from major customers could have a material adverse effect on our revenue and operating results.
• Average selling prices of our products could decrease rapidly, which could have a material adverse effect on our profit.
• If we fail to penetrate new applications and markets, our revenue, revenue growth rate, if any, and financial condition could be materially and adversely affected.
• Development delays and consolidation trends in our industry could adversely affect our future revenues and results.
• We may be unable to make the substantial R&D investments that are required to remain competitive.
• A significant variance in our operating results or rates of growth, if any, could lead to substantial volatility in our stock price. We may not sustain our current growth rate and/or manage future growth effectively.
• Unforeseen delays or expenses caused by undiscovered defects or bugs in our products could reduce the market acceptance of our new products, damage our reputation and adversely affect our operating costs.
• We must be able to attract, train and retain qualified personnel and senior management, or our business, financial conditions, results of operations and prospects could suffer.
• If we fail to timely develop and introduce new or enhanced products, our ability to attract and retain customers and compete could be harmed.
• We are subject to order and shipment uncertainties, and differences between our estimates of customer demand and product mix and our actual results could negatively affect our inventory levels, sales and operating results.
• We may have difficulty accurately predicting our future revenue and appropriately budgeting our expenses particularly as we seek to enter new markets where we may not have prior experience.
• Customers require us to undergo a lengthy and expensive qualification process which does not assure product sales.
• We incur significant expenditures to win business and customer product plan cancellations may adversely affect our results of operations.
• Our operating results may fluctuate significantly from factors that could adversely affect our business and stock price.
• We are subject to the cyclical nature of the semiconductor industry.
• A failure to maintain compliance with governmental regulations could have a material adverse effect on our business.
• We have been and may be subject to future information technology failures, including security breaches and cyber-attacks, that could disrupt our operations and adversely affect our business, operations, and financial results.

Risks Relating to Intellectual Property

• We are currently facing and may in the future face claims of intellectual property infringement, which could be time-consuming, costly to defend or settle and result in the loss of significant rights.
• If we are unable to protect our significant amount of intellectual property, our business could be adversely affected.

Risks Relating to Reliance on Third Parties

• Failure to manage our relationships with, or negative impacts from, third parties could adversely affect our ability to market and sell our products.
• Should any of our distributors cease or be forced to stop distributing our products, our business would suffer.
• A lack of long-term supply contracts, and any supply disruption could have a material adverse effect on our business.
Any failure of third parties to provide services and technology could have a material adverse effect on our business.

Risks Relating to Our Common Stock

- Our senior management team may use our available cash and cash equivalents in ways with which you may not agree or in ways which may not yield a return.
- Anti-takeover provisions in our charter and under Delaware law could make an acquisition of us more difficult.
- Our share price may be volatile as a result of various factors.

Risks Relating to our Proposed Merger with Silicon Motion

If the merger is completed, our actual financial and operating results could differ materially from any expectations or guidance provided by us concerning future results, including (without limitation) expectations or guidance with respect to the financial impact of any cost savings and other potential synergies.

Although we currently expect to realize material synergies as a result of our proposed merger with Silicon Motion, the expectations and guidance we have provided with respect to the potential financial impact of the merger are subject to numerous assumptions including assumptions derived from our diligence efforts concerning the status of and prospects for Silicon Motion’s business, which we do not currently control, and assumptions relating to the near-term prospects for the semiconductor industry generally and the markets for Silicon Motion’s products in particular. Additional assumptions we have made relate to numerous matters, including (without limitation) the following:

- projections of Silicon Motion’s future revenues;
- the anticipated financial performance of Silicon Motion’s products and products currently in development;
- anticipated cost savings and other synergies associated with the merger, including potential revenue synergies;
- our capital structure after the merger;
- the amount of goodwill and intangibles that will result from the merger;
- certain other purchase accounting adjustments that we expect to record in our financial statements in connection with the merger;
- merger costs, including restructuring charges and transaction costs payable to our financial, legal, and accounting advisors;
- our ability to maintain, develop, and deepen relationships with customers of Silicon Motion; and
- other financial and strategic risks of the merger, including the possible impact of our reduced liquidity resulting from deal-related cash outlays, the credit risk associated from the potential debt facility described below, and continued uncertainty arising from the COVID-19 pandemic.

We cannot provide any assurances with respect to the accuracy of our assumptions, including our assumptions with respect to future revenues or revenue growth rates, if any, of Silicon Motion, and we cannot provide assurances with respect to our ability to realize the cost savings that we currently anticipate. Risks and uncertainties that could cause our actual results to differ materially from currently anticipated results include, but are not limited to, risks relating to our ability to integrate Silicon Motion successfully; currently unanticipated incremental costs that we may incur in connection with integrating the two companies; risks relating to our ability to realize incremental revenues from the merger in the amounts that we currently anticipate; risks relating to the willingness of Silicon Motion’s customers and other partners to continue to conduct business with MaxLinear; risks related to changes in government regulations, including those related to export controls; and numerous risks and uncertainties that affect the semiconductor industry generally and the markets for our products and those of Silicon Motion specifically. Any failure to integrate Silicon Motion successfully and to realize the financial benefits we currently anticipate from the merger would have a material adverse impact on our future operating results and financial condition and could materially and adversely affect the trading price or trading volume of our common stock.
Failure to integrate our business and operations successfully with those of Silicon Motion in the expected timeframe or otherwise may adversely affect our operating results and financial condition if the merger is completed.

The success of the proposed merger with Silicon Motion will depend, in substantial part, on our ability to integrate Silicon Motion’s business and operations successfully with those of MaxLinear and to realize fully the anticipated benefits and potential synergies from combining our companies, including, among others, currently expected cost savings from duplicative functions; potential operational efficiencies in our respective supply chains and in research and development investments; and potential revenue growth resulting from the addition of Silicon Motion’s product portfolio. Historically, we and Silicon Motion have been independent companies, and we will continue to operate as such until the consummation of the merger. We expect that the integration will be complex and time consuming and will require substantial management time and attention, which may divert attention and resources from other important areas, including our existing businesses. We may face significant challenges in consolidating our operations with Silicon Motion, integrating the two companies’ technologies, and addressing the different corporate cultures of the two companies. Additional unanticipated costs may be incurred in the course of integrating our respective businesses. If the companies are not successfully integrated, the anticipated benefits of the merger may not be realized fully or at all or may take longer to realize than expected. In such a case, we would expect our operating results and financial condition to be materially and adversely affected, which could also have a material adverse effect on the trading price or trading volume of our common stock.

Our business relationships, including customer relationships, and those of Silicon Motion may be subject to disruption due to uncertainty associated with the merger.

Customers, vendors, licensors, and other third parties with whom we or Silicon Motion do business or otherwise have relationships may experience uncertainty associated with the merger, and this uncertainty could materially affect their decisions with respect to existing or future business relationships with MaxLinear or Silicon Motion while the merger is pending or with MaxLinear after the merger is consummated. As a result, we are in many instances unable to evaluate the impact of the merger on certain assumed contractual rights and obligations, including intellectual property rights.

These business relationships may be subject to disruption as customers and others may elect to delay or defer purchase or design-win decisions or switch to other suppliers due to the uncertainty about the direction of our offerings, any perceived unwillingness on our part to support existing Silicon Motion products after the merger is consummated, or any general perceptions by customers or other third parties that impute operational or business challenges to us arising from the merger. In addition, customers or other third parties may attempt to negotiate changes in existing business relationships, which may result in additional obligations imposed on us. These disruptions could have a material adverse effect on our business, operating results, and financial condition while the merger is pending or after it is consummated. The adverse effect of any such disruptions could be exacerbated by a delay in the consummation of the merger for any reason, including delays associated with obtaining regulatory approval from SAMR, or termination of the agreement and plan of merger, or the Merger Agreement, with Silicon Motion. Any loss of customers, customer products, design win opportunities, or other important strategic relationships could have a material adverse effect on our business, operating results, and financial condition and could have a material adverse effect on the trading price or trading volume of our common stock.

We and Silicon Motion may have difficulty motivating and retaining senior management and other key personnel in light of the pending merger.

Uncertainty about the effect of the merger on our employees and those of Silicon Motion may have a material adverse effect on MaxLinear or Silicon Motion while the merger is pending or on MaxLinear after the merger is consummated. This uncertainty may impair our or Silicon Motion’s ability to retain and motivate key personnel in the months leading up to the consummation of the merger and our ability to retain and motivate them following the merger. Employee retention may be particularly challenging as our and Silicon Motion’s employees may experience frustrations during the integration process and uncertainty about their future roles with us following consummation of the merger. For the merger to be successful, we and Silicon Motion must continue to retain and motivate senior management and other key employees during the period before the merger is completed. Furthermore, after the merger is consummated, we must be successful at retaining and motivating key employees in order for the benefits of the transaction to be fully realized. If key employees depart, we may incur significant costs in identifying, hiring, and retaining replacements, which could substantially reduce or delay our ability to realize the anticipated benefits of the merger, which could have a material adverse effect on our business, operating results, and financial condition.
The merger agreement with Silicon Motion contains provisions that could require us to pay Silicon Motion a termination fee of $160 million under certain circumstances.

The consummation of the merger is subject to certain customary closing conditions such as regulatory approval from SAMR. Under certain circumstances, we could be required to pay Silicon Motion a termination fee if the Merger Agreement is terminated by MaxLinear or Silicon Motion as a result of a court or other competent authority issuing an order pursuant to regulatory law permanently prohibiting the consummation of the merger, or the merger is not consummated by February 6, 2023, or the Outside Date. The Outside Date will be automatically extended to May 5, 2023 and further to August 7, 2023, if all conditions to closing have been met, other than certain exceptions related to regulatory matters. However, in certain circumstances, the right to terminate the Merger Agreement would not be available to a party in material breach of the Merger Agreement.

If the proposed merger is not completed, we will have incurred substantial costs that may adversely affect our operating results and financial condition as well as the market price of our common stock.

If the merger is not consummated, the price of our common stock may decline to the extent that such market price reflects a market assumption that the merger will be completed. In addition, we have incurred and will incur substantial costs in connection with the proposed merger. These costs are primarily associated with the fees of our financial advisors, accountants, lenders, and legal counsel and, with limited exceptions relating to a portion of our financial advisor fees, will be payable regardless of whether the merger is completed. In addition, we have diverted significant management resources in an effort to complete the merger and are subject to restrictions contained in the Merger Agreement on the conduct of our business during the pendency of the merger. If the merger is not completed, we will have received little or no benefit in respect of such costs incurred. If the merger is not completed under certain circumstances specified in the Merger Agreement, we may be required to pay a termination fee to Silicon Motion of $160 million, as described above. Furthermore, if the merger is not consummated, we may experience negative reactions from the financial markets and our suppliers, customers, customer prospects, and employees. Any of these factors could have a material adverse effect on our business, operating results, and financial condition or on the trading price of our common stock.

Our ability to complete the merger is subject to various closing conditions, including certain required regulatory approval from SAMR, which may contain burdensome conditions, that could have a material adverse effect on our operation of the business following the merger.

Although the statutory waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, expired on June 27, 2022, and Silicon Motion’s shareholders approved the merger at Silicon Motion’s extraordinary general meeting of shareholders held on August 31, 2022, completion of the merger is subject to the satisfaction of the remaining customary closing conditions, including receipt of clearance from SAMR, among other things. Even if this approval is obtained, governmental authorities could impose conditions on the completion of the merger that could delay consummation of the acquisition or have a material adverse effect on our business following the acquisition. MaxLinear and Silicon Motion cannot predict with certainty the length of review by SAMR but expect a final determination in the second or third quarter of 2023, or even later.

If we are unable to complete the merger, we would be subject to a number of risks, including the following:

• we would not realize the anticipated benefits of the acquisition, including, among other things, increased operating efficiencies;
• the attention of our senior management team and other key personnel may have been diverted to the merger rather than to our own operations and the pursuit of other opportunities that could have been beneficial to us;
• the potential loss of key personnel during the pendency of the merger as employees and other service providers may experience uncertainty about their future roles with us following completion of the merger; and
• the trading price of our common stock may decline to the extent that the current market prices reflect a market assumption that the merger will be completed.

We can provide no assurance that the various closing conditions will be satisfied, that the necessary regulatory approval from SAMR will be obtained, or that any required conditions will not materially adversely affect our business following the merger. If we are required to undertake divestitures or to commit to certain behavioral remedies in order to obtain any approvals required to complete the acquisition, we may be less able to realize anticipated benefits of the acquisition, and our business,
operating results, and financial condition after the merger may be adversely affected. In addition, we can provide no assurance that these conditions will not result in the abandonment or delay of the merger. The occurrence of any of these events individually or in combination could have a material adverse effect on our business, financial condition, and results of operations and on the trading price of our common stock.

In order to consummate the merger and distribute the cash consideration payable to Silicon Motion securityholders, we will incur material indebtedness of up to $3.5 billion and we may also use a portion of Silicon Motion’s and our cash resources. This material increase in our indebtedness will adversely affect our operating results and cash-flows as we satisfy our underlying interest and principal payment obligations. The loan agreement is also expected to contain financial and operational covenants that would adversely affect our operational freedom or ability to pursue strategic transactions that we would otherwise consider to be in the best interests of stockholders, including obtaining additional indebtedness to finance such transactions.

As previously disclosed, MaxLinear will finance the merger in part with the Senior Secured Credit Facilities, which will provide funding of up to $3.5 billion. A portion of the proceeds from the Senior Secured Credit Facilities will be used to repay existing debt in full. As of December 31, 2022, our aggregate indebtedness was $125.0 million.

The material increase in our indebtedness to up to $3.5 billion will adversely affect our operating expenses through materially increased interest payment obligations and will adversely affect our ability to use cash generated from operations as we repay interest and principal under the term loans and revolving credit facility, as applicable. In addition, the loan agreements will contain financial and operational covenants that may adversely affect our ability to engage in certain activities, including certain financing and acquisition transactions, stock repurchases, guarantees, and similar transactions, without obtaining the consent of the lenders, which may or may not be forthcoming. Such financial and operational covenants will include compliance with a secured net leverage ratio test. Accordingly, outstanding indebtedness could adversely affect our operational freedom or ability to pursue strategic transactions that we would otherwise consider to be in the best interests of stockholders.

Specifically, our materially increased indebtedness could have important consequences to investors in our common stock, including the following:

• we could be subject to substantial variable interest rate risk because our interest rate under term loans typically vary based on a fixed margin over an indexed rate or an adjusted base rate. While we are mitigating the impact of rising interest rates with large amounts of prepayments on our outstanding debt, if interest rates were to further increase substantially, particularly with respect to our anticipated debt associated with the Silicon Motion merger, it would have a material adverse effect on our operating results and could affect our ability to service the indebtedness;

• our ability to obtain any necessary financing in the future for working capital, capital expenditures, debt service requirements, or other purposes may be limited or financing may be unavailable;

• a substantial portion of our cash flows must be dedicated to the payment of principal and interest on our indebtedness and other obligations and will not be available for use in our business;

• our level of indebtedness could limit our flexibility in planning for, or reacting to, changes in our business and the markets in which we operate; and

• our high degree of indebtedness will make us more vulnerable to changes in general economic conditions and/or a downturn in our business, thereby making it more difficult for us to satisfy our obligations.

If we fail to make required debt payments, or if we fail to comply with other covenants in our debt service agreements, we would be in default under the terms of these agreements. Subject to customary cure rights, any default would permit the holders of the indebtedness to accelerate repayment of this debt and could cause defaults under other indebtedness that we have, any of which could have a material adverse effect on the trading price of our common stock.

Servicing our materially increased indebtedness will require a significant amount of cash, and we may not have sufficient cash flow from our business to pay our substantial indebtedness.

Under the Senior Secured Credit Facilities, we may incur up to $3.5 billion in aggregate principal amount of senior indebtedness. Our substantial indebtedness may increase our vulnerability to any generally adverse economic and industry conditions.
Our ability to make scheduled payments of the principal and interest when due, or to refinance our borrowings under the Senior Secured Credit Facilities, will depend on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to satisfy our obligations under our indebtedness, and any future indebtedness we may incur and to make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as reducing or delaying investments or capital expenditures, selling assets, refinancing or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance the term loans or existing or future indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on the Senior Secured Credit Facilities or future indebtedness.

MaxLinear stockholders or Silicon Motion securityholders could file additional lawsuits in the future challenging the merger, which may delay or prevent the consummation of the merger and cause us and/or Silicon Motion to incur substantial defense or settlement costs, or otherwise adversely affect us or Silicon Motion.

As of the date of this filing of our annual report on Form 10-K, four lawsuits challenging the merger with Silicon Motion have been dismissed. However, Silicon Motion has received several shareholder demand letters, and potential plaintiffs may file additional lawsuits challenging the merger. The outcome of any current demand letters or future litigation is uncertain. Such litigation, if not resolved, could prevent or delay completion of the merger and result in substantial costs to us and/or Silicon Motion, including any costs associated with the indemnification of directors and officers. One of the conditions to the closing is the absence of any provision of applicable law or order by any court or governmental entity (subject to certain limited exceptions) that has the effect of restraining, enjoining or otherwise prohibiting the consummation of the merger. Therefore, if a plaintiff were successful in obtaining an injunction prohibiting the consummation of the merger on the agreed-upon terms, then such injunction may prevent the merger from being completed, or from being completed within the expected timeframe. The defense or settlement of any lawsuit or claim that remains unresolved at the time the merger is completed may adversely affect our or Silicon Motion’s business, financial conditions, results of operations and cash flows.

The fact that there is a merger pending could materially harm our or Silicon Motion’s businesses and results of operations.

While the merger is pending, we and Silicon Motion are subject to a number of risks that may harm our business and results of operations, including:

• the diversion of management and employee attention from implementing growth strategies in existing markets or in new markets we or Silicon Motion are targeting;

• potential diversion of public attention from positioning of our or Silicon Motion’s independent brand and products in a manner that appeals to customers;

• the fact that we and Silicon Motion have and will continue to incur expenses related to the merger prior to its closing;

• the potential inability to respond effectively to competitive pressures, industry developments and future opportunities, in particular, given the restrictions on the conduct of our or Silicon Motion’s business during the interim period between signing and closing due to the pre-closing covenants in the Merger Agreement;

• We or Silicon Motion could be subject to costly litigation associated with the merger; and

• current and prospective employees may be uncertain about their roles and relationships with us or Silicon Motion following completion of the merger, which may adversely affect the ability of us or Silicon Motion to attract and retain key personnel.

Counterparties of Silicon Motion may acquire certain rights upon the merger, which could negatively affect us following the merger.

Silicon Motion is party to numerous contracts, agreements, licenses, permits, authorizations and other arrangements that contain provisions giving counterparties certain rights (including, in some cases, termination rights) in the event of an “assignment” of such agreement or a “change in control” of Silicon Motion or its subsidiaries. The definitions of “assignment” and “change in control” vary from contract to contract and, in some cases, the “assignment” or “change in control” provisions
may be implicated by the merger. If an “assignment” or “change in control” occurs, a counterparty may be permitted to terminate its contract with Silicon Motion or to exercise other remedies thereunder.

Whether a counterparty would have cancellation rights or other rights in connection with the merger depends upon the language and governing law of its agreement with Silicon Motion. Whether a counterparty exercises any cancellation rights or other rights it has would depend on, among other factors, such counterparty’s views with respect to our financial strength and business reputation following the merger, prevailing market conditions and the business implications of exercising any such rights. We and Silicon Motion cannot presently predict the effects, if any, if the merger is deemed to constitute an assignment or change in control under certain of Silicon Motion’s contracts and other arrangements, including the extent to which cancellation rights or other rights would be exercised, if at all, or the effect on our financial condition, results of operations or cash flows following the merger, but such effect could be material.

If the merger with Silicon Motion is consummated, the issuance of shares of our common stock to Silicon Motion securityholders will reduce the ownership percentage interests of our stockholders.

At the completion of the proposed merger with Silicon Motion, we expect to issue shares of our common stock to former Silicon Motion securityholders entitled to receive consideration pursuant to the Merger Agreement. If the merger is consummated, we expect that our stockholders will own approximately 86% and that Silicon Motion stockholders will own approximately 14% of our outstanding capital stock following completion of the merger. The issuance of shares of our common stock to Silicon Motion securityholders in the acquisition and the assumption by us of Silicon Motion restricted stock units will cause a reduction in the relative percentage voting and economic interests of our current stockholders.

After completion of the merger, we will be exposed to intensified risks associated with doing business in Taiwan because of tense regional geopolitical risk with China.

Following the merger, the revenue and operations of Silicon Motion will form a substantial portion of our revenue and operations, and since most of Silicon Motion’s business operations are in Taiwan and its principal executive offices are in Hong Kong, risks of conducting business in Taiwan and Hong Kong, as described in the section “Risks Related to Our Business” under the risk factor “We are also subject to risks associated with international geopolitical conflicts involving the U.S. and other governments such as China and Russia” will be further intensified.

Past and recent developments in relations between Taiwan and China have on occasion depressed the market prices of the securities of companies with significant business activities in Taiwan. We cannot assure you that any contentious situation between Taiwan and China will always resolve in maintaining the current status quo or remain peaceful. Relations between Taiwan and China, potential confrontations between the United States and China and other factors affecting military, political, social or economic conditions in Taiwan and Hong Kong could have a material adverse effect on our financial condition and results of operations, as well as the market price and the liquidity of our common stock.

We expect to incur substantial expenses related to the merger of MaxLinear and Silicon Motion.

We expect to incur substantial expenses in connection with the pending merger and subsequent integration of Silicon Motion’s business with MaxLinear. We expect operational integration to require substantial management attention. Numerous factors, many of which are beyond our control, could affect the total cost or the timing of expected merger and integration expenses. Moreover, many of the expenses that will be incurred are by their nature difficult to estimate accurately at the present time. These expenses could, particularly in the near term, reduce the savings that we expect to achieve from the elimination of duplicative expenses and the realization of economies of scale and cost savings related to the integration of Silicon Motion. These merger and integration expenses may result in MaxLinear’s taking significant charges against earnings.

The market value of our common stock could decline if large amounts of our common stock are sold following the merger with Silicon Motion.

Following the merger with Silicon Motion, our stockholders and former securityholders of Silicon Motion will own interests in a company operating an expanded business with more assets and a different mix of liabilities. Our current stockholders (and the securityholders of Silicon Motion who will receive our common stock in connection with the merger) may not wish to continue to invest in us, or may wish to reduce their investment in us, in order to comply with institutional investing guidelines, to increase diversification or to track any rebalancing of stock indices in which our common stock and Silicon Motion ADS are or were included. If, following the merger, large amounts of our common stock are sold, the price of our common stock could decline.
We will record goodwill in connection with the Silicon Motion merger that could become impaired and adversely affect our future operating results.

The merger with Silicon Motion will be accounted for as a business combination using the acquisition method of accounting by MaxLinear in accordance with accounting principles generally accepted in the United States. Under the acquisition method of accounting, the assets and liabilities of Silicon Motion will be recorded, as of completion, at their respective fair values and added to our assets and liabilities. Our reported financial condition and results of operations after completion of the merger will reflect Silicon Motion’s balances and results but will not be restated retroactively to reflect the historical financial position or results of operations of Silicon Motion for periods prior to the merger. As a result, comparisons of future results against prior period results will be more difficult for investors.

Under the acquisition method of accounting, the total purchase price will be allocated to Silicon Motion’s tangible assets and liabilities and identifiable intangible assets based on their fair values as of the date of completion of the merger. The excess of the purchase price over those fair values will be recorded as goodwill. We expect that the merger will result in the creation of a material amount of intangible assets and goodwill based upon the application of the acquisition method of accounting. To the extent the value of goodwill or intangibles becomes impaired, we may be required to incur material charges relating to such impairment. Any such impairment charge could have a material impact on our operating results in future periods, and the announcement of a material impairment could have a material adverse effect on the trading price and trading volume of our common stock.

Risks Related to Our Business

We face intense competition and expect competition to increase in the future, which could have a material adverse effect on our revenue, revenue growth rate, if any, and market share.

The global semiconductor market in general, and the broadband, wired and wireless infrastructure, and broader industrial and communications analog and mixed-signal markets in particular, are highly competitive. We compete in different target markets to various degrees on the basis of a number of principal competitive factors, including our products’ performance, features and functionality, energy efficiency, size, ease of system design, customer support, product roadmap, reputation, reliability and price. We expect competition to increase and intensify as a result of industry consolidation and the resulting creation of larger semiconductor companies. Large semiconductor companies resulting from industry consolidation could enjoy substantial market power, which they could exert through, among other things, aggressive pricing that could adversely affect our customer relationships, revenues, margins and profitability. In addition, we expect the internal resources of large, integrated original equipment manufacturers, or OEMs, may continue to enter our markets. Increased competition could result in price pressure, reduced profitability and loss of market share, any of which could materially and adversely affect our business, revenue, revenue growth rates, if any, and operating results.

As our products are integrated into a variety of communications and industrial platforms, our competitors range from large, international merchant semiconductor companies offering a wide range of semiconductor products to smaller companies specializing in narrow markets, to internal or vertically integrated engineering groups within certain of our customers. Our primary merchant semiconductor competitors include Broadcom Inc., Qualcomm Incorporated, Realtek Semiconductor Corp., Nokia Corp., Skyworks Solutions, Inc., Xilinx, Inc., Altera Corporation, Credo Semiconductor Inc., MediaTek, Inc., Marvell Technology Group Ltd., MACOM Technology Solutions Holdings, Inc., Texas Instruments Incorporated, Analog Devices, Inc., Renesas Electronics Corporation, and Microchip Technology Inc. It is quite likely that competition in the markets in which we participate will increase in the future as existing competitors improve or expand their product offerings. In addition, a number of other public and private companies are in the process of developing competing products for our current and target markets. Because our products often are building block semiconductors which provide functions that in some cases can be integrated into more complex integrated circuits, we also face competition from manufacturers of integrated circuits, some of which may be existing customers or platform partners that develop their own integrated circuit products. If we cannot offer an attractive solution for applications where our competitors offer more fully integrated products, we may lose significant market share to our competitors. Some of our targeted customers for our optical interconnect solutions are module makers who are vertically integrated, where we compete with internally supplied components, and we compete with much larger analog and mixed-signal catalog competitors in the multi-market high-performance analog markets.

Our ability to compete successfully depends on factors both within and outside of our control, including industry and general economic trends. During past periods of downturns in our industry, competition in the markets in which we operate intensified as manufacturers of semiconductors reduced prices in order to combat production overcapacity and high inventory levels. Many of our competitors have substantially greater financial and other resources with which to withstand similar adverse
economic or market conditions in the future. Moreover, the competitive landscape is changing as a result of intense consolidation within our industry as some of our competitors have merged with or been acquired by other competitors, and other competitors have begun to collaborate with each other, which could result in significant changes to the competitive landscape. In addition, changes in government trade policies, including the imposition of tariffs and export restrictions, could limit our ability to sell our products to certain customers and adversely affect our ability to compete successfully. These developments may materially and adversely affect our current and future target markets and our ability to compete successfully in those markets.

Global economic conditions, including factors such as high inflation or a recession could adversely affect our business, financial condition, and results of operations.

Inflation and uncertainty in customer demand and the worldwide economy has continued, and we have experienced and may experience continued volatility in our sales and revenues in the near future. Our products are incorporated in numerous consumer devices, and demand for such products will ultimately be driven by consumer demand for products such as televisions, personal computers, automobiles, cable modems, and set-top boxes. Many of these purchases are discretionary. Global economic volatility and economic volatility in the specific markets in which the devices that incorporate our products are ultimately sold, including the impacts of current high rates of inflation and recession, can cause extreme difficulties for our customers and third-party vendors in accurately forecasting and planning future business activities. This unpredictability could cause our customers to delay or reduce their capital expenditures and spending on our products, which would delay and lengthen sales cycles and negatively affect the overall demand for our products. Worsening economic instability could result in a cancellation of such orders or otherwise adversely affect spending for information technology and limit our ability to forecast future demand for our products, which could reduce expected revenues or result in a write-down of any excess or obsolete inventory. Furthermore, during challenging economic times, our customers may face challenges in gaining timely access to sufficient credit, which could impact their ability to make timely payments to us. These events, together with economic volatility that may face the broader economy and, in particular, the semiconductor and communications industries, may adversely affect, our business, particularly to the extent that consumers decrease their discretionary spending for devices deploying our products. However, the magnitude of such volatility on our business and its duration is uncertain and cannot be reasonably estimated at this time.

Other areas of our business which could be disrupted or subject to negative impacts of negative global economic conditions may include, but may not be limited to, the following:

- Reduced ability to accurately predict our future revenue and budget future expenses;
- Inefficiencies, delays and additional costs in design win, product development, production and fulfillment;
- Accounts receivable collection issues should any of our limited and significant customers experience liquidity concerns;
- Material impacts to the value of our common stock, which may result in impairment of our goodwill;
- Material impairment of our assets, if recoverability thereof becomes a concern; and
- Decreased availability of capital or access thereto in the United States and from other jurisdictions in which we operate.

Our business, financial condition and results of operations could be adversely affected by the political and economic conditions of the countries in which we conduct business and other factors related to our international operations.

We sell our products throughout the world. Products shipped to Asia accounted for 82% of our net revenue in the year ended December 31, 2022. In addition, as of December 31, 2022, approximately 77% of our employees are located outside of the United States. The majority of our products are manufactured, assembled and tested in Asia, and our major distributors are located in Asia. Multiple factors relating to our international operations and to particular countries in which we operate could have a material adverse effect on our business, financial condition and results of operations. These factors include:

- changes in political, regulatory, legal or economic conditions;
- restrictive governmental actions, such as restrictions on the transfer or repatriation of funds and foreign investments and trade protection measures, including export controls and restrictions, duties and quotas and customs duties and tariffs;
disruptions of capital and trading markets;
changes in import or export licensing requirements;
transportation delays;
civil disturbances or political instability;
geopolitical turmoil, including terrorism, war or political or military coups;
public health emergencies, including the COVID-19 pandemic;
differing employment practices and labor standards;
limitations on our ability under local laws to protect our intellectual property;
local business and cultural factors that differ from our customary standards and practices;
nationalization and expropriation;
changes in tax laws;
currency fluctuations relating to our international operating activities; and
difficulty in obtaining distribution and support.

In addition to a significant portion of our wafer supply coming from Taiwan, Singapore, and China, substantially all of our products undergo packaging and final testing in Taiwan, Singapore, China, South Korea, and Thailand. Any conflict or uncertainty in these countries, including due to natural disaster, public health or safety concerns, could have a material adverse effect on our business, financial condition and results of operations. In addition, if the government of any country in which our products are manufactured or sold sets technical standards for products manufactured in or imported into their country that are not widely shared, it may lead some of our customers to suspend imports of their products into that country, require manufacturers in that country to manufacture products with different technical standards and disrupt cross-border manufacturing relationships which, in each case, could have a material adverse effect on our business, financial condition and results of operations.

Changes in trade policies among the United States and other countries, in particular the imposition of new or higher tariffs, could place pressure on our average selling prices as our customers seek to offset the impact of increased tariffs on their own products. Increased tariffs or the imposition of other barriers to international trade could have a material adverse effect on our revenues and operating results.

The United States has imposed or proposed new or higher tariffs on certain products exported by a number of U.S. trading partners, including China, Europe, Canada, and Mexico. In response, many of those trading partners, including China, have imposed or proposed new or higher tariffs on American products. Continuing changes in government trade policies create a heightened risk of further increased tariffs that impose barriers to international trade. Our business and operating results are substantially dependent on international trade. Many of our manufacturers sell products incorporating our integrated circuits into international markets.

Tariffs on our customers’ products may adversely affect our gross profit margins in the future due to the potential for increased pressure on our selling prices by customers seeking to offset the impact of tariffs on their own products. In addition, tariffs could make our OEM and ODM customers’ products less attractive relative to products offered by their competitors, which may not be subject to similar tariffs. Some OEM and ODMs in our industry have already implemented short-term price adjustments to offset such tariffs and transitioned their production and supply chain to locations outside of China. We believe that increases in tariffs on imported goods or the failure to resolve current international trade disputes could have a material adverse effect on our business and operating results.

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We will lose sales if we are unable to obtain government authorization to export certain of our products or technology related to the development or production of our products, and we will be subject to legal and regulatory consequences if we do not comply with applicable export control laws and regulations.

Certain of our products and technologies are subject to export and/or import controls imposed by countries in which we do business. In certain instances, these regulations may require pre-shipment authorization approval from a government authority; depending on the country and/or individual or entity involved, approval may not be granted. For products subject to the Export Administration Regulations, or EAR, administered by the U.S. Department of Commerce’s Bureau of Industry and Security, or BIS, a license may be required, depending on one or more factors including the type of product or technology at issue, the intended end use, the identity of the end user, the identity of other companies involved in the production process, and whether a license exception might apply. Certain of our products and technologies are subject to the EAR.

Obtaining export licenses can be difficult, costly and time-consuming and we may not always be successful in obtaining necessary export licenses. Our failure to obtain required import or export approval for our products may adversely affect our business, and other limitations imposed on our ability to export or sell our products may also harm our international and domestic revenue. Although our policies, controls, and procedures are designed to maintain ongoing compliance with applicable export controls laws, we cannot assure you that we have been or will be at all times in complete compliance with such laws and regulations. If we violate or fail to comply with any of them, a range of consequences could result, including fines, import/export restrictions, sales limitations, criminal and civil liabilities or other sanctions. In addition, if our customers fail to comply with these regulations and laws, we may be required to suspend sales to these customers, which could damage our reputation and negatively impact our results of operations. The absence of comparable restrictions imposed on competitors based in other countries may adversely affect our competitive position.

In October 2022, the BIS issued an interim final rule to implement (1) additional export controls on advanced computing integrated circuits (ICs), computer commodities that contain such ICs and certain semiconductor manufacturing items; (2) additional export control requirements for products and/or technologies that may be destined for facilities meeting certain criteria; and (3) additional export controls on transactions involving items for supercomputer and semiconductor manufacturing end uses. The additional export controls on certain manufacturing end-uses resulted in an expansion of the scope of foreign-produced items subject to license requirements for 28 Chinese entities already on the Entity List (a list of entities to which the transfer of EAR-controlled technology or software is generally prohibited absent a U.S. export license), which includes one immaterial customer of MaxLinear located in China.

Export control laws, regulations, and orders are complex, change frequently and with limited or no notice, have generally become more stringent over time and have intensified as U.S.-China geopolitical tensions worsen. The addition of new entities to restricted party lists can further increase the scope of export restrictions applicable to our business. Failure to obtain required export licenses for our products or the placement of one or more of our customers on any restricted parties lists could significantly reduce our revenue and harm our business.

Additionally, current and future business with parties subject to significant export restrictions, including those named on the Entity List may be limited in scope or suspended entirely in order to comply with the EAR or other applicable laws or regulations and, as a result, our revenue could be adversely impacted until a license is granted. It is possible that the U.S. government may not grant licenses or renew licenses to transact business with entities on the Entity List.

In October 2022, we self-identified a potential violation of the EAR related to certain transactions with one of our foundry partners in China on the Entity List, or Specific Foundry Partner, in which limited technology in the form of test results and failure analysis reports were furnished to our Specific Foundry Partner without authorization under the EAR. Upon discovery, (1) we took immediate action to remediate, including by preventing recurrence and (2) our Audit Committee engaged outside counsel to conduct a privileged investigation into the potential violation, which investigation is ongoing. In October 2022, we submitted an initial notification of voluntary self-disclosure to the BIS regarding the potential EAR violation described above. Our notification submission is currently under review at BIS, and it is unknown when such review will be completed. Concurrently with the filing of the initial notification of voluntary self-disclosure, we submitted an export license application to BIS, in order to ensure that all prospective transactions with our Specific Foundry Partner are conducted in full compliance with the EAR. That license was issued on November 29, 2022. As part of the ongoing investigation, we identified other export control violations and have taken actions to remediate such infractions and continue to evaluate if any additional remedial actions should be taken. We are also continuing to review our export compliance procedures and program to enhance our programs, policies and or procedures, as appropriate.
We also are subject to risks associated with international geopolitical conflicts involving the U.S. and other governments such as China and Russia.

In recent years, diplomatic and trade relationships between the U.S. government and China have been frayed. Events in Hong Kong and the threat of a takeover of Taiwan by China have also prompted other governments such as that of the United Kingdom to reconsider its trade and business relationships with China and with certain Chinese companies. Difficulties in these relationships have in a number of cases required us to take actions adverse to our business to comply with governmental restrictions on business and trade with China.

Beginning in May 2019 and subsequently, other than for certain transactions for which we have a valid export license issued by BIS, we ceased business operations with entities affiliated with Huawei Technologies Co., Ltd., or Huawei and certain other entities, following an amendment to the EAR adding such entities to the Entity List for acting contrary to the national security or foreign policy interests of the United States.

In September 2020, we further restricted business operations with additional entities affiliated with Huawei when the BIS again amended the EAR to add such entities to the Entity List.

In October 2022, the BIS again amended the EAR, among other things, to add 31 new entities in China to the Unverified List. It is possible that entities currently on the Unverified List may be added to the Entity List if certain conditions are not met. As noted above, our ability to manufacture or distribute products or technology will be limited if BIS further amends the EAR to add restrictions against parties who are or may be our customers. This also raises an additional risk that China may enact retaliatory legislation or regulations that may raise similar adverse risks.

We are required to obtain special licenses to conduct business with entities on the Entity List and to conduct additional diligence and recordkeeping, including obtaining user statements from entities on the Unverified List. Failure to obtain any required license would likely result in a loss of business and a corresponding negative impact on our financial position and results of operations.

We believe direct impacts of the economic sanctions against Russia and the military conflict in Ukraine are currently limited to volatility in the prices of metals used by our outsourced semiconductor assembly and test, or OSAT, supply chain, in particular around the supply of palladium, for which Russia is the top producer in the world, as well as increased fuel costs, which has global impact on transportation costs, including the shipping and delivery of our products. However, the magnitude of such price volatility on our business and its duration is uncertain and cannot be reasonably estimated at this time.

We cannot provide assurances that similar disruptions of distribution arrangements in the future, the imposition of governmental prohibitions on selling our products to particular customers, further sanctions on Russia or other countries, and/or increases in costs of certain raw materials and transportation will not also adversely affect our revenues and operating results. Loss of a key distributor or customer under similar circumstances could have a material adverse effect on our business, revenues and operating results.

We depend on a limited number of customers for a substantial portion of our revenue, and the loss of, or a significant reduction in orders from one or more of our major customers could have a material adverse effect on our revenue and operating results.

In the year ended December 31, 2022, two customers accounted for 31% of our net revenue, and our ten largest customers collectively accounted for 65% of our net revenue, of which distributor customers accounted for 18% of our net revenue. We expect that our operating results for the foreseeable future will continue to show a substantial percentage of sales dependent on a relatively small number of customers. In the future, these customers may decide not to purchase our products at all, may purchase fewer products than they did in the past, or may defer or cancel purchases or otherwise alter their purchasing patterns. Factors that could affect our revenue from these large customers include the following:

- substantially all of our sales to date have been made on a purchase order basis, which permits our customers to cancel, change or delay product purchase commitments with little or no notice to us and without penalty;
- some of our customers have sought or are seeking relationships with current or potential competitors which may affect their purchasing decisions;
service provider and OEM consolidation across cable, satellite, and fiber markets could result in significant changes to our customers’ technology development and deployment priorities and roadmaps, which could affect our ability to forecast demand accurately and could lead to increased volatility in our business; and

• technological changes in our markets could lead to substantial volatility in our revenues based on product transitions, and particularly in our broadband markets, we face risks based on changes in the way consumers are accessing and using broadband and cable services, which could affect operator demand for our products.

In addition, delays in development could impair our relationships with our strategic customers and negatively impact sales of the products under development. Moreover, it is possible that our customers may develop their own products or adopt a competitor’s solution for products that they currently buy from us. If that happens, our sales would decline and our business, financial condition and results of operations could be materially and adversely affected.

Our relationships with some customers may deter other potential customers who compete with these customers from buying our products. To attract new customers or retain existing customers, we may offer these customers favorable prices on our products. In that event, our average selling prices and gross margins would decline. The loss of a key customer, a reduction in sales to any key customer or our inability to attract new significant customers could seriously impact our revenue and materially and adversely affect our results of operations.

A significant portion of our revenues are from sales of product to distributors, who then resell our product. Our agreements with certain of these distributors provide protection against price reduction on their inventories of our products. The loss of certain distributors could have a material adverse effect on our business and results of operations, and price reductions associated with their inventories of our products could have a material adverse effect on our operating results in the event of a dramatic decline in selling prices for these products.

In addition, the current situation relating to trade with China and governmental and regulatory concerns relating to specific Chinese companies continue to remain fluid and unpredictable. Our current and future operating results could be materially and adversely affected by limitations on our ability to sell to one or more Chinese customers, as described in the section “Risks Related to Our Business” under the risk factor “We are also subject to risks associated with international geopolitical conflicts involving the U.S. and other governments such as China and Russia”, and by tariffs and other trade barriers that may be implemented by governmental authorities.

Despite a relatively short-term positive pricing environment, average selling prices of our products could decrease rapidly, which would have a material adverse effect on our revenue and gross margins.

We may experience substantial period-to-period fluctuations in future operating results due to the erosion of our average selling prices. From time to time, we have reduced the average unit price of our products due to competitive pricing pressures, new product introductions by us or our competitors, and for other reasons, and we expect that we will have to do so again in the future, despite a relatively short-term positive pricing environment. In particular, we believe that industry consolidation has provided a number of larger semiconductor companies with substantial market power, which has had a material adverse impact on selling prices in some of our markets. If we are unable to offset any reductions in our average selling prices by increasing our sales volumes or introducing new products with higher margins, our revenue and gross margins will suffer. To support our gross margins, we must develop and introduce new products and product enhancements on a timely basis and continually reduce our and our customers’ costs. If we fail to penetrate new applications and markets, our revenue, revenue growth rate, if any, and financial condition could be materially and adversely affected.

We sell a significant portion of our products to manufacturers of cable broadband voice and data modems and gateways, Pay-TV set-top boxes and gateways into cable and satellite operator markets, satellite outdoor units or LNB’s, optical modules for long-haul and metro telecommunications markets, and RF transceivers and modem solutions for wireless infrastructure markets. Our product offerings also include broadband data access, power management and interface technologies which are ubiquitous functions in new and existing markets such as wireless and wireline communications infrastructure, broadband access, industrial, enterprise network, and automotive applications. We have further expanded our product offerings to include Wi-Fi, ethernet and broadband gateway processor systems-on-chip, or SoCs, and intellectual property that utilizes patented machine learning techniques to improve signal integrity and power efficiency in SoCs, ASICs, and field-programmable gate
arrays, or FPGAs, used in next-generation communication and artificial intelligence systems. Our future revenue growth, if any, will depend in part on our ability to further penetrate into, and expand beyond, these markets with analog, digital and mixed-signal solutions targeting the markets for Wi-Fi and broadband, high-speed optical interconnects for data center, metro, and long-haul optical modules, telecommunications wireless infrastructure, and cable DOCSIS 3.1 network infrastructure products. Each of these markets presents distinct and substantial risks. If any of these markets do not develop as we currently anticipate, or if we are unable to penetrate them successfully, it could materially and adversely affect our revenue and revenue growth rate, if any.

Broadband data modems and gateways and Pay-TV and satellite set-top boxes and video gateways continue to represent a significant North American and European revenue generator. The North American and European Pay-TV market is dominated by only a few OEMs, including Technicolor SA, CommScope Holding Company, Inc., Hitron Technologies, Inc., Compal Broadband Networks Inc., Humax Co., Ltd., and Samsung Electronics Co., Ltd. These OEMs are large multinational corporations with substantial negotiating power relative to us and are undergoing significant consolidation. Securing design wins with any of these companies requires a substantial investment of our time and resources. Even if we succeed, additional testing and operational certifications will be required by the OEMs' customers, which include large Pay-TV television companies such as Comcast Corporation, Liberty Global plc, Charter Communications, Inc., Sky UK Limited, AT&T Inc. and EchoStar Corporation. In addition, our products will need to be compatible with other components in our customers' designs, including components produced by our competitors or potential competitors. There can be no assurance that these other companies will support or continue to support our products.

If we fail to penetrate these or other new markets upon which we target our resources, our revenue and revenue growth rate, if any, likely will decrease over time and our financial condition could suffer.

A significant portion of our revenue is attributable to demand for our products in markets for broadband solutions, and development delays and consolidation trends among cable and satellite Pay-TV and broadband operators could adversely affect our future revenues and operating results.

For the years ended December 31, 2022 and 2021, revenue directly attributable to broadband applications accounted for approximately 44% and 55% of our net revenue, respectively. Delays in the development of, or unexpected developments in the broadband markets could have an adverse effect on order activity by original equipment manufacturers in these markets and, as a result, on our business, revenue, operating results and financial condition. In addition, consolidation trends among Pay-TV and broadband operators may continue, which could delay or lead to cancellations of major spending programs and have a material adverse effect on our future operating results and financial condition.

We may be unable to make the substantial and productive research and development investments that are required to remain competitive in our business.

The semiconductor industry requires substantial investment in research and development in order to develop and bring to market new and enhanced technologies and products. Many of our products originated with our research and development efforts, which we believe have provided us with a significant competitive advantage. For years ended December 31, 2022, 2021 and 2020, our research and development expense was $296.4 million, $278.4 million, and $180.0 million respectively. We expect our research and development expenses to increase in future years as we continue to expand our product portfolio and enhance existing products. We monitor such expenditures as part of our strategy of devoting focused research and development efforts on the development of innovative and sustainable product platforms. We are committed to investing in new product development internally in order to stay competitive in our markets and plan to maintain research and development and design capabilities for new solutions in advanced semiconductor process nodes such as 16nm and 5nm and beyond. However, we do not know whether we will have sufficient resources to maintain the level of investment in research and development required to remain competitive as semiconductor process nodes continue to shrink and become increasingly complex. In addition, we cannot assure you that the technologies that are the focus of our research and development expenditures will become commercially successful.

A significant variance in our operating results or rates of growth, if any, could lead to substantial volatility in our stock price. We may not sustain our current growth rate, and we may not be able to manage future growth effectively.

Our net revenue increased from $892.4 million in the year ended December 31, 2021 to $1.1 billion in the year ended December 31, 2022. However, continued uncertainty in customer demand as well as the global economy could result in increased volatility in our sales and revenues. You should not rely on our operating results for any prior quarterly or annual periods as an indication of our future operating performance. Please refer to the Risk Factor entitled “Our operating results are
subject to substantial quarterly and annual fluctuations and may fluctuate significantly due to a number of factors that could adversely affect our business and our stock price for a discussion of factors contributing to variances in our operating results or rates of growth. If we are unable to sustain adequate revenue growth, our financial results could suffer and our stock price could decline.

To sustain and manage any future growth successfully, we believe we must effectively, among other things:

- successfully develop new products and penetrate new applications and markets;
- recruit, hire, train and manage additional qualified engineers for our research and development activities, especially in the positions of design engineering, product and test engineering and applications engineering;
- add sales personnel and expand customer engineering support offices;
- implement and improve our administrative, financial and operational systems, procedures and controls; and
- enhance our information technology support for enterprise resource planning and design engineering by adapting and expanding our systems and tool capabilities, and properly training new hires as to their use.

If we are unable to sustain and manage our growth effectively, we may not be able to take advantage of market opportunities or develop new products and we may fail to satisfy customer requirements, maintain product quality, execute our business plan, or respond to competitive pressures.

The complexity of our products could result in unforeseen delays or expenses caused by undetected defects or bugs, which could reduce the market acceptance of our new products, damage our reputation with current or prospective customers and adversely affect our operating costs.

Highly complex products like our Wi-Fi and broadband RF receivers and RF receiver SoCs, physical medium devices for optical modules, RF transceiver and modern solutions for wireless infrastructure markets, and high-performance analog solutions may contain defects and bugs when they are first introduced or as new versions are released. Where any of our products, including legacy acquired products, contain defects or bugs, or have reliability, quality or compatibility problems, we may not be able to successfully correct these problems. Consequently, our reputation may be damaged and customers may be reluctant to buy our products, which could materially and adversely affect our ability to retain existing customers and attract new customers, and our financial results. In addition, these defects or bugs could interrupt or delay sales to our customers. If any of these problems are not found until after we have commenced commercial production of a new product, we may be required to incur additional development costs and product recall, repair or replacement costs, and our operating costs could be adversely affected. These problems may also result in warranty or product liability claims against us by our customers or others that may require us to make significant expenditures to defend these claims or pay damage awards. In the event of a warranty claim, we may also incur costs if we compensate the affected customer. We maintain product liability insurance, but this insurance is limited in amount and subject to significant deductibles. There is no guarantee that our insurance will be available or adequate to protect against all claims. We also may incur costs and expenses relating to a recall of one of our customers’ products containing one of our devices. The process of identifying a recalled product in devices that have been widely distributed may be lengthy and require significant resources, and we may incur significant replacement costs, contract damage claims from our customers and reputational harm. Costs or payments made in connection with warranty and product liability claims and product recalls could materially affect our financial condition and results of operations, and ability to obtain future coverage. Although we purchase insurance to mitigate certain losses, any uninsured losses could negatively affect our operating results. Although we maintain reserves for reasonably estimable liabilities and purchase product liability insurance, if a catastrophic product liability claim were to occur, our reserves may be inadequate to cover the uninsured portion of such claims. Further, our business liability insurance may be inadequate, may not cover the claims, and future coverage may be unavailable on acceptable terms, which could adversely impact our financial results.

If we are unable to attract, train and retain qualified personnel and senior management, our business, financial condition, results of operations and prospects could suffer.

Our future success depends on our ability to retain, attract and motivate qualified personnel, including our management, sales and marketing and finance teams, and especially our design and technical staff. We do not know whether we will be able to attract and retain the required and desirable personnel as we continue to pursue our business strategy. Historically, we have encountered difficulties in hiring and retaining qualified engineers because there is a limited pool of engineers with the expertise required in our field. Competition for these personnel is intense in the semiconductor industry. As the source of our
Our future success also depends on the continued contributions of our senior management team and other key personnel. None of our senior management team or other key personnel is bound by written employment contracts to remain with us for a specified period. In addition, we have not entered into non-compete agreements with members of our senior management team or other key personnel, except in limited circumstances (e.g., in connection with the acquisition of other companies). We are fortunate that many members of our senior management team have long tenures with us, but from time to time we also have been required to recruit new members of senior management. With respect to recruitment and retention of senior management, we need to ensure that our compensation programs provide sufficient recruitment and retention incentives as well as incentives to achieve our long-term strategic business and financial objectives. We expect competition for individuals with our required skill sets, particularly technical and engineering skills, to remain intense even in weak global macroeconomic environments. The loss of any member of our senior management team or other key personnel could harm our ability to implement our business strategy and respond to the rapidly changing market conditions in which we operate.

If we fail to develop and introduce new or enhanced products on a timely basis, our ability to attract and retain customers could be impaired and our competitive position could be harmed.

We operate in a dynamic environment characterized by rapidly changing technologies and industry standards and technological obsolescence. To compete successfully, we must design, develop, market and sell new or enhanced products that provide increasingly higher levels of performance and reliability and meet the cost expectations of our customers. The introduction of new products by our competitors, the market acceptance of products based on new or alternative technologies, or the emergence of new industry standards could render our existing or future products obsolete. Our failure to anticipate or timely develop new or enhanced products or technologies in response to technological shifts could result in decreased revenue and our competitors winning more competitive bid processes, known as “design wins." In particular, we may experience difficulties with product design, manufacturing, marketing or certification that could delay or prevent our development, introduction or marketing of new or enhanced products. If we fail to introduce new or enhanced products that meet the needs of our customers or penetrate new markets in a timely fashion, we will lose market share and our operating results will be adversely affected.

In particular, we believe that we will need to develop new products in part to respond to changing dynamics and trends in our end user markets, including (among other trends) consolidation among cable and satellite operators, potential industry shifts away from the hardware devices and other technologies that incorporate certain of our products, and changes in consumer television viewing habits and how consumers access and receive broadcast content and digital broadband services. We cannot predict how these trends will continue to develop or how or to what extent they may affect our future revenues and operating results. We believe that we will need to continue to make substantial investments in research and development in an attempt to ensure a product roadmap that anticipates these types of changes; however, we cannot provide any assurances that we will accurately predict the direction in which our markets will evolve or that we will be able to develop, market, or sell new products that respond to such changes successfully or in a timely manner, if at all. We are subject to order and shipment uncertainties, and differences between our estimates of customer demand and product mix and our actual results could negatively affect our inventory levels, sales and operating results.

Our revenue is generated on the basis of shipments of products under purchase orders with our customers rather than long-term purchase commitments. In addition, our customers can cancel purchase orders or defer the shipments of our products under certain circumstances. Our products are manufactured using a silicon foundry according to our estimates of customer demand, which requires us to make separate demand forecast assumptions for every customer, each of which may introduce significant variability into our aggregate estimate. We have limited visibility into future customer demand and the product mix that our customers will require, which has in the past affected and could in the future adversely affect our revenue forecasts and
operating margins. Moreover, because our target markets are relatively new, many of our customers have difficulty accurately forecasting their product requirements and estimating the timing of their new product introductions, which ultimately affects their demand for our products. Historically, because of this limited visibility, actual results have been different from our forecasts of customer demand. Some of these differences have been material, leading to excess inventory or product shortages and revenue and margin forecasts above those we were actually able to achieve. These differences may occur in the future, and the adverse impact of these differences between forecasts and actual results could grow if we are successful in selling in and expanding the customer base for our products. In addition, the rapid pace of innovation in our industry could render significant portions of our inventory obsolete. Excess or obsolete inventory levels could result in unexpected expenses or increases in our reserves that could adversely affect our business, operating results and financial condition. Conversely, if we were to underestimate customer demand or if sufficient manufacturing capacity were unavailable, we could forego revenue opportunities, potentially lose market share and damage our customer relationships. In addition, any significant future cancellations or deferrals of product orders or the return of previously sold products due to manufacturing defects could materially and adversely impact our profit margins, increase our write-offs due to product obsolescence and restrict our ability to fund our operations.

We may have difficulty accurately predicting our future revenue and appropriately budgeting our expenses particularly as we seek to enter new markets where we may not have prior experience.

Our operating history had historically focused on developing integrated circuits for specific applications and more recently, the wired whole-home broadband connectivity market and markets for wireless telecommunications infrastructure and power management and interface technologies which are ubiquitous functions in wireless and wireline communications infrastructure, broadband access, industrial, enterprise network, and automotive applications. As part of our growth strategy, we seek to expand our addressable market into new product categories. For example, we expanded into the markets for Wi-Fi, Ethernet and Broadband Gateway Processor SoCs and intellectual property that utilizes patented machine learning techniques to improve signal integrity and power efficiency in SoCs, ASICs, and FPGAs used in next-generation communication and artificial intelligence systems. Our limited operating experience in new markets or potential markets we may enter, combined with the rapidly evolving nature of our markets in general, substantial uncertainty concerning how these markets may develop and other factors beyond our control reduces our ability to accurately forecast quarterly or annual revenue. If our revenue does not increase as anticipated, we could incur significant losses due to our higher expense levels if we are not able to decrease our expenses in a timely manner to offset any shortfall in future revenue.

Our customers require our products and our third-party contractors to undergo a lengthy and expensive qualification process which does not assure product sales.

Prior to purchasing our products, our customers require that both our products and our third-party contractors undergo extensive qualification processes, which involve testing of the products in the customer’s system and rigorous reliability testing. This qualification process may continue for six months or more. However, qualification of a product by a customer does not assure any sales of the product to that customer. Even after successful qualification and sales of a product to a customer, a subsequent revision to our solutions, or changes in our customer’s manufacturing process or our selection of a new supplier may require a new qualification process, which may result in delays and in us holding excess or obsolete inventory. After our products are qualified, it can take six months or more before the customer commences volume production of components or devices that incorporate our products. Despite these uncertainties, we devote substantial resources, including design, engineering, sales, marketing and management efforts, to qualifying our products with customers in anticipation of sales. If we are unsuccessful or delayed in qualifying any of our products with a customer, sales of this product to the customer may be precluded or delayed, which may result in a decrease in our revenue and cause our business to suffer.

Winning business is subject to lengthy competitive selection processes that require us to incur significant expenditures. Even if we begin a product design, customers may decide to cancel or change their product plans, which could cause us to generate no revenue from a product and adversely affect our results of operations.

We are focused on securing design wins to develop RF receivers and RF receiver SoCs, MoCA and G.hn SoCs, DBS-ODU SoCs, physical medium devices for optical modules, interface and power management devices, and SoC solutions targeting infrastructure opportunities within the telecommunications, wireless, industrial and multimarket and Wi-Fi and broadband operator markets for use in our customers’ products. These selection processes typically are lengthy and can require us to incur significant design and development expenditures and dedicate scarce engineering resources in pursuit of a single customer opportunity. We may not win the competitive selection process and may never generate any revenue despite incurring significant design and development expenditures. These risks are exacerbated by the fact that some of our customers’ products likely will have short life cycles. Although this has not occurred to date, failure to obtain a design win could prevent us from
offering an entire generation of a product. This could cause us to lose revenue and require us to write off obsolete inventory, and could weaken our position in future competitive selection processes. After securing a design win, we may experience delays in generating revenue from our products as a result of the lengthy development cycle typically required. Our customers generally take a considerable amount of time to evaluate our products. The typical time from early engagement by our sales force to actual product introduction runs from nine to twelve months for the consumer market, to as much as 18 to 24 months for the satellite markets, and 36 months or longer for industrial, wired and wireless infrastructure markets. The delays inherent in these lengthy sales cycles increase the risk that a customer will decide to cancel, curtail, reduce or delay its product plans, causing us to lose anticipated sales. In addition, any delay or cancellation of a customer’s plans could materially and adversely affect our financial results, as we may have incurred significant expense and generated no revenue. Finally, our customers’ failure to successfully market and sell their products could reduce demand for our products and materially and adversely affect our business, financial condition and results of operations. If we were unable to generate revenue after incurring substantial expenses to develop any of our products, our business would suffer.

Our operating results are subject to substantial quarterly and annual fluctuations and may fluctuate significantly due to a number of factors that could adversely affect our business and our stock price.

Our revenue and operating results have fluctuated in the past and are likely to fluctuate in the future. These fluctuations may occur on a quarterly and on an annual basis and are due to a number of factors, many of which are beyond our control. These factors include, among others:

- changes in end-user demand for the products manufactured and sold by our customers;
- the receipt, reduction or cancellation of significant orders by customers;
- fluctuations in the levels of component inventories held by our customers;
- the gain or loss of significant customers;
- market acceptance of our products and our customers’ products;
- our ability to develop, introduce, and market new products and technologies on a timely basis;
- the timing and extent of product development costs;
- new product announcements and introductions by us or our competitors;
- incurrence of research and development and related new product expenditures;
- seasonality or cyclical fluctuations in our markets;
- government actions, by the United States, China or other countries, that impose barriers or restrictions that would impact our ability to sell or ship products to customers;
- currency fluctuations;
- fluctuations in IC manufacturing yields;
- significant warranty claims, including those not covered by our suppliers;
- changes in our product mix or customer mix;
- potential indemnification claims, including those arising as a result of our contractual arrangements or intellectual property disputes;
- intellectual property disputes;
- loss of key personnel or inability to attract, retain and motivate qualified skilled workers;
- impairment of long-lived assets, including masks and production equipment;
- the effects of competitive pricing pressures, including decreases in average selling prices of our products; and
• uncertainties arising from the impact of the COVID-19 pandemic on the market and our business operations.

These factors are difficult to forecast, and these, as well as other factors, could materially adversely affect our quarterly or annual operating results. We typically are required to incur substantial development costs in advance of a prospective sale with no certainty that we will ever recover these costs. A substantial amount of time may pass between a design win and the generation of revenue related to the expenses previously incurred, which can potentially cause our operating results to fluctuate significantly from period to period. In addition, a significant amount of our operating expenses are relatively fixed in nature due to our significant sales, research and development costs. Any failure to adjust spending or our operations quickly enough to compensate for a revenue shortfall could magnify its adverse impact on our results of operations.

We are subject to the cyclical nature of the semiconductor industry.

The semiconductor industry is highly cyclical and is characterized by constant and rapid technological change, rapid product obsolescence and price erosion, evolving standards, short product life cycles and wide fluctuations in product supply and demand. Any future downturns may result in diminished product demand, production overcapacity, high inventory levels and accelerated erosion of our average selling prices. Furthermore, any upturn in the semiconductor industry could result in increased competition for access to third-party foundry and assembly capacity. We are dependent on the availability of this capacity to manufacture and assemble all of our products. None of our third-party foundry or assembly contractors has provided assurances that adequate capacity will be available to us in the future. A significant downturn or upturn could have a material adverse effect on our business and operating results.

Our business is subject to various international and U.S. laws and governmental regulations, and compliance with these laws and regulations may cause us to incur significant expenses. A failure to maintain compliance with applicable laws and regulations could result in a material adverse effect on our business and operating results, and we could be subject to civil or criminal penalties.

Our business is subject to various laws and regulations in the United States and other jurisdictions where we do business, including but not limited to laws, regulations and other legal requirements related to packaging; product content; labor and employment; imports; export controls; anti-corruption; personal and data privacy; cybersecurity; human rights; conflict minerals; environment, health and safety; competition and antitrust; and intellectual property ownership and infringement. These laws and regulations are complex, change frequently and with little or no notice, occasionally are conflicting or ambiguous, and have generally become more stringent over time. We may be required to incur significant costs to comply with these laws and regulations or to remedy violations. In addition, because many of our products are regulated or sold into regulated industries, we must comply with additional regulations in marketing our products. Although our policies, controls, and procedures are designed to maintain ongoing compliance with applicable laws, we cannot assure you that we have been or will be at all times in compliance with such laws and regulations. If we violate or fail to comply with any of them, a range of consequences could result, including fines, import/export restrictions, sales limitations, criminal and civil liabilities or other sanctions. The costs of complying with these laws (including the costs of any investigations, auditing and monitoring) could adversely affect our current or future business.

As indicated elsewhere in this report, we do a substantial portion of our business in Asia and particularly in China. There has been a substantial focus by regulators in the United States and Europe on the business practices of certain major Chinese technology companies. In October 2022, we restricted shipments and exports to certain major Chinese technology companies, including a semiconductor foundry and OSAT providers. While we intend to continue to conduct our businesses in compliance with all applicable laws, including laws relating to export controls and anti-corruption, it is possible that the nature of our business and customers could result in a review of our relationships and practices by regulatory authorities. We could incur increased administrative and legal costs in order to respond to any inquiries, and any failure to comply with applicable laws could adversely affect our business and operating results. We have implemented policies and procedures, including adoption of an anti-corruption policy and procedures with respect to applicable export control laws, but there can be no assurance that our policies and procedures will prove effective.

Our products and operations are also subject to the rules of industrial standards bodies, like the International Standards Organization, as well as regulation by other agencies, such as the U.S. Federal Communications Commission. If we fail to adequately address any of these rules or regulations, our business could be harmed.

We must conform the manufacture and distribution of our semiconductors to various laws and adapt to regulatory requirements in all countries as these requirements change. If we fail to comply with these requirements in the manufacture or
distribution of our products, we could be required to pay civil penalties, face criminal prosecution and, in some cases, be prohibited from distributing our products in commerce until the products or component substances are brought into compliance.

We have been and may in the future be subject to information technology failures, including security breaches, cyber-attacks, design defects or system failures, that could disrupt our operations, damage our reputation and adversely affect our business, operations, and financial results.

We rely on our information technology systems for the effective operation of our business and for the secure maintenance and storage of confidential data relating to our business and third-party businesses. In June 2020, we announced a security incident resulting from a Maze ransomware attack affecting certain but not all operational systems within our information technology infrastructure. Because we did not satisfy the attacker’s monetary demands, on June 15, 2020, the attacker released online certain proprietary information obtained from our network. Since that time, our internal information technology team, supplemented by a leading cyber defense firm, took steps aimed at containing and assessing this incident, including implementing enhanced security controls aimed at protecting our information technology systems. Since that event, security breaches and incidents, computer malware and computer hacking attacks have continued to become more prevalent and sophisticated. These threats are constantly evolving, making it increasingly difficult to successfully defend against or implement adequate preventive measures. We experience cyber-attacks of varying degrees on our technology infrastructure and systems and notwithstanding our defensive measures, experienced programmers, hackers or state actors may be able to penetrate our security controls through attacks such as phishing, impersonating authorized users, ransomware, viruses, worms and other malicious software programs, exploitation of design flaws, bugs and other security weaknesses and vulnerabilities, covert introduction of malware to computers and networks, including those using techniques that change frequently or may be disguised or difficult to detect, or designed to remain dormant until a triggering event or that may continue undetected for an extended period of time. Geopolitical tensions or conflicts may create heightened risk of cyber-attacks.

Our information technology infrastructure also includes products and services provided by third parties, and these providers can experience breaches of their systems and products, or provide inadequate updates or support, which can impact the security of our systems and our proprietary or confidential information.

A cybersecurity incident or other compromise of our information technology systems could result in unauthorized publication of confidential business or proprietary information belonging to us, a customer, supplier, employee or other third party, including personal data, result in violations of privacy or other laws, expose us to a risk of litigation, cause us to incur direct losses if attackers initiate wire transfers or access our bank or investment accounts, or damage our reputation. More generally, any theft, loss, misuse, or other unauthorized processing of any confidential business or proprietary information, including personal data, collected, used, stored, transferred, or otherwise processed by us or on our behalf could result in significantly increased costs, expenses, damage to our reputation, and claims, litigation, demands, and regulatory investigations or other proceedings. The cost and operational consequences of implementing further data protection measures either as a response to specific breaches or incidents or as a result of evolving risks could be significant. In addition, our inability to use or access our information systems at critical points in time could adversely affect the timely and efficient operation of our business. Any delayed sales, significant costs or lost customers resulting from these technology failures could adversely affect our business, operations and financial results. We also may face difficulties or delays in identifying and remediating and otherwise responding to any security breach or incident.

From time-to-time, we upgrade software that we use in our business, including our enterprise resource planning, or ERP, system. Our business may be disrupted if our software does not work as planned or if we experience issues relating to any implementation, or accessing our software as has happened in a previous cybersecurity attack, in which case we may be unable to timely or accurately prepare financial reports, make payments to our suppliers and employees, or ship to, invoice and collect from our customers.

We may be subject to supply chain attacks where threat actors attempt to inject malicious code into our products thus infecting our products and the systems of our customers. Any such supply chain attack could have magnified damages to our business as a direct result of the attack as well as due to a lack of credibility or reputation with our customers. Such attempts are increasing in number and in technical sophistication, and if successful, expose us and the affected parties to risk of loss or misuse of proprietary or confidential information or disruptions of our business operations, including our manufacturing operations.

Third parties with which we conduct business, such as foundries, assembly and test contractors, and distributors, have access to certain portions of our sensitive data, and we rely on third parties to store and otherwise process data for us. We are dependent on the information security systems of these third parties and they face substantial security risks similar to those outlined above. Any security breaches or incidents or other unauthorized access by third parties to the systems of our suppliers,
service providers, or other third parties with access to our sensitive data, or the existence of computer viruses, ransomware or other malicious code in their data, software, or hardware, could result in disruptions or failures of systems used in our business and expose us to a risk of loss, misappropriation, unavailability and other unauthorized processing of information. Any of the foregoing, or the perception any of them has occurred, could have a material adverse impact on our business, operations and financial results.

Additionally, we cannot be certain that our insurance coverage will be adequate or otherwise protect us with respect to claims, expenses, fines, penalties, business loss, data loss, litigation, regulatory actions, or other impacts arising from any of the security breaches or incidents outlined above, or that such coverage will continue to be available on acceptable terms or at all. Any of these results could adversely affect our business, operations and financial results, potentially in a material manner.

We are subject to governmental laws, regulations and other legal obligations related to privacy, data protection, and cybersecurity.

The legislative, enforcement policy and regulatory framework for privacy, data protection and cybersecurity issues worldwide is rapidly evolving and complex and is likely to remain uncertain for the foreseeable future. We collect and otherwise process personal data and other data as part of our business processes and activities. This data is subject to a variety of U.S. and international laws and regulations, including oversight by various regulatory or other governmental bodies. Many foreign countries and governmental bodies, including China, the European Union and other relevant jurisdictions where we conduct business, have laws and regulations concerning the collection and use of personal data, and other data obtained from their residents or by businesses operating within their jurisdictions that are currently more restrictive than those in the U.S. These laws may require that our overall information technology security environment meet certain standards and/or be certified. For example, effective May 2018, the European Union adopted the General Data Protection Regulation, or GDPR, that imposed stringent data protection requirements and provided for greater penalties for noncompliance. The United Kingdom has adopted legislation that substantially implements the GDPR and provides for a similar penalty structure. Similarly, California has adopted the California Consumer Privacy Act of 2018, or CCPA, which took effect in 2020. The CCPA gives California residents the right to access, delete and opt out of certain sharing of their information, and imposes penalties for failure to comply. California has adopted a new law, the California Privacy Rights Act of 2020, or CPRA, that substantially expands the CCPA and is effective as of January 1, 2023. Additionally, other U.S. states continue to propose, and in certain cases adopt, privacy-focused legislation such as Colorado, Virginia, Utah, and Connecticut. In 2021, the National People’s Congress passed the Data Security Law of the People’s Republic of China, or the Data Security Law. The Data Security Law is the first comprehensive data security legislation in the People's Republic of China, or China, and aims to regulate a wide range of issues in relation to the collection, storage, processing, use, provision, transaction and publication of any kind of data. There is significant uncertainty in how regulators will interpret and enforce the law, but it contains provisions that allow substantial government oversight and include fines for failure to obtain required approval from China’s cyber and data protection regulators for cross-border personal data-related data transfers.

The laws outlined above are only a sample of the governmental laws, regulations and other legal obligations related to privacy, data protection, and cybersecurity to which we are subject. Various aspects of these laws, including their interpretation and enforcement, remain unclear, resulting in further uncertainty and potentially requiring us to modify our data practices and policies and to incur substantial additional costs and expenses in an effort to comply. Because the interpretation and application of many such laws and regulations, remain uncertain and continue to evolve, it is possible that these laws and regulations may be interpreted and applied in a manner that is inconsistent with our data management practices or the features of our products or solutions, and we could face fines, lawsuits, regulatory investigations, and other claims and penalties, and we could be required to fundamentally change our products or our business practices, all of which could have a material adverse effect on our business. Any inability, or perceived inability, to adequately address privacy and data protection concerns, or to comply with applicable laws, regulations, policies, industry standards, contractual obligations or other legal obligations, even if unfounded, could result in additional cost and liability to us, damage our reputation, inhibit sales and have a material adverse effect on our business, results of operations, and financial condition.

Our products must conform to industry standards in order to be accepted by end users in our markets.

Generally, our products comprise only a part or parts of a communications device. All components of these devices must uniformly comply with industry standards in order to operate efficiently together. We depend on companies that provide other components of the devices to support prevailing industry standards. Many of these companies are significantly larger and more influential in driving industry standards than we are. Some industry standards may not be widely adopted or implemented uniformly, and competing standards may emerge that may be preferred by our customers or end users. If larger companies do
not support the same industry standards that we do, or if competing standards emerge, market acceptance of our products could be adversely affected, which would harm our business.

Products for communications applications are based on industry standards that are continually evolving. Our ability to compete in the future will depend on our ability to identify and ensure compliance with these evolving industry standards. The emergence of new industry standards could render our products incompatible with products developed by other suppliers. As a result, we could be required to invest significant time and effort and to incur significant expense to redesign our products to ensure compliance with relevant standards. If our products are not in compliance with prevailing industry standards for a significant period of time, we could miss opportunities to achieve crucial design wins. We may not be successful in developing or using new technologies or in developing new products or product enhancements that achieve market acceptance. Our pursuit of necessary technological advances may require substantial time and expense.

As of December 31, 2022, our aggregate indebtedness was $125.0 million. Such indebtedness adversely affects our operating results and cash flows as we satisfy our underlying interest and principal payment obligations and contains financial and operational covenants that could adversely affect our operational freedom or ability to pursue strategic transactions that we would otherwise consider to be in the best interests of stockholders, including obtaining additional indebtedness to finance such transactions.

As of December 31, 2022, our aggregate indebtedness was $125.0 million from an initial secured term B loan facility, or the Initial Term Loan under the June 23, 2021 Credit Agreement. The June 23, 2021 Credit Agreement also provides for a revolving credit facility of up to $100.0 million, or the Revolving Facility, which remains undrawn as of December 31, 2022. The credit agreement also permits us to request incremental loans in an aggregate principal amount not to exceed the sum of an amount equal to the greater of (x) $175.0 million and (y) 100% of “Consolidated EBITDA” (as defined in such agreement), plus the amount of certain voluntary prepayments, plus an unlimited amount that is subject to pro forma compliance with certain first lien net leverage ratio, secured net leverage ratio and total net leverage ratio tests.

The Initial Term Loan under the June 23, 2021 Credit Agreement has a seven-year term expiring in June 2028 and bears interest at either an Adjusted LIBOR plus a fixed applicable margin of 2.25% or an Adjusted Base Rate plus a fixed applicable margin of 1.25%, at our option. Commencing on September 30, 2021, the Initial Term Loan under the June 23, 2021 Credit Agreement will amortize in equal quarterly installments equal to 0.25% of the original principal amount, with the balance payable on June 23, 2028. We are subject to commitment fees ranging from 0.175% to 0.25% on the undrawn portion of the Revolving Facility, and any outstanding loans under the Revolving Facility will bear interest at either an Adjusted LIBOR plus a margin of 1.00% to 1.75% or an Adjusted Base Rate plus a margin of 0% to 0.75%. Our obligations under the June 23, 2021 Credit Agreement are required to be guaranteed by certain of our domestic subsidiaries meeting materiality thresholds set forth in the credit agreement. Such obligations, including the guaranties, are secured by substantially all of our assets and those of the subsidiary guarantors.

Our material indebtedness adversely affects our operating expenses through increased interest payment obligations and adversely affects our ability to use cash generated from operations as we repay interest and principal under the term loans. In addition, the Revolving Facility provisions under the June 23, 2021 Credit Agreement include financial covenants such as an initial maximum secured net leverage ratio of 3.5 to 1, which temporarily increases to 3.75 to 1 following the consummation of certain material permitted acquisitions, and operational covenants that may adversely affect our ability to engage in certain activities, including obtaining additional financing, granting liens, undergoing certain fundamental changes, or making investments or certain restricted payments, and selling assets, and similar transactions, without obtaining the consent of the lenders, which may or may not be forthcoming. The Initial Term Loan under the June 23, 2021 Credit Agreement is only subject to operational covenants. Lastly, our borrowing costs can be affected by periodic credit ratings from independent rating agencies. Such ratings are largely based on our performance, which may be measured by credit metrics such as leveraging and interest coverage ratios. Accordingly, outstanding indebtedness could adversely affect our operational freedom or ability to pursue strategic transactions that we would otherwise consider to be in the best interests of stockholders, including obtaining additional indebtedness to finance such transactions.

Specifically, our indebtedness has important consequences to investors in our common stock, including the following:

- we are subject to variable interest rate risk because our interest rate under the Initial Term Loan under the June 23, 2021 Credit Agreement varies based on a fixed margin of 2.25% per annum over an adjusted LIBOR rate or 1.25% per annum over an adjusted base rate and our interest rate for any outstanding principal under the revolving credit facility varies based a margin of 0% to 0.75% over adjusted base rate or a margin of 1.00% to 1.75% over an adjusted LIBOR rate, and we are also subject to commitment fees ranging from 0.175% to 0.25% on the undrawn
portion of the Revolving Facility. If interest rates were to increase substantially, it would adversely affect our operating results and could affect our ability to service our indebtedness;

- a portion of our cash flows is dedicated to the payment of interest and when applicable, principal, on our indebtedness and other obligations and will not be available for use in our business;
- our level of indebtedness could limit our flexibility in planning for, or reacting to, changes in our business and the markets in which we operate, including limiting our future investments or ability to enter into acquisitions and strategic partnerships; and
- our high degree of indebtedness may make us more vulnerable to changes in general economic conditions and/or a downturn in our business, thereby making it more difficult for us to satisfy our obligations.

If we fail to make required debt payments, or if we fail to comply with financial or other covenants in our debt service agreements, which include a maximum leverage ratio, we would be in default under the terms of these agreements. Subject to customary cure rights, any default would permit the holders of the indebtedness to accelerate repayment of this debt and could cause defaults under other indebtedness that we have, any of which could have a material adverse effect on the trading price of our common stock.

**We may still incur substantially more debt or take other actions, which would intensify the risks discussed immediately above.**

We and our subsidiaries may, subject to any limitations in the terms of our existing loan facilities or the Senior Secured Credit Facilities, incur additional debt, secure existing or future debt, recapitalize our debt or take a number of other actions that are not limited by the terms of our term loans that could have the effect of diminishing our ability to make payments under the indebtedness when due. If we incur any additional debt, the related risks that we and our subsidiaries face could intensify.

We plan to finance the cash portion of the purchase price of the merger with Silicon Motion with approximately $3.5 billion of cash on hand and new debt. In connection with entering into the Merger Agreement, we entered into a commitment letter, dated as of May 5, 2022, and amended on June 17, 2022 and October 24, 2022 with Wells Fargo Bank, N.A. and Wells Fargo Securities, LLC, or collectively, Wells Fargo, pursuant to which, subject to the terms and conditions set forth therein, Wells Fargo has committed to provide us (i) a senior secured term B loan facility in an aggregate principal amount of up to $2.7375 billion, (ii) a senior secured term A loan facility in an aggregate principal amount of up to $512.5 million, and (iii) a senior secured revolving credit facility in an aggregate principal amount of up to $250.0 million. The funding of these secured credit facilities provided for in the commitment letter is contingent on the satisfaction of customary conditions, including (i) the execution and delivery of definitive documentation with respect to such credit facilities in accordance with the terms sets forth in the commitment letter and (ii) the consummation of the merger in accordance with the Merger Agreement.

**In addition to our pending merger with Silicon Motion, we may, from time to time, make additional business acquisitions or investments, which involve significant risks.**

We have completed multiple acquisitions in the past seven years. We may also enter into alliances or make investments in other businesses to complement our existing product offerings, augment our market coverage or enhance our technological capabilities. Any such transactions could result in:

- issuances of equity securities dilutive to our existing stockholders;
- substantial cash payments;
- the incurrence of substantial debt and assumption of unknown liabilities;
- large one-time write-offs;
- amortization expenses related to intangible assets;
- a limitation on our ability to use our net operating loss carryforwards;
- the diversion of management's time and attention from operating our business to acquisition integration challenges;
- stockholder or other litigation relating to the transaction;
• adverse tax consequences;
• costs and expenses associated with any undisclosed or potential liabilities; and
• the potential loss of, or ability to attract, key personnel, customers and suppliers of the acquired businesses.

To the extent we pay the purchase price of any acquisition or investment in cash or through borrowings under our Revolving Facility, it would reduce our cash balances and/or result in indebtedness we must service, which may have a material adverse effect on our business and financial condition. If the purchase price is paid with our stock, it would be dilutive to our stockholders. In addition, we may assume liabilities associated with a business acquisition or investment, including unrecorded liabilities that are not discovered at the time of the transaction, and the repayment of those liabilities may have a material adverse effect on our financial condition.

Integrating acquired organizations and their products and services, including the integration of completed acquisitions, may be expensive, time-consuming and a strain on our resources and our relationships with employees, customers, distributors and suppliers, and ultimately may not be successful. The benefits or synergies we may expect from the acquisition of complementary or supplementary businesses may not be realized to the extent or in the time frame we initially anticipate. Some of the risks that may affect our ability to successfully integrate acquired businesses include those associated with:

• failure to successfully further develop the acquired products or technology;
• conforming the acquired company’s standards, policies, processes, procedures and controls with our operations;
• coordinating new product and process development, especially with respect to highly complex technologies;
• loss of key employees or customers of the acquired business;
• hiring additional management and other key personnel;
• in the case of foreign acquisitions, the need to integrate operations across different cultures and languages and to address the particular economic, currency, political and regulatory risks associated with specific countries;
• increasing the scope, geographic diversity and complexity of our operations;
• consolidation of facilities, integration of the acquired businesses’ accounting, human resource and other administrative functions and coordination of product, engineering and sales and marketing functions;
• the geographic distance between the businesses;
• liability for activities of the acquired businesses before the acquisition, including patent and trademark infringement claims, violations of laws, commercial disputes, tax liabilities and other known and unknown liabilities; and
• litigation or other claims in connection with the acquired businesses, including claims for terminated employees, customers, former stockholders or other third parties.

We may not be able to identify suitable acquisition or investment candidates, or even if we do identify suitable candidates, they may be difficult to finance, expensive to fund and there is no guarantee that we can obtain any necessary regulatory approvals or complete such transactions on terms that are favorable to us.

We have in the past been and may in the future be party to litigation related to acquisitions. Any adverse determination in litigation resulting from acquisitions could have a material adverse effect on our business and operating results.

**Risks Relating to Intellectual Property**

We have settled in the past intellectual property litigation, are currently facing, and may in the future face additional claims of intellectual property infringement. Any current or future litigation could be time-consuming, costly to defend or settle and result in the loss of significant rights.

The semiconductor industry is characterized by companies that hold large numbers of patents and other intellectual property rights and that vigorously pursue, protect and enforce intellectual property rights. Third parties have in the past and may in the future assert against us and our customers and distributors their patent and other intellectual property rights to
technologies that are important to our business. In particular, from time to time, we receive correspondence from competitors and other third parties seeking to engage us in discussions concerning potential claims against us, and we receive correspondence from customers seeking indemnification for potential claims related to infringement claims asserted against down-stream users of our products. We investigate these requests and claims as received and could be required to enter license agreements with respect to third party intellectual property rights or indemnify third parties, either of which could have a material adverse effect on our future operating results.

Claims that our products, processes or technology infringe third-party intellectual property rights, regardless of their merit or resolution are costly to defend or settle and could divert the efforts and attention of our management and technical personnel. In addition, many of our customer and distributor agreements require us to indemnify and defend our customers or distributors from third-party infringement claims and pay damages and attorneys’ fees in the case of adverse rulings. Claims of this sort also could harm our relationships with our customers or distributors and might deter future customers from doing business with us. In order to maintain our relationships with existing customers and secure business from new customers, we have been required from time to time to provide additional assurances beyond our standard terms. If any of our current or future proceedings result in an adverse outcome, we could be required to:

• cease the manufacture, use or sale of the infringing products, processes or technology;
• pay substantial damages, indemnification expenses and attorneys’ fees;
• expend significant resources to develop non-infringing products, processes or technology;
• license technology from the third-party claiming infringement, which license may not be available on commercially reasonable terms, or at all;
• cross-license our technology to a competitor to resolve an infringement claim, which could weaken our ability to compete with that competitor; or
• pay substantial damages to our customers or end users to discontinue their use of or to replace infringing technology sold to them with non-infringing technology.

Any of the foregoing results could have a material adverse effect on our business, financial condition, and results of operations.

We utilize a significant amount of intellectual property in our business. If we are unable to protect our intellectual property, our business could be adversely affected.

Our success depends in part upon our ability to protect our intellectual property. To accomplish this, we rely on a combination of intellectual property rights, including patents, copyrights, trademarks and trade secrets in the United States and in selected foreign countries where we believe filing for such protection is appropriate. Effective patent, copyright, trademark and trade secret protection may be unavailable, limited or not applied for in some countries. Some of our products and technologies are not covered by any patent or patent application. We cannot guarantee that:

• any of our present or future patents or patent claims will not lapse or be invalidated, circumvented, challenged or abandoned;
• our intellectual property rights will provide competitive advantages to us;
• our ability to assert our intellectual property rights against potential competitors or to settle current or future disputes will not be limited by our agreements with third parties;
• any of our pending or future patent applications will be issued or have the coverage originally sought;
• our intellectual property rights will be enforced in jurisdictions where competition may be intense or where legal protection may be weak;
• any of the trademarks, copyrights, trade secrets or other intellectual property rights that we presently employ in our business will not lapse or be invalidated, circumvented, challenged or abandoned; or
• we will not lose the ability to assert our intellectual property rights against or to license our technology to others and collect royalties or other payments.
In addition, our competitors or others may design around our protected patents or technologies. Effective intellectual property protection may be unavailable or more limited in one or more relevant jurisdictions relative to those protections available in the United States, or may not be applied for in one or more relevant jurisdictions. If we pursue litigation to assert our intellectual property rights, an adverse decision in any of these legal actions could limit our ability to assert our intellectual property rights, limit the value of our technology or otherwise negatively impact our business, financial condition and results of operations.

Monitoring unauthorized use of our intellectual property is difficult and costly. Unauthorized use of our intellectual property may have occurred or may occur in the future. Although we have taken steps to minimize the risk of this occurring, any such failure to identify unauthorized use and otherwise adequately protect our intellectual property would adversely affect our business. Moreover, if we are required to commence litigation, whether as a plaintiff or defendant as has occurred in the past, not only will this be time-consuming, but we will also be forced to incur significant costs and divert our attention and efforts of our employees, which could, in turn, result in lower revenue and higher expenses.

We also rely on customary contractual protections with our customers, suppliers, distributors, employees and consultants, and we implement security measures to protect our trade secrets. We cannot assure you that these contractual protections and security measures will not be breached, that we will have adequate remedies for any such breach or that our suppliers, employees or consultants will not assert rights to intellectual property arising out of such contracts.

In addition, we have a number of third-party patent and intellectual property license agreements. Some of these license agreements require us to make one-time payments or ongoing royalty payments. Also, a few of our license agreements contain most-favored nation clauses or other price restriction clauses which may affect the amount we may charge for our products, processes or technology. We cannot guarantee that the third-party patents and technology we license will not be licensed to our competitors or others in the semiconductor industry. In the future, we may need to obtain additional licenses, renew existing license agreements or otherwise replace existing technology. We are unable to predict whether these license agreements can be obtained or renewed or the technology can be replaced on acceptable terms, or at all.

When we settled a trademark dispute with Linear Technology Corporation, we agreed not to register the “MAXLINEAR” mark or any other marks containing the term “LINEAR”. We may continue to use “MAXLINEAR” as a corporate identifier, including to advertise our products and services, but may not use that mark on our products. Due to our agreement not to register the “MAXLINEAR” mark, our ability to effectively prevent third parties from using the “MAXLINEAR” mark in connection with similar products or technology may be affected. If we are unable to protect our trademarks, we may experience difficulties in achieving and maintaining brand recognition and customer loyalty.

We face risks related to security vulnerabilities in our products.

We regularly are subject to security vulnerabilities with respect to our products as well as intellectual property that we purchase or license from third parties for use in our products. Our products are used in application areas that create new or increased cybersecurity and privacy risks, including applications that gather and process large amounts of data, such as the cloud or Internet of Things, and critical infrastructure, payment card applications, and automotive applications. Security features in our products cannot make our products entirely secure, and security vulnerabilities identified in our products have resulted in, and are expected to continue to result in, attempts by third parties to identify and exploit additional vulnerabilities. We, our customers, and the users of our products do not always promptly learn of or have the ability to fully assess the magnitude or effects of a vulnerability, including the extent, if any, to which a vulnerability has been exploited.

Mitigation techniques designed to address security vulnerabilities, including software and firmware updates or other preventative measures, are not always available on a timely basis, or at all, and at times do not operate as intended or effectively resolve vulnerabilities for all applications. In addition, we are often required to rely on third parties, including hardware, software, and services vendors, as well as our customers and end users, to develop and/or deploy mitigation techniques, and the availability, effectiveness, and performance impact of mitigation techniques can depend solely or in part on the actions of these third parties in determining whether, when, and how to develop and deploy mitigations. We and such third parties make prioritization decisions about which vulnerabilities to address, which can delay, limit, or prevent development or deployment of a mitigation and harm our reputation. Subsequent events or new information can develop that changes our assessment of the impact of a security vulnerability, which can cause certain claims or customer satisfaction considerations, as well as result in litigation or regulatory inquiries or actions over these matters.
Security vulnerabilities and/or mitigation techniques can result in adverse performance or power effects, reboots, system instability or unavailability, loss of functionality, non-compliance with standards, data loss or corruption, unpredictable system behavior, decisions by customers, regulators and end users to limit or change the applications in which they use our products or product features, and/or the misappropriation of data by third parties. Security vulnerabilities and any limitations or adverse effects of mitigation techniques can adversely affect our results of operations, financial condition, customer relationships, prospects, and reputation in a number of ways, any of which may be material.

The use of open source software in our products, processes and technology may expose us to additional risks and harm our intellectual property.

Our products, processes and technology sometimes utilize and incorporate software that is subject to an open source license. Open source software is typically freely accessible, usable and modifiable. Certain open source software licenses require a user who intends to distribute the open source software as a component of the user’s software to disclose publicly part or all of the source code to the user’s software. In addition, certain open source software licenses require the user of such software to make any derivative works of the open source code available to others on unfavorable terms or at no cost. This can subject previously proprietary software to open source license terms.

While we monitor the use of all open source software in our products, processes and technology and try to ensure that no open source software is used in such a way as to require us to disclose the source code to the related product, processes or technology when we do not wish to do so, such use could inadvertently occur. Additionally, if a third party software provider has incorporated certain types of open source software into software we license from such third party for our products, processes or technology, we could, under certain circumstances, be required to disclose the source code to our products, processes or technology. This could harm our intellectual property position and have a material adverse effect on our business, results of operations and financial condition.

Risks Relating to Reliance on Third-Parties

We do not have our own manufacturing facilities and rely on a limited number of third parties to manufacture, assemble, and test our products. The failure to manage our relationships with our third-party contractors successfully, or impacts from volatility in global supply, natural disasters, public health crises, or other labor stoppages in the regions where such contractors operate, could adversely affect our ability to market and sell our products.

We operate an outsourced manufacturing business model that utilizes third-party foundry and assembly and test capabilities. As a result, we rely on third-party foundry wafer fabrication, including sole sourcing for many components or products. Currently, the majority of our products are manufactured by Semiconductor Manufacturing International Corporation, or SMIC, Taiwan Semiconductor Manufacturing Company, Limited, or TSMC, and United Microelectronics Corporation, or UMC, at foundries located in Taiwan, Singapore, and China. We also rely on Intel Corporation, or Intel, for certain products on a turnkey basis under a supply agreement with an initial term of five years. We also use third-party contractors for all of our assembly and test operations.

Relying on third party manufacturing, assembly and testing presents significant risks to us, including the following:

- capacity shortages during periods of high demand or from events beyond our control or inventory oversupply during periods of decreased demand. For example, we believe inventory oversupply due to changes in customer demand will add to volatility in managing the business. Inventory oversupply could also lead to inventory write-downs, including charges for any excess or obsolete inventory which could negatively impact our gross margins;
- failure by us, our customers, or their end customers to qualify a selected supplier;
- reduced control over delivery schedules and quality;
- shortages of materials;
- misappropriation of our intellectual property;
- limited warranties on wafers or products supplied to us; and
- potential increases in prices.
The ability and willingness of our third-party contractors to perform is largely outside our control. If one or more of our contract manufacturers or other outsourcers fail to perform its obligations in a timely manner or at satisfactory quality levels, our ability to bring products to market and our reputation could suffer. For example, in the event that manufacturing capacity is reduced or eliminated at one or more facilities, manufacturing could be disrupted, we could have difficulties fulfilling our customer orders and our net revenue could decline. In addition, if these third parties fail to deliver quality products and components on time and at reasonable prices, we could have difficulties fulfilling our customer orders, our net revenue could decline and our business, financial condition and results of operations would be adversely affected.

Additionally, our product shipment and manufacturing capacity may be similarly reduced or eliminated at one or more facilities due to the fact that the majority of our fabrication and assembly and test contractors are all located in the Pacific Rim region, principally in China, Taiwan, and Singapore. The risk of earthquakes in these geographies is significant due to the proximity of major earthquake fault lines, and Taiwan in particular is also subject to typhoons and other Pacific storms, and more recently, a drought impacting the water supply which chip manufacturers rely upon to fabricate chip products. Earthquakes, fire, flooding, drought, or other natural disasters in Taiwan or the Pacific Rim region, or political unrest, war, labor strikes, work stoppages or public health crises, such as the outbreak of COVID-19, in countries where our contractors’ facilities are located could result in the disruption of our product shipments, foundry, assembly, or test capacity. For example, as a result of the extension of the lunar new year holidays due to the outbreak of COVID-19, certain of our product shipments from China were temporarily delayed in the first quarter of 2020. Although we continue to monitor impacts from COVID-19 globally on our business, it is currently unknown whether any resurgence of the outbreak will occur and disrupt our product shipments or manufacturing in the region over future periods. If such disruption were to recur over a prolonged period, it could have a material impact on our revenues and our business. Any disruption resulting from similar events on a larger scale or over a prolonged period could cause significant delays in shipments of our products until we are able to resume such shipments, or shift our manufacturing, assembly, or test from the affected contractor to another third-party vendor, if needed. There can be no assurance that alternative capacity could be obtained on favorable terms, if at all.

We are subject to risks associated with our distributors’ product inventories and product sell-through. Should any of our distributors cease or be forced to stop distributing our products, our business would suffer.

We currently sell a large portion of our products to customers through our distributors, who maintain their own inventories of our products. Sales to distributors accounted for approximately 46%, 47% and 49% of our net revenue in the years ended December 31, 2022, 2021 and 2020, respectively. Upon shipment of product to these distributors, title to the inventory transfers to the distributor and the distributor is invoiced, generally with 30 to 60 day terms. Distributor sales are also recognized upon shipment to the distributor and estimates of future pricing credits and/or stock rotation rights reduce revenue recognized to the net amount before the actual amounts are known. If our estimates of such credits and rights are materially understated it could cause subsequent adjustments that negatively impact our revenues and gross profits in a future period.

If our distributors are unable to sell an adequate amount of their inventories of our products in a given quarter to manufacturers and end users or if they decide to decrease their inventories of our products for any reason, our sales through these distributors and our revenue may decline. In addition, if some distributors decide to purchase more of our products than are required to satisfy end customer demand in any particular quarter, inventories at these distributors would grow in that quarter. These distributors could then reduce future orders until inventory levels realign with end customer demand, which could adversely affect our product revenue.

Our reserve estimates with respect to the products stocked by our distributors are based principally on reports provided to us by our distributors, typically on a weekly basis. To the extent that this resale and channel inventory data is inaccurate or not received in a timely manner, we may not be able to make reserve estimates accurately or at all.

We do not have any long-term supply contracts with our contract manufacturers or suppliers, and any disruption in our supply of products or materials could have a material adverse effect on our business, revenue and operating results.

While certain products are supplied to us by Intel on a turnkey basis under the terms of a supply agreement with an initial term of five years, currently we do not have long-term supply contracts with any other third-party vendors, including but, not limited to GF, SMIC, TSMC, and UMC. We make substantially all of our purchases on a purchase order basis, and our contract manufacturers are not required to supply us products for any specific period or in any specific quantity. Foundry capacity may not be available when we need it or at reasonable prices. Availability of foundry capacity has in the past been reduced from time to time due to strong demand. Foundries can allocate capacity to the production of other companies’ products and reduce deliveries to us on short notice. It is possible that foundry customers that are larger and better financed than we are, or that have long-term agreements with our foundry, may induce our foundry to reallocate capacity to them. This reallocation could impair
our ability to secure the supply of components that we need. We generally place orders for products with some of our suppliers approximately four to five months prior to the anticipated delivery date, with order volumes based on our forecasts of demand from our customers. Accordingly, if we inaccurately forecast demand for our products, we may be unable to obtain adequate and cost-effective foundry or assembly capacity from our third-party contractors to meet our customers’ delivery requirements, which could harm our reputation and customer relationships, or we may accumulate excess inventories. On occasion, we have been unable to adequately respond to unexpected increases in customer purchase orders and therefore were unable to benefit from this incremental demand. None of our third-party contractors has provided any assurance to us that adequate capacity will be available to us within the time required to meet additional demand for our products.

We rely on third parties to provide services and technology necessary for the operation of our business. Any failure of one or more of our partners, vendors, suppliers or licensors to provide these services or technology could have a material adverse effect on our business.

We rely on third-party vendors to provide critical services, including, among other things, services related to accounting, billing, human resources, information technology, network development, network monitoring, in-licensing and intellectual property that we cannot or do not create or provide ourselves. We depend on these vendors to ensure that our corporate infrastructure will consistently meet our business requirements. The ability of these third-party vendors to successfully provide reliable and high quality services is subject to technical and operational uncertainties that are beyond our control. While we may be entitled to damages if our vendors fail to perform under their agreements with us, our agreements with these vendors limit the amount of damages we may receive. In addition, we do not know whether we will be able to collect on any award of damages or that these damages would be sufficient to cover the actual costs we would incur as a result of any vendor’s failure to perform under its agreement with us. Any failure of our corporate infrastructure could have a material adverse effect on our business, financial condition and results of operations. Upon expiration or termination of any of our agreements with third-party vendors, we may not be able to replace the services provided to us in a timely manner or on terms and conditions, including service levels and cost, that are favorable to us and a transition from one vendor to another vendor could subject us to operational delays and inefficiencies until the transition is complete.

Additionally, we incorporate third-party technology into and with some of our products, and we may do so in future products. The operation of our products could be impaired if errors occur in the third-party technology we use. It may be more difficult for us to correct any errors in a timely manner if at all because the development and maintenance of the technology is not within our control. There can be no assurance that these third parties will continue to make their technology, or improvements to the technology, available to us, or that they will continue to support and maintain their technology. Further, due to the limited number of vendors of some types of technology, it may be difficult to obtain new licenses or replace existing technology. Any impairment of the technology or our relationship with these third parties could have a material adverse effect on our business.

Risks Relating to Our Common Stock

Our management team may use our available cash and cash equivalents in ways with which you may not agree or in ways which may not yield a return.

We use our cash and cash equivalents for general corporate purposes, including working capital and for repayment of outstanding long-term debt. We may also, in the future, use a portion of our assets to acquire other complementary businesses, products, services or technologies. Our management has considerable discretion in the application of our cash and cash equivalents, and resources, and you will not have the opportunity to assess whether these liquid assets are being used in a manner that you deem best to maximize your return. We may use our available cash and cash equivalents and resources for corporate purposes that do not increase our operating results or market value. In addition, in the future our cash and cash equivalents, and resources may be placed in investments that do not produce significant income or that may lose value.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us more difficult, limit attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our certificate of incorporation and bylaws, as amended and restated, may have the effect of delaying or preventing a change of control or changes in our management. These provisions provide for the following:

- authorize our Board of Directors to issue, without further action by the stockholders, up to 25,000,000 shares of undesignated preferred stock;
require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;

• specify that special meetings of our stockholders can be called only by our Board of Directors, our Chairman of the Board of Directors, or our President;

• establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our Board of Directors;

• establish that our Board of Directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered terms;

• provide that our directors may be removed only for cause;

• provide that vacancies on our Board of Directors may be filled only by a majority of directors then in office, even though less than a quorum;

• specify that no stockholder is permitted to cumulate votes at any election of directors; and

• require supermajority votes of the holders of our common stock to amend specified provisions of our charter documents.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our Board of Directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally restricts a Delaware corporation from engaging in any of a broad range of business combinations with any “interested” stockholder for a period of three years following the date on which the stockholder became an “interested” stockholder.

Our share price may be volatile as a result of various factors.

The trading price of our common stock is highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. For example, in the year ended December 31, 2022, the trading price of our common stock ranged from a low of $29.27 to a high of $77.57. These factors include those discussed in this “Risk Factors” section of the Annual Report on Form 10-K and others such as:

• any developments related to our pending merger with Silicon Motion;

• actual or anticipated fluctuations in our financial condition and operating results;

• overall conditions in the semiconductor market;

• addition or loss of significant customers;

• changes in laws or regulations applicable to our products, including export controls;

• geopolitical changes impacting our business, including with respect to China and Taiwan;

• actual or anticipated changes in our growth rate relative to our competitors;

• announcements of technological innovations by us or our competitors;

• announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, or capital commitments;

• departures of, and inability to attract, qualified key personnel;

• competition from existing products or new products that may emerge;

• issuance of new or updated research or reports by securities analysts;

• fluctuations in the valuation of companies perceived by investors to be comparable to us;

•
• disputes or other developments related to proprietary rights, including patents, litigation matters, and our ability to obtain intellectual property protection for our technologies;
• acquisitions may not be accretive and may cause dilution to our earnings per share;
• announcement or expectation of additional financing efforts;
• sales of our common stock by us or our stockholders; and
• general economic and market conditions, including the impacts from sanctions against Russia and the military conflict in Ukraine, increased inflationary pressures, interest rate changes, and the global COVID-19 pandemic.

Furthermore, the stock markets have experienced extreme price and volume fluctuations that have affected the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political, and market conditions such as recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of our common stock. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We have been and may continue to be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management’s attention from other business concerns, which could seriously harm our business.

We have adopted a stock repurchase program to repurchase shares of our common stock; however, any future decisions to reduce or discontinue purchasing our common stock pursuant to our stock repurchase programs could cause the market price for our common stock to decline.

Our share repurchase program has been temporarily suspended since July 2022 due to our pending merger with Silicon Motion. Although our board of directors has authorized a stock repurchase program, any determination to resume our stock repurchase program and execute our stock repurchase program will be subject to, among other things, our financial position and results of operations, available cash and cash flow, capital requirements, and other factors, as well as our board of director’s continuing determination that the repurchase program are in the best interests of our shareholders and is in compliance with all laws and agreements applicable to the repurchase program. Our stock repurchase program does not obligate us to acquire any common stock. If we fail to meet any expectations related to stock repurchases, the market price of our common stock could decline, and could have a material adverse impact on investor confidence. Additionally, price volatility of our common stock over a given period may cause the average price at which we repurchase our common stock to exceed the stock’s market price at a given point in time.

We may further increase or decrease the amount of repurchases of our common stock in the future. Any reduction or discontinuance by us of repurchases of our common stock pursuant to our current stock repurchase program could cause the market price of our common stock to decline. Moreover, in the event repurchases of our common stock are reduced or discontinued, our failure or inability to resume repurchasing common stock at historical levels could result in a lower market valuation of our common stock.

If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our share price and trading volume could decline.

The trading market for our common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. If one or more of the analysts who cover us downgrade our shares or change their opinion of our shares, our share price would likely decline. If one or more of these analysts cease coverage of us or fails to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

Future sales of our common stock in the public market could cause our share price to decline.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. As of December 31, 2022, we had approximately 78.7 million shares of common stock outstanding.
All shares of our common stock are freely tradable without restrictions or further registration under the Securities Act unless held by our “affiliates,” as that term is defined under Rule 144 of the Securities Act.

Our Executive Incentive Bonus Plan permits the settlement of awards under the plan in the form of shares of our common stock. We have issued shares of our common stock to settle such bonus awards for our employees, including executives, for the 2014 to 2021 performance periods, and we intend to continue this practice in the foreseeable future. We issued 0.5 million shares of our common stock for the 2021 performance period in February 2022. If we issue additional shares of our common stock to settle bonus awards in the future, such shares may be freely sold in the public market immediately following the issuance of such shares, subject to the applicable conditions of Rule 144 and our insider trading policy, and the issuance of such shares may have a material adverse effect on our share price once they are issued.

We do not intend to pay dividends for the foreseeable future.

We have never declared or paid any cash dividends on our common stock and do not intend to pay any cash dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our Board of Directors. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

General Risk Factors

If we suffer losses to our facilities or distribution system due to catastrophe, our operations could be seriously harmed.

Our facilities and distribution system, and those of our third-party contractors, are subject to risk of catastrophic loss due to fire, flood, drought or other natural or man-made disasters. A number of our facilities and those of our contract manufacturers are located in areas with above average seismic activity. The risk of an earthquake in the Pacific Rim region or Southern California is significant due to the proximity of major earthquake fault lines, and Taiwan in particular is also subject to typhoons and other Pacific storms, and more recently, a drought impacting the water supply which chip manufacturers rely upon to fabricate chip products. Any catastrophic loss to any of these facilities would likely disrupt our operations, delay production, shipments and revenue and result in significant expenses to repair or replace the facility. The majority of the factories we use for foundry, assembly and test, and warehousing services, are located in Asia, principally in China, Taiwan, and Singapore. Our corporate headquarters is located in Southern California. Our operations and financial condition could be seriously harmed in the event of a major earthquake, fire, flooding, drought, or other natural disasters in Taiwan or the Pacific Rim region, or political unrest, war, labor strikes, work stoppages or public health crises, such as the outbreak of COVID-19, or other natural or man-made disaster in countries where our contractors’ facilities are located. Such catastrophes could result in the disruption of our product shipments, foundry, assembly, or test capacity.

We have recorded goodwill and other intangible assets in connection with business acquisitions. Goodwill and other acquired intangible assets could become impaired and adversely affect our future operating results.

We account for business acquisitions as business combinations under the acquisition method of accounting in accordance with accounting principles generally accepted in the United States. Under the acquisition method of accounting, the total purchase price is allocated to net tangible assets and identifiable intangible assets of acquired businesses based on their fair values as of the date of completion of the acquisition. The excess of the purchase price over those fair values is recorded as goodwill. Our acquisitions have resulted in the creation of goodwill and recording of a large amount of intangible assets based upon the application of the acquisition method of accounting. To the extent the value of goodwill or other intangible assets become impaired, we may be required to incur material charges relating to such impairment. We conduct our annual goodwill and indefinite-lived intangible asset impairment analysis on October 31 each year, or more frequently if we believe indicators of impairment exist. Our reported financial condition and results of operations reflect the balances and results of the acquired businesses but are not restated retroactively to reflect the historical financial position or results of operations of acquired businesses for periods prior to the acquisitions. As a result, comparisons of future results against prior period results will be more difficult for investors. In addition, there can be no guarantee that acquired intangible assets, particularly in-process research and development, will generate revenues or profits that we include in our forecast that is the basis for their fair values as of the acquisition date. Any such impairment charges relating to goodwill or other intangible assets could have a material impact on our operating results in future periods, and the announcement of a material impairment could have a material adverse effect on the trading price and trading volume of our common stock. As of December 31, 2022, our balance sheet reflected goodwill of $306.7 million and other intangible assets of $109.3 million. Consequently, we could recognize material impairment charges in the future.
Unanticipated changes in our tax rates or unanticipated tax obligations could affect our future results.

We are subject to income taxes in the United States, Singapore and various other foreign jurisdictions. The amount of income taxes we pay is subject to our interpretation and application of tax laws in jurisdictions in which we file. Changes in current or future laws or regulations, the imposition of new or changed tax laws or regulations or new interpretations by taxing authorities or courts could affect our results of operations and lead to volatility with respect to tax expenses and liabilities from period to period. For example, beginning in 2022, the Tax Cuts and Jobs Act, or the Tax Act, eliminated the option to deduct research and development expenditures currently and requires taxpayers to capitalize and amortize them over five or fifteen years pursuant to Internal Revenue Code Section 174. This has increased our effective tax rate and our cash tax payable in 2022. If the requirement to capitalize Section 174 expenditures is not modified, it may also impact our effective tax rate and our cash tax liability in future years. On August 9, 2022, the CHIPS and Science Act of 2022, or the CHIPS Act, was enacted in the United States. The CHIPS Act will provide financial incentives to the semiconductor industry which are primarily directed at manufacturing activities within the United States for qualifying property placed in service after December 31, 2022. As the Company currently outsources its manufacturing, the CHIPS Act is not expected to have a material impact to the Company’s consolidated tax provision for the year ending December 31, 2023. The Inflation Reduction Act of 2022, or IRA, was signed into law on August 16, 2022. The bill was meant to address the high inflation rate in the United States through various climate, energy, healthcare, and other incentives. These incentives are meant to be paid for by the tax provisions included in the IRA, such as a new 15 percent corporate minimum tax, a 1 percent new excise tax on stock buybacks, additional IRS funding to improve taxpayer compliance, and others. The IRA provisions are effective for tax years beginning after December 31, 2022. At this time, none of the IRA tax provisions are expected to have a material impact to our consolidated tax provision for the year ending December 31, 2023. The application of tax laws and related regulations is subject to legal and factual interpretation, judgment and uncertainty. We cannot determine whether any legislative proposals may be enacted into law or what, if any, changes may be made to such proposals prior to their being enacted into law. If U.S. or international tax laws change in a manner that increases our tax obligation, it could result in a material adverse impact on our results of operations and our financial position.

Our income tax provision is subject to volatility and our ability to use our deferred tax assets to offset future taxable income may be limited since we are subject to tax examinations, which may adversely impact our future effective tax rate and operating results.

Excess tax benefits associated with employee stock-based compensation are included in income tax expense. However, since the amount of such excess tax benefits and deficiencies depend on the fair market value of our common stock, our income tax provision is subject to volatility in our stock price and in the future, could unfavorably affect our future effective tax rate.

Our future effective tax rate could be unfavorably affected by unanticipated changes in the valuation of our deferred tax assets and liabilities, and the ultimate use and depletion of these various tax credits and net operating loss carryforwards. Changes in our effective tax rate could have a material adverse impact on our results of operations. We record a valuation allowance to reduce our net deferred tax assets to the amount that we believe is more likely than not to be realized. In making such determination, we consider all available positive and negative evidence quarterly, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies, and recent financial performance. To the extent we believe it is more likely than not that some portion of our deferred tax assets will not be realized, we record a valuation allowance against the deferred tax asset. Realization of our deferred tax assets is dependant primarily upon future taxable income in the applicable jurisdiction. On a periodic basis we evaluate our deferred tax assets for realizability. Based upon our review of all positive and negative evidence, as of December 31, 2022, we continue to have a valuation allowance on state deferred tax assets, certain federal deferred tax assets, and certain foreign deferred tax assets in jurisdictions where we have cumulative losses or otherwise are not expected to utilize certain tax attributes. The impact of releasing some or all of such valuation allowance in a future period could be material in the period in which such release occurs.

Our corporate income tax liability could materially increase if tax incentives we have negotiated in Singapore cease to be effective or applicable or if we are challenged on our use of such incentives.

We operate under certain favorable tax incentives in Singapore which are effective through March 2027, and generally are dependent on our meeting certain headcount and investment thresholds. Such incentives allow certain qualifying income earned in Singapore to be taxed at reduced rates and are conditional upon our meeting certain employment and investment thresholds over time. If we fail to satisfy the conditions for receipt of these tax incentives, or to the extent U.S. or other tax authorities challenge our operation under these favorable tax incentive programs or our intercompany transfer pricing agreements, our taxable income could be taxed at higher federal or foreign statutory rates and our income tax liability and
expense could materially increase beyond our projections. Each of our Singapore tax incentives is separate and distinct from the others, and may be granted, withheld, extended, modified, truncated, compiled or terminated independently without any effect on the other incentives. Absent these tax incentives, our corporate income tax rate in Singapore would generally be the 17% statutory tax rate. We are also subject to operating and other compliance requirements to maintain our favorable tax incentives. If we fail to comply with such requirements, we could lose the tax benefits and could possibly be required to refund previously realized material tax benefits. Additionally, in the future, we may fail to qualify for renewal of our favorable tax incentives or such incentives may not be available to us, which could also cause our future taxable income to increase and be taxed at higher statutory rates. Loss of one or more of our tax incentives could cause us to modify our tax strategies and our operational structure, which could cause disruption in our business and have a material adverse impact on our results of operations. Further, there can be no guarantee that such modification in our tax strategy will yield tax incentives as favorable as those we have negotiated with Singapore. Our interpretations and conclusions regarding the tax incentives are not binding on any taxing authority, and if our assumptions about tax and other laws are incorrect or if these tax incentives are substantially modified or rescinded we could suffer material adverse tax and other financial consequences, which would increase our expenses, reduce our profitability and adversely affect our cash flows.

Investor confidence may be adversely impacted if we are unable to comply with Section 404 of the Sarbanes-Oxley Act of 2002, and as a result, our stock price could decline.

We are subject to rules adopted by the SEC pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley Act, which require us to include in our Annual Report on Form 10-K our management’s report on, and assessment of the effectiveness of, our internal controls over financial reporting.

If we fail to maintain the adequacy of our internal controls, there is a risk that we will not comply with all of the requirements imposed by Section 404. Moreover, effective internal controls, particularly those related to revenue recognition, are necessary for us to produce reliable financial reports and are important to helping prevent financial fraud. Any of these possible outcomes could result in an adverse reaction in the financial marketplace due to a loss of investor confidence in the reliability of our consolidated financial statements and could result in investigations or sanctions by the SEC; the Nasdaq Stock Market LLC; or Nasdaq, or other regulatory authorities or in stockholder litigation. Any of these factors ultimately could harm our business and could negatively impact the market price of our securities. Ineffective control over financial reporting could also cause investors to lose confidence in our reported financial information, which could adversely affect the trading price of our common stock.

Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives. However, our management, including our principal executive officer and principal financial officer, does not expect that our disclosure controls and procedures will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our corporate headquarters occupy approximately 68,000 square feet in Carlsbad, California under a lease that expires in December 2023. A full range of business and engineering functions are represented at our corporate headquarters, including a laboratory for research and development and manufacturing operations. In addition to our principal office spaces in Carlsbad, we have active leased facilities in Irvine, California; San Jose, California; Boston, Massachusetts; Burnaby, Canada; Bangalore and Chennai, India; Singapore; Taipei and Hsinchu, Taiwan; Shenzhen, Shanghai, and Hong Kong, China; Seoul, South Korea; Tokyo, Japan; Paterna, Spain; Villach, Austria; Munich, Germany; and in Petah Tikva, Israel.

We believe our current facilities are adequate to meet our current needs and are being utilized by our business.
ITEM 3. LEGAL PROCEEDINGS

Bell Semiconductor Litigation

On August 11, 2022, Bell Semiconductor LLC filed suit against MaxLinear in the Southern District of California alleging infringement of U.S. Patent Nos. 6,436,807 and 7,007,259. MaxLinear answered the complaint on January 26, 2023 and the case is presently early in the fact discovery phase. The case is tentatively scheduled for trial in February 2024.

On August 26, 2022, Bell Semiconductor LLC filed suit against MaxLinear in the Southern District of California alleging infringement of U.S. Patent Nos. 7,149,989 and 7,260,803. MaxLinear answered the complaint on January 26, 2023 and the case is presently early in the fact discovery phase. The case is tentatively scheduled for trial in February 2024.

On October 7, 2022 Bell Semiconductor LLC filed suit against MaxLinear in the Southern District of California alleging infringement of U.S. Patent No. 7,396,760. This action has been stayed pending a parallel ITC investigation involving the same patent.

Specifically, on October 13, 2023, Bell Semiconductor also filed suit against MaxLinear before the U.S. International Trade Commission alleging infringement of U.S. Patent No. 7,396,760. This was instituted by the Commission as Investigation No. 337-TA-1342 on November 23, 2022. A schedule was set by the administrative law judge and key deadlines include a close of fact discovery on May 1, 2023, a close of expert discovery June 5, 2023, and an evidentiary hearing beginning on August 7, 2023. An initial determination is expected from the judge on November 21, 2023, with a final determination from the Commission by March 21, 2024.

Other Matters

In addition, from time to time, we are subject to threats of litigation or actual litigation in the ordinary course of business, some of which may be material. We record a provision for contingent losses when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. We currently do not believe that the ultimate outcome of any of the matters described above is probable or reasonably estimable, or that these matters will have a material adverse effect on our business; however, the results of litigation and claims are inherently unpredictable. Regardless of the outcome, litigation can have an adverse impact on us because of litigation and settlement costs, diversion of management resources and other factors.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.
ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information and Holders

Our common stock is traded on the Nasdaq Stock Market LLC, or the Nasdaq, under the symbol MXL.

According to our transfer agent, as of January 25, 2023, there were 52 record holders of our common stock. We believe we have approximately 42,000 beneficial holders of our common stock.

Dividend Policy

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our common stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our Board of Directors and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our Board of Directors may deem relevant.

Stock Performance Graph

Notwithstanding any statement to the contrary in any of our previous or future filings with the SEC, the following information relating to the price performance of our common stock shall not be deemed “filed” with the SEC or “Soliciting Material” under the Exchange Act, or subject to Regulation 14A or 14C, or to liabilities of Section 18 of the Exchange Act except to the extent we specifically request that such information be treated as soliciting material or to the extent we specifically incorporate this information by reference.

The graph below compares the cumulative total stockholder return on our common stock with the cumulative total return on The Nasdaq Composite Index, The NYSE Composite Index and The Philadelphia Semiconductor Index. The period shown commences on December 31, 2017 and ends on December 31, 2022, the end of our last fiscal year. The graph assumes an investment of $100 on December 31, 2017, and the reinvestment of any dividends.

The comparisons in the graph below are required by the Securities and Exchange Commission and are not intended to forecast or be indicative of possible future performance of our common stock.
Recent Sales of Unregistered Securities

None.

Recent Repurchases of Equity Securities

<table>
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<tr>
<th>Period</th>
<th>Total Number of Shares Repurchased</th>
<th>Average Price Paid Per Share</th>
<th>Total Number of Shares Purchased as Part of Publicly Announced Program</th>
<th>Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program</th>
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<tr>
<td><strong>Fiscal 2022</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>January 1, 2022 through January 31, 2022</td>
<td>128,500</td>
<td>$ 61.67</td>
<td>128,500</td>
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<tr>
<td>February 1, 2022 through February 28, 2022</td>
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<td>$ 60.81</td>
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<td>April 1, 2022 through April 30, 2022</td>
<td>40,000</td>
<td>$ 47.97</td>
<td>40,000</td>
<td>$48,260,767</td>
</tr>
<tr>
<td>May 1, 2022 through May 31, 2022</td>
<td>42,000</td>
<td>$ 41.46</td>
<td>42,000</td>
<td>$46,519,356</td>
</tr>
<tr>
<td>June 1, 2022 through June 30, 2022</td>
<td>42,000</td>
<td>$ 36.91</td>
<td>42,000</td>
<td>$44,968,957</td>
</tr>
<tr>
<td>July 1, 2022 through July 31, 2022</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>$44,968,957</td>
</tr>
<tr>
<td>August 1, 2022 through August 31, 2022</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>$44,968,957</td>
</tr>
<tr>
<td>September 1, 2022 through September 30, 2022</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>$44,968,957</td>
</tr>
<tr>
<td>October 1, 2022 through October 31, 2022</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>$44,968,957</td>
</tr>
<tr>
<td>November 1, 2022 through November 30, 2022</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>$44,968,957</td>
</tr>
<tr>
<td>December 1, 2022 through December 31, 2022</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>$44,968,957</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>564,449</td>
<td></td>
<td>564,449</td>
<td>$44,968,957</td>
</tr>
</tbody>
</table>

(1) On February 24, 2021, the Company publicly announced that its board of directors authorized a plan to repurchase up to $100 million of the Company’s common stock over a period ending February 16, 2024. The amount and timing of repurchases are subject to a variety of factors including liquidity, share price, market conditions, and legal requirements. Any purchases will be funded from available working capital and may be effected through open market purchases, block transactions, and privately negotiated transactions. The share repurchase program does not obligate the Company to make any repurchases and may be modified, suspended, or terminated by the Company at any time without prior notice. The share repurchase program has been temporarily suspended since July 2022 due to our pending merger with Silicon Motion.

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

The following discussion and analysis of the financial condition and results of our operations should be read in conjunction with the consolidated financial statements and related notes included elsewhere in this report. This discussion contains forward-looking statements that involve a number of risks, uncertainties, and assumptions that could cause our actual results to differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below, and those discussed in the sections titled “Business” and “Risk Factors” included elsewhere in this report.
Overview

We are a provider of communications systems-on-chip, or SoC, solutions used in broadband, mobile and wireline infrastructure, data center, and industrial and multi-market applications. We are a fabless integrated circuit design company whose products integrate all or substantial portions of a high-speed communication system, including radio frequency, or RF, high-performance analog, mixed-signal, digital signal processing, security engines, data compression and networking layers, and power management. In most cases, these products are designed on a single silicon-die, using standard digital complementary metal oxide semiconductor, or CMOS, processes and conventional packaging technologies. We believe this approach enables our solutions to achieve superior power, performance, and cost relative to our industry competition. Our customers include electronics distributors, module makers, original equipment manufacturers, or OEMs, and original design manufacturers, or ODMs, who incorporate our products in a wide range of electronic devices. Examples of such devices include cable Data Over Cable Service Interface Specifications, or DOCSIS, fiber and DSL broadband modems and gateways; Wi-Fi and wireline routers for home networking; radio transceivers and modems for 4G/5G base-station and backhaul infrastructure; fiber-optic modules for data center, metro, and long-haul transport networks; as well as power management and interface products used in these and many other markets.

Our highly integrated semiconductor devices and platform-level solutions are primarily manufactured using low-cost CMOS process technology. CMOS processes are ideally suited for large digital logic implementations targeting high-volume and low-cost consumer applications. Importantly, our ability to design analog and mixed-signal circuits in CMOS allows us to efficiently combine analog functionality and complex digital signal processing logic in the same integrated circuit. As a result, our solutions have exceptional levels of functional integration and performance, low manufacturing cost, and reduced power consumption. In addition, our proprietary CMOS-based radio and digital system architectures also enable shorter design cycles, significant design flexibility and low system-level cost across a wide range of broadband communications, wired and wireless infrastructure, and industrial and multi-market customer applications.

In the year ended December 31, 2022, net revenue was $1.1 billion, which was derived in part from sales of RF receivers and RF receiver SoC and connectivity solutions into broadband operator voice and data modems and gateways and connectivity adapters, global analog and digital RF receiver products, radio and modem solutions into wireless carrier access and backhaul infrastructure platforms, high-speed optical interconnect solutions sold into optical modules for data-center, metro and long-haul networks, and high-performance interface and power management solutions into a broad range of communications, industrial, automotive and multi-market applications. Our ability to achieve revenue growth in the future will depend, among other factors, on our ability to further penetrate existing markets; our ability to expand our target addressable markets by developing new and innovative products; changes in government trade policies; and our ability to obtain design wins with device manufacturers, in particular manufacturers of set-top boxes, data modems, and gateways for the broadband service provider, storage networking market, cable infrastructure market, industrial and automotive markets, and optical module and telecommunications infrastructure markets.

Products shipped to Asia accounted for 82%, 83% and 82% of net revenue during the years ended 2022, 2021 and 2020, respectively, including 43%, 40% and 42%, respectively, from products shipped to Hong Kong and 16%, 12% and 17%, respectively, from products shipped to mainland China and 13% from products shipped to Vietnam in 2021. Although a large percentage of our products is shipped to Asia, we believe that a significant number of the systems designed by these customers and incorporating our semiconductor products are then sold outside Asia. For example, revenue generated from sales of our products during the years ended December 31, 2022, 2021 and 2020 related principally to sales to Asian ODMs and contract manufacturers delivering products into European and North American markets. To date, all of our sales have been denominated in United States dollars.

A significant portion of our net revenue has historically been generated by a limited number of customers. Sales to customers comprise both direct sales to customers and indirect sales through distributors. In the year ended December 31, 2022, our top two customers accounted for 31% of our net revenue, and our ten largest customers collectively accounted for 65% of our net revenue, of which distributor customers accounted for 18% of our net revenue. In the year ended December 31, 2021, two of our customers accounted for 26% of our net revenue, and our ten largest customers collectively accounted for 69% of our net revenue, of which distributor customers comprised 27% of our net revenue. In the year ended December 31, 2020, two of our direct customers accounted for 28% of our net revenue, and our ten largest customers collectively accounted for 68% of our net revenue, of which distributor customers comprised 41% of our net revenue. For certain customers, we sell multiple products into disparate end user applications such as cable modems, satellite set-top boxes and broadband gateways.

Our business depends on winning competitive bid selection processes, known as design wins, to develop integrated circuits for use in our customers’ products. These selection processes are typically lengthy, and as a result, our sales cycles will
vary based on the specific market served, whether the design win is with an existing or a new customer and whether our product being designed in our customer’s device is a first generation or subsequent generation product. Our customers’ products can be complex and, if our engagement results in a design win, can require significant time to define, design and result in volume production. Because the sales cycle for our products is long, we can incur significant design and development expenditures in circumstances where we do not ultimately recognize any revenue. We do not have any long-term purchase commitments with any of our customers, all of whom purchase our products on a purchase order basis. Once one of our products is incorporated into a customer’s design, however, we believe that our product is likely to remain a component of the customer’s product for its life cycle because of the time and expense associated with redesigning the product or substituting an alternative chip. Product life cycles in our target markets will vary by application. For example, in the cable operator modem and gateway sectors, a design-in can have a product life cycle of 24 to 48 months. In the industrial and wired and wireless infrastructure markets, a design-in can have a product life cycle of 24 to 60 months and beyond.

Impact of the Global Economic Downturn

Inflation, and uncertainty in customer demand and the worldwide economy has continued, and we may experience continued volatility in our sales and revenues in the near future. In particular, we believe an economic downturn and inventory oversupply due to changes in customer demand will add to volatility in managing the business. In addition, inventory oversupply could also lead to inventory write-downs, including charges for any excess or obsolete inventory which could negatively impact our gross margins. However, the magnitude of such volatility on our business and its duration is uncertain and cannot be reasonably estimated at this time.

Recent Developments

Silicon Motion Merger

On May 5, 2022, we entered into an agreement and plan of merger, or the Merger Agreement, with Silicon Motion Technology Corporation, or Silicon Motion, an exempted company with limited liability incorporated under the Law of the Cayman Islands, pursuant to which, subject to the terms and conditions thereof, we agreed to acquire Silicon Motion pursuant to a statutory merger of Shark Merger Sub, a wholly-owned subsidiary of MaxLinear, with and into Silicon Motion, with Silicon Motion surviving the merger as a wholly-owned subsidiary of MaxLinear. Silicon Motion is a provider of NAND flash controllers for solid state drives and other solid state storage devices.

Under the terms of the Merger Agreement, the transaction consideration will consist of $93.54 in cash and 0.388 shares of our stock for each Silicon Motion American Depositary Share, or ADS, and $23.385 in cash and 0.097 shares of our common stock for each Silicon Motion ordinary share not represented by an ADS. Upon closing of the transaction, our current stockholders will own approximately 86% of the combined company and former Silicon Motion securityholders will own approximately 14% of the combined company. Based on the closing price of our common shares on May 4, 2022, the implied value of the total transaction consideration for Silicon Motion is approximately $4.3 billion. We may fund up to $3.5 billion of cash consideration with cash on hand and fully committed debt financing from Wells Fargo Bank, N.A., or Wells Fargo Bank, and other lenders as described below. We will also assume Silicon Motion’s vested and unvested employee stock-based compensation awards.

The merger is not subject to any financing conditions but is pending satisfaction of customary closing conditions, including regulatory approval in the People’s Republic of China, or China. On June 27, 2022, the Hart-Scott-Rodino Antitrust Improvements Act of 1976, or HSR, waiting period expired with respect to the pending merger. On July 13, 2022, the Form S-4 was declared effective by the SEC. On August 31, 2022, the Silicon Motion securityholders approved the merger at the extraordinary general meeting.

On June 17, 2022, we entered into an amended and restated commitment letter with Wells Fargo Bank and other lenders pursuant to which, subject to the terms and conditions set forth therein, the lenders have committed to provide (i) a senior secured term B loan facility in an aggregate principal amount of up to $2.7375 billion (ii) a senior secured term A loan facility in an aggregate principal amount of up to $512.5 million and (iii) a senior secured revolving credit facility in an aggregate principal amount of up to $250.0 million, which we collectively refer to as the Senior Secured Credit Facilities. The funding of the Senior Secured Credit Facilities is contingent on the satisfaction of customary conditions, including (i) the execution and delivery of definitive documentation with respect to credit facilities in accordance with the terms in the amended and restated commitment letter, and (ii) the consummation of the acquisition by us of Silicon Motion in accordance with the Merger Agreement. A portion of the proceeds from the Senior Secured Credit Facilities will be used to repay existing debt in full.
Expanded U.S. Export Controls

In October 2022, the Bureau of Industry and Security, or BIS, of the U.S. Commerce Department issued an interim final rule to implement additional export controls on advanced computing integrated circuits and related products. The primary impact of these rules is that we may be required to obtain a license to do business with certain customers, semiconductor foundries and outsource assembly and testing, or OSAT, facilities in China. The BIS rule also expanded the scope of foreign-produced items subject to license requirements when intended for certain entities located in China, and also added new entities in China to the EAR’s Unverified List. We are currently in the process of securing any licenses or other approvals that may be required as result of the October 2022 BIS rule.

We may experience a temporary loss of revenues or supply while we are obtaining licenses needed to do business with certain customers and other partners recently added to the Entity List, and failure to obtain any required license could result in a reduction of anticipated revenues or supply until an alternate source of supply can be obtained. We have assessed the impact of the interim final rule and addition of new entities to the Entity List and the Unverified List, and we believe they do not have a material impact on our business, financial condition and results of operations.

Acquisition of Company Y

On January 17, 2023, the Company completed its acquisition of a business, or Company Y, pursuant to a Purchase and Sale Agreement, or the Purchase Agreement. The initial closing transaction consideration consisted of $9.9 million in cash. In addition, their stockholders may receive up to an additional $2.6 million in potential contingent consideration, subject to the acquired business satisfying certain personnel objectives by June 17, 2023.

Company Y is headquartered in Bangalore, India and operates as a provider of engineering design services.

Critical Accounting Estimates

Management’s discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements which are prepared in accordance with accounting principles that are generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities, related disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. We continually evaluate our estimates and judgments, the most critical of which are those related to business combinations, revenue recognition, inventory valuation, production masks, goodwill and other intangible assets valuation, and income taxes. We base our estimates and judgments on historical experience and other factors that we believe to be reasonable under the circumstances. Materially different results can occur as circumstances change and additional information becomes known.

We believe that the following accounting estimates we have identified as critical involve a greater degree of judgment and complexity than our other accounting policies. Accordingly, these are the estimates we believe are the most critical to understanding and evaluating our consolidated financial condition and results of operations. Refer to Note 1 to our consolidated financial statements included elsewhere in this report for a summary of each of the related accounting policies.

Business Combinations

Estimates in our business combination accounting that involve a significant level of estimation uncertainty include the valuation of identifiable intangible and tangible assets such as inventory, property and equipment, and intangible assets including in-process research and development, or IPR&D, and contingent consideration, which involve the use of forecasted financial information available at the acquisition date, including application of revenue growth rates and margin percentages, and use of a discount rate and various other assumptions as described in more detail in notes 1 and 3 to our consolidated financial statements. The reported amounts are sensitive to changes to certain assumptions used in the valuation. For example, if the discount rate used in our valuations increased by 1%, it would result in a decrease to the valuation of intangible assets of $3.8M for our 2020 acquisitions and $0.1M for our 2021 acquisition. The amortization and depreciation of such assets, and change in fair value of contingent consideration, impact our consolidated financial results in periods subsequent to the acquisition, and such amounts are disclosed in our consolidated financial statements. During the years ended December 31, 2022, we recorded impairment of intangible assets of $2.8 million associated with a 2021 acquisition. During the years ended December 31, 2021 and 2020, we did not record any material adjustments to the valuation of such assets, goodwill, or subsequent period adjustments to the consolidated statements of operations associated with our other business combinations.
Revenue Recognition

Estimates in our revenue recognition that involve a significant level of estimation uncertainty include the estimates of price adjustments and returns under contractual stock rotation rights based on our analysis of expected value of actual price adjustment claims by distributors and product and historical return rates. Any changes to such estimates, for example differences in actual self-through activity versus our estimate of self-through activity in our price adjustments, or actual vs. historical return rates, may impact our consolidated financial results in periods subsequent to recording those estimates, and such amounts are disclosed in our consolidated financial statements. Other than our estimates of self-through activity and customer return rates, there are no assumptions inherent in our estimates in the valuation of inventory that would result in sensitivity of reported amounts to such assumptions. During the years ended December 31, 2022, 2021 and 2020 we have not recorded any material adjustments to such estimates.

Inventory Valuation

Estimates in the valuation of inventory that involve a significant level of estimation uncertainty include our estimates of excess and obsolete inventory based on forecasts of future demand for our products in inventory. Any changes to such estimates, for example differences in actual sales versus our estimates of demand, or conversely, the ultimate sell-through of fully reserved inventory for which we did not anticipate any future demand, impact our consolidated financial results in periods subsequent to recording those estimates. Other than our forecasts of future demand, there are no assumptions inherent in our estimates in the valuation of inventory that would result in sensitivity of reported amounts to such assumptions. During the years ended December 31, 2022, 2021 and 2020, we have not recorded any material net adjustments for such changes in estimates.

Impairment of Goodwill and Long-Lived Assets

Estimates in our assessment of impairment of goodwill and long-lived assets that involve a significant level of estimation uncertainty and management judgment include the comparison of our market capitalization as of the annual impairment assessment date to the carrying value of goodwill, use of forecasted financial information for our projects remaining in IPR&D, including growth rates and margin percentages, and a discount rate as of the annual IPR&D impairment assessment date, and our quarterly assessment of whether indicators of impairment exist with respect to all of our goodwill and long-lived assets. For example, a decision to abandon a project involving the technology underlying developed technology and IPR&D may result in immediate impairment of such assets in the quarter such decision is made. As of the October 31 assessment date, the valuation of IPR&D was not sensitive to changes in the underlying discount rate used in our impairment analysis; for example, if our discount rate increased by 10%, it would not result in impairment of IPR&D. Impairment of goodwill and long-lived assets impact our consolidated financial results in periods subsequent to their acquisition, and such amounts are disclosed in our consolidated financial statements. During the year ended December 31, 2022, we recorded impairment of intangible assets of $2.8 million associated with a 2021 acquisition. During the years ended December 31, 2021 and 2020, we did not record any material adjustments to the valuation of such assets.

Income Taxes

Estimates in our assessment of realizability of deferred tax assets that involve a significant level of estimation uncertainty and management judgment include projected future taxable income. For example, we continue to have a valuation allowance against state deferred tax assets, certain federal deferred tax assets, and certain foreign deferred tax assets in jurisdictions where we have cumulative losses or otherwise are not expected to utilize certain tax attributes. If projected future taxable income in the U.S., for example, were to increase from what we assumed in our estimates, in periods subsequent to recording valuation allowances, it may be more likely than not that a proportional amount of the valuation against deferred tax assets will be released, resulting in an impact to our tax provision (benefit).
Recently Issued Accounting Pronouncements

In October 2021, the FASB issued ASU No. 2021-08, Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers, to provide specific guidance to eliminate diversity in practice on how to recognize and measure acquired contract assets and contract liabilities from revenue contracts from customers in a business combination consistent with revenue contracts with customers not acquired in an acquisition. The amendments in this update provide that the acquirer should consider the terms of the acquired contracts, such as timing of payment, identify each performance obligation in the contracts, and allocate the total transaction price to each identified performance obligation on a relative standalone selling price basis as of contract inception (that is, the date the acquiree entered into the contracts) or contract modification to determine what should be recorded at the acquisition date. These amendments are effective for us beginning with fiscal year 2023. The impact of the adoption of the amendments in this update will depend on the magnitude of any customer contracts assumed in a business combination in 2023 and beyond.

Results of Operations

The following describes the line items set forth in our consolidated statements of operations. A discussion of changes in our results of operations during the year ended December 31, 2021 compared to the year ended December 31, 2020 has been omitted from this Annual Report on Form 10-K, but may be found in “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on February 2, 2022, which discussion is incorporated herein by reference and which is available free of charge on the SEC’s website at www.sec.gov.

Net Revenue: Net revenue is generated from sales of radio-frequency, analog, digital, and mixed-signal integrated circuits for access and connectivity, wired and wireless infrastructure, and industrial and multi-market applications. A significant portion of our sales are to distributors, who then resell our products.

Cost of Net Revenue: Cost of net revenue includes the cost of finished silicon wafers processed by third-party foundries; costs associated with our outsourced packaging and assembly, test and shipping; costs of personnel, including salaries, benefits and stock-based compensation; equipment associated with manufacturing support, logistics and quality assurance; amortization of acquired developed technology and purchased licensed technology intangible assets; inventory fair value adjustments; amortization of certain production mask costs and computer-aided design software license costs; cost of production load boards and sockets; and an allocated portion of our occupancy costs.

Research and Development: Research and development expense includes personnel-related expenses, including stock-based compensation, new product engineering mask costs, prototype integrated circuit packaging and test costs, computer-aided design software license costs, intellectual property license costs, reference design development costs, development testing and evaluation costs, depreciation expense and allocated occupancy costs. Research and development activities include the design of new products, refinement of existing products and design of test methodologies to ensure compliance with required specifications. All research and development costs are expensed as incurred.

Selling, General and Administrative: Selling, general and administrative expense includes personnel-related expenses, including salaries and benefits and stock-based compensation, amortization of certain acquired intangible assets, merger, acquisition and integration costs, third-party sales commissions, field application engineering support, travel costs, professional and consulting fees, legal fees, depreciation expense and allocated occupancy costs.

Impairment Losses: Impairment losses consist of charges resulting from the impairment of intangible assets.

Restructuring Charges: Restructuring charges consist of severance, lease and leasehold impairment charges, and other charges related to restructuring plans.

Loss on Extinguishment of Debt: Loss on extinguishment of debt consists of the charge-off of remaining unamortized debt discount and issuance cost on debt we repaid early with a majority of the proceeds from a new term loan.

Interest and Other Income (Expense): Net Interest and other income (expense), net includes interest income, interest expense and other income (expense). Interest income consists of interest earned on our cash, cash equivalents and restricted cash balances. Interest expense consists of interest accrued on debt and amortization of discounts on debt and other liabilities. Other income (expense) generally consists of income (expense) generated from non-operating transactions, including sales of investments, and unrealized holding gains (losses) from certain investments required to be marked to market value.
Income tax provision. We make certain estimates and judgments in determining income taxes for financial statement purposes. These estimates and judgments occur in the calculation of certain tax assets and liabilities, which arise from differences in the timing of recognition of revenue and expenses for tax and financial statement purposes and the realizability of assets in future years.

The following table sets forth our consolidated statement of income data as a percentage of net revenue for the periods indicated:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net revenue</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Cost of net revenue</td>
<td>42</td>
<td>44</td>
</tr>
<tr>
<td>Gross profit</td>
<td>58</td>
<td>56</td>
</tr>
<tr>
<td>Operating expenses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research and development</td>
<td>26</td>
<td>31</td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Impairment losses</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Restructuring charges</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>42</td>
<td>48</td>
</tr>
<tr>
<td>Income from operations</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>Interest income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td>(1)</td>
<td>(1)</td>
</tr>
<tr>
<td>Loss on extinguishment of debt</td>
<td>—</td>
<td>(1)</td>
</tr>
<tr>
<td>Other income (expense), net</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total other income (expense), net</td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Income tax provision</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Net income</td>
<td>11%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Net Revenue

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>(dollars in thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broadband</td>
<td>$ 493,232</td>
<td>$ 492,482</td>
<td>$ 750</td>
<td>—%</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>44%</td>
<td>55%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connectivity</td>
<td>303,925</td>
<td>149,285</td>
<td>154,640</td>
<td>104%</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>27%</td>
<td>17%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure</td>
<td>136,274</td>
<td>119,421</td>
<td>16,853</td>
<td>14%</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>12%</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial and multi-market</td>
<td>186,821</td>
<td>131,210</td>
<td>55,611</td>
<td>42%</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>17%</td>
<td>15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total net revenue</td>
<td>$ 1,120,252</td>
<td>$ 892,398</td>
<td>$ 227,854</td>
<td>26%</td>
</tr>
</tbody>
</table>

Net revenue increased $227.9 million to $1.1 billion for the year ended December 31, 2022, as compared to $892.4 million for the year ended December 31, 2021. The increase in broadband net revenue of $0.8 million was primarily from gateway revenues. The increase in connectivity revenue of $154.6 million was primarily driven by higher Wi-Fi and ethernet revenues as our supply improved and an increase in MoCA product shipments. The increase in infrastructure revenues of $16.9 million was primarily driven by an increase in high-performance analog, wireless access and wireless backhaul shipments. The increase in industrial and multi-market revenue of $55.6 million was related to increased shipments of high-performance analog and component products.
We currently expect that revenue will fluctuate in the future, from period-to-period. In the first quarter of 2023, certain of our product lines will likely experience a decrease in revenues due to macroeconomic conditions impacting customer demand for such products, which is consistent with the cyclical nature of our industry.

Cost of Net Revenue and Gross Profit

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of net revenue</td>
<td>$470,483</td>
<td>$396,566</td>
<td>$73,917</td>
<td>19%</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>42%</td>
<td>44%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross profit</td>
<td>649,769</td>
<td>495,832</td>
<td>153,937</td>
<td>31%</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>58%</td>
<td>56%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cost of net revenue increased $73.9 million to $470.5 million for the year ended December 31, 2022, as compared to $396.6 million for the year ended December 31, 2021. The increase was primarily driven by higher sales and incremental expense. Gross profit percentage improved for the year ended December 31, 2022, as compared to the year ended December 31, 2021, due primarily to revenue mix and improved absorption of amortization of intangible assets.

We currently expect that gross profit percentage will fluctuate in the future, from period-to-period, based on changes in product mix, average selling prices, and average manufacturing costs.

Research and Development

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research and development</td>
<td>$296,442</td>
<td>$278,440</td>
<td>$18,002</td>
<td>6%</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>26%</td>
<td>31%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research and development expense increased $18.0 million to $296.4 million for the year ended December 31, 2022 from $278.4 million in the year ended December 31, 2021. The increase was primarily driven by increased headcount to support increased R&D projects this year.

We expect our research and development expenses to increase next quarter due to increased personnel costs, and increase in future years as we continue to expand our product portfolio and enhance existing products.

Selling, General and Administrative

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling, general and administrative</td>
<td>168,008</td>
<td>149,943</td>
<td>18,065</td>
<td>12%</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>15%</td>
<td>17%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Selling, general and administrative expense increased $18.1 million to $168.0 million for the year ended December 31, 2022, as compared to $149.9 million for the year ended December 31, 2021. The increase was primarily due to increased headcount as well as increased acquisition and integration costs of $6.8 million.

We expect selling, general and administrative expenses to increase next quarter due to increased personnel costs and increase in future years as we grow our sales and marketing organization to expand into existing and new markets.
### Impairment Losses

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th></th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
<td>2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impairment losses</td>
<td>$2,811</td>
<td>$—</td>
<td>$2,811</td>
<td>n/a</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>—%</td>
<td>—%</td>
<td>—%</td>
<td></td>
</tr>
</tbody>
</table>

Impairment losses in the year ended December 31, 2022 related to abandonment of certain acquired licensing agreements.

### Restructuring Charges

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th></th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
<td>2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restructuring charges</td>
<td>$2,265</td>
<td>$2,204</td>
<td>$61</td>
<td>3%</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>—%</td>
<td>—%</td>
<td>—%</td>
<td></td>
</tr>
</tbody>
</table>

Restructuring charges increased $0.1 million to $2.3 million for the year ended December 31, 2022, compared to $2.2 million for the year ended December 31, 2021. Restructuring charges for the year ended December 31, 2022 primarily consisted of $1.8 million in employee severance-related charges and $0.5 million of lease-related charges, which is comprised of impairment of leased right-of-use assets from partial abandonment of a facility. Restructuring charges in the year ended December 31, 2021 primarily consisted of $1.3 million in employee severance-related charges and $0.6 million of lease-related charges, which primarily consisted of impairment of leased right-of-use assets and leasehold improvements.

### Loss on Extinguishment of Debt

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th></th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
<td>2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss on extinguishment of debt</td>
<td>$—</td>
<td>$(5,221)</td>
<td>$5,221</td>
<td>(100)%</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>—%</td>
<td>(1)%</td>
<td>—%</td>
<td></td>
</tr>
</tbody>
</table>

Loss on extinguishment of debt in the year ended December 31, 2021 consisted of the charge-off of remaining unamortized debt discount and issuance costs on debt under our prior term loan which we repaid early with proceeds from a new term loan in June 2021.

### Interest and Other Income (Expense)

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th></th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
<td>2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest and other income (expense), net</td>
<td>$(6,045)</td>
<td>$(12,154)</td>
<td>$6,109</td>
<td>(50)%</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>(1)%</td>
<td>(1)%</td>
<td>—%</td>
<td></td>
</tr>
</tbody>
</table>

Interest and other income (expense), net decreased by $6.1 million to a net expense of $6.0 million in the year ended December 31, 2022 from a net expense of $12.2 million for the year ended December 31, 2021. The change in interest and other income (expense), net was primarily due to the positive impact of a non-recurring gain on sale of privately held investments of $3.4 million and decreased interest expense of $3.2 million associated with a lower outstanding principal balance of debt, partially offset by unrealized losses on investments and impacts from foreign currency exchange rate fluctuations.
Income Tax Provision

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>(dollars in thousands)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income tax provision</td>
<td>$49,158</td>
<td>$5,901</td>
</tr>
<tr>
<td>% of pre-tax income (loss)</td>
<td>28%</td>
<td>12%</td>
</tr>
</tbody>
</table>

The income tax provision for the year ended December 31, 2022 was $49.2 million compared to an income tax provision of $5.9 million for the year ended December 31, 2021.

The difference between our effective tax rate and the 21.0% U.S. federal statutory rate for the year ended December 31, 2022 primarily related to the mix of pre-tax income among jurisdictions, permanent tax items including a tax on global intangible low-taxed income, stock based compensation, excess tax benefits related to stock-based compensation, release of uncertain tax positions under ASC 740-10, and release of the valuation allowance on certain federal research and development credits. The permanent tax item related to global intangible low-taxed income, or GILTI, also reflects recent legislative changes requiring the capitalization of research and experimentation costs, as well as limitations on the creditability of certain foreign income taxes.

The difference between our effective tax rate and the 21.0% U.S. federal statutory rate for the year ended December 31, 2021 resulted primarily from a tax on GILTI, and non-deductible foreign stock-based compensation, offset by a benefit related to research and development tax credits, foreign earnings taxed at rates other than the federal statutory rate and the effect of a release of valuation allowance against certain Singapore deferred tax assets pertaining to usage of net operating losses.

We continue to maintain a valuation allowance to offset state and certain federal and foreign deferred tax assets, as realization of such assets does not meet the more-likely-than-not threshold required under accounting guidelines. In making such determination, we consider all available positive and negative evidence quarterly, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies, and recent financial performance. Based upon our review of all positive and negative evidence, we continue to have a valuation allowance on state deferred tax assets, certain federal deferred tax assets, and certain foreign deferred tax assets in jurisdictions where we have cumulative losses or otherwise are not expected to utilize certain tax attributes. We do not incur income tax expense or benefit in certain tax-free jurisdictions in which we operate.

Our subsidiary in Singapore operates under certain tax incentives in Singapore, which are effective through March 2027. Under these incentives, qualifying income derived from certain sales of our integrated circuits is taxed at a concessionary rate over the incentive period. We also receive a reduced withholding tax rate on certain intercompany royalty payments made by our Singapore subsidiary during the incentive period. We recorded a tax provision in the year ended December 31, 2022 at the incentive rate. In the year ended December 31, 2021, due to our Singapore net operating losses and a full valuation allowance in Singapore, the incentives did not have a material impact on our income tax provision. The incentives are conditional upon our meeting certain minimum employment and investment thresholds within Singapore over time, and we may be required to return certain tax benefits in the event we do not achieve compliance related to that incentive period. We currently believe that we will be able to satisfy these conditions without material risk.

On August 9, 2022, the CHIPS and Science Act of 2022, or the CHIPS Act, was enacted in the United States. The CHIPS Act will provide financial incentives to the semiconductor industry which are primarily directed at manufacturing activities within the United States for qualifying property placed in service after December 31, 2022. As we currently outsource our manufacturing, the CHIPS Act is not expected to have a material impact to our consolidated tax provision for the year ending December 31, 2023.

The Inflation Reduction Act of 2022, or IRA, was signed into law on August 16, 2022. The bill was meant to address the high inflation rate in the United States through various climate, energy, healthcare, and other incentives. These incentives are meant to be paid for by the tax provisions included in the IRA, such as a new 15 percent corporate minimum tax, a 1 percent new excise tax on stock buybacks, additional IRS funding to improve taxpayer compliance, and others. The IRA provisions are effective for tax years beginning after December 31, 2022. At this time, none of the IRA tax provisions are expected to have a material impact to our consolidated tax provision for the year ending December 31, 2023.

We will continue to monitor updates to our business along with guidance issued with respect to both Acts to determine whether any adjustments are needed to our consolidated tax provision in future periods.
Liquidity and Capital Resources

As of December 31, 2022, we had cash and cash equivalents of $187.4 million, restricted cash of $1.0 million and net accounts receivable of $171.0 million. Additionally, as of December 31, 2022, our working capital, which we define as current assets less current liabilities, was $222.0 million.

Our primary uses of cash are to fund operating expenses and purchases of inventory, property and equipment, and from time to time, the acquisition of businesses. In May 2022, we entered into the Merger Agreement to acquire Silicon Motion. As described in Note 3 to our consolidated financial statements, the implied value of the total transaction consideration for Silicon Motion is approximately $4.3 billion. MaxLinear may fund up to $3.5 billion of cash consideration with cash on hand and fully committed debt financing from Wells Fargo Bank and other lenders. In June 2022 and October 2022, we amended and restated the commitment letter with Wells Fargo Bank and other lenders pursuant to which, subject to the terms and conditions set forth therein, the lenders have committed to provide (i) a senior secured term B loan facility in an aggregate principal amount of up to $2.7375 billion (ii) a senior secured term A loan facility in an aggregate principal amount of up to $512.5 million and (iii) a senior secured revolving credit facility in an aggregate principal amount of up to $250.0 million. Funding of the Senior Secured Credit Facilities is contingent on customary conditions, including, but not limited to the consummation of the merger and execution of definitive loan agreements. A portion of the proceeds from the Senior Secured Credit Facilities will be used to repay our existing debt in full.

We also use cash to pay down outstanding debt, repurchase our common stock under our stock repurchase plan, and from time to time, make investments. As of December 31, 2022, $125.0 million of principal was outstanding under a senior secured term B loan facility, or the Initial Term Loan under the June 23, 2021 Credit Agreement. The Company also has available a senior secured revolving credit facility, or the Revolving Facility, in an aggregate principal amount of up to $100.0 million which remained undrawn as of December 31, 2022. The proceeds of the Revolving Facility may be used to finance the working capital needs and other general corporate purposes of the Company and its subsidiaries.

Commencing on September 30, 2021, the Initial Term Loan under the June 23, 2021 Credit Agreement has amortized in equal quarterly installments equal to 0.25% of the original principal amount of the Initial Term Loan under the June 23, 2021 Credit Agreement, with the balance payable on June 23, 2028. We could be subject to substantial variable interest rate risk because our interest rate under term loans typically vary based on a fixed margin over an indexed rate or an adjusted base rate. While we are mitigating the impact of rising interest rates with large amounts of prepayments on our outstanding debt, if interest rates were to further increase substantially, particularly with respect to our anticipated debt associated with the Silicon Motion merger, it would have a material adverse effect on our operating results and could affect our ability to service the indebtedness. Please refer to the Risk Factor entitled “In order to consummate the merger and distribute the cash consideration payable to Silicon Motion securityholders, we will incur material indebtedness of up to $3.5 billion and we may also use a portion of Silicon Motion’s and our cash resources. This material increase in our indebtedness will adversely affect our operating results and cash-flows as we satisfy our underlying interest and principal payment obligations. The loan agreement is also expected to contain financial and operational covenants that would adversely affect our operational freedom or ability to pursue strategic transactions that we would otherwise consider to be in the best interests of stockholders, including obtaining additional indebtedness to finance such transactions” for a discussion of how our indebtedness could have a material adverse effect on our liquidity and capital resources.

Our future capital requirements will depend on many factors, including changes in revenue, the expansion of our engineering, sales and marketing activities, the timing and extent of our expansion into new territories, the timing of introductions of new products and enhancements to existing products, the continuing market acceptance of our products, our pending merger with Silicon Motion, and any other potential material investments in, or acquisitions of, complementary businesses, services or technologies. Additional funds may not be available on terms favorable to us or at all. If we are unable to raise additional funds when needed, we may not be able to sustain our operations or execute our strategic plans.

Our cash and cash equivalents are impacted by the timing of when we pay expenses as reflected in the change in our outstanding accounts payable and accrued expenses. Cash used to fund operating expenses in our consolidated statements of cash flows excludes the impact of non-cash items such as amortization and depreciation of acquired intangible assets and leased right-of-use assets and property and equipment, stock-based compensation, impairment of intangible assets, impairment of leased right-of-use assets and related leasehold improvements and unrealized holding or realized gains or losses on marketable equity securities. Cash used to fund capital purchases and acquisitions of businesses and investments are included in investing activities in our consolidated statements of cash flows. Cash proceeds from issuance of common stock and debt and cash used to pay down outstanding debt or repurchase common stock are included in financing activities in our consolidated statements of cash flows.
As of December 31, 2022, our material cash requirements include long-term debt, non-cancelable operating leases, inventory purchase obligations and other obligations, which primarily consist of contractual payments due for computer-aided design software, as follows:

<table>
<thead>
<tr>
<th>Payments due</th>
<th>Total (in thousands)</th>
<th>Less than 1 year</th>
<th>1-3 years</th>
<th>3-5 years</th>
<th>More than 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term debt obligations</td>
<td>$125,000</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>$125,000</td>
</tr>
<tr>
<td>Operating lease obligations</td>
<td>36,178</td>
<td>11,445</td>
<td>15,461</td>
<td>8,695</td>
<td>577</td>
</tr>
<tr>
<td>Purchase obligations</td>
<td>132,772</td>
<td>132,635</td>
<td>137</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other obligations</td>
<td>29,920</td>
<td>20,820</td>
<td>9,100</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$323,870</strong></td>
<td><strong>$164,900</strong></td>
<td><strong>$24,698</strong></td>
<td><strong>$8,695</strong></td>
<td><strong>$125,577</strong></td>
</tr>
</tbody>
</table>

Our planned capital expenditures as of December 31, 2022 were not material. Our consolidated balance sheet at December 31, 2022 included $6.0 million in other long-term liabilities for uncertain tax positions, some of which may result in cash payment. The future payments related to uncertain tax positions recorded as other long-term liabilities have not been presented in the table above due to the uncertainty of the amounts and timing of cash settlement with the taxing authorities.

Our primary sources of cash are cash receipts on accounts receivable from our shipment of products to distributors and direct customers. Aside from the amounts billed to our customers, net cash collections of accounts receivable are impacted by the efficiency of our cash collections process, which can vary from period to period depending on the payment cycles of our major distributor customers, and relative linearity of shipments period-to-period. The June 23, 2021 Credit Agreement, under which we entered into a senior secured term B loan facility and a revolving credit facility, permits us to request incremental loans in an aggregate principal amount not to exceed the sum of an amount equal to the greater of (x) $175.0 million and (y) 100% of “Consolidated EBITDA” (as defined in such agreement), plus the amount of certain voluntary prepayments, plus an unlimited amount that is subject to pro forma compliance with certain first lien net leverage ratio, secured net leverage ratio and total net leverage ratio tests.

The following is a summary of our working capital, cash and cash equivalents, and restricted cash for the periods indicated:

<table>
<thead>
<tr>
<th>December 31,</th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in thousands)</td>
<td>(in thousands)</td>
</tr>
<tr>
<td>Working capital</td>
<td>$222,038</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$187,353</td>
</tr>
<tr>
<td>Short-term restricted cash</td>
<td>982</td>
</tr>
<tr>
<td>Long-term restricted cash</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total cash, cash equivalents, and restricted cash</strong></td>
<td><strong>$188,357</strong></td>
</tr>
</tbody>
</table>
The following is a summary of our cash flows provided by (used in) operating activities, investing activities and financing activities for the periods indicated:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in thousands)</td>
<td></td>
</tr>
<tr>
<td>Net cash provided by operating activities</td>
<td>$388,726</td>
<td>$168,233</td>
</tr>
<tr>
<td>Net cash used in investing activities</td>
<td>(91,762)</td>
<td>(91,757)</td>
</tr>
<tr>
<td>Net cash used in financing activities</td>
<td>(240,401)</td>
<td>(91,903)</td>
</tr>
<tr>
<td>Effect of exchange rate changes on cash, cash equivalents and restricted cash</td>
<td>56</td>
<td>2,869</td>
</tr>
<tr>
<td>Increase (decrease) in cash, cash equivalents and restricted cash</td>
<td>$56,619</td>
<td>$(18,296)</td>
</tr>
</tbody>
</table>

**Cash Flows from Operating Activities**

Net cash provided by operating activities was $388.7 million for the year ended December 31, 2022 and consisted of positive impact of net income of $125.0 million and non-cash items of $164.1 million, changes in operating assets and liabilities of $86.0 million, and excess tax benefits and deferred income taxes totaling $13.5 million. Non-cash items included in net income for the year ended December 31, 2022 primarily consisted of stock-based compensation of $81.7 million, depreciation and amortization of property, equipment, acquired intangible assets and leased right-of-use assets of $80.7 million, and intangible impairment loss of $2.8 million.

Net cash provided by operating activities was $168.2 million for the year ended December 31, 2021 and primarily consisted of the positive impact from net income of $42.0 million and non-cash items of $161.2 million, partially offset by changes in operating assets and liabilities of $24.3 million and deferred income taxes and excess tax benefits totaling $10.7 million. Non-cash items included in net income for the year ended December 31, 2021 primarily consisted of depreciation and amortization of property, equipment, acquired intangible assets and leased right-of-use assets of $91.8 million, stock-based compensation of $59.4 million, loss on extinguishment of debt of $5.2 million, and amortization of debt issuance costs and discounts of $3.0 million.

**Cash Flows from Investing Activities**

Net cash used in investing activities was $91.8 million for the year ended December 31, 2022 and consisted of purchases of property and equipment of $41.3 million, purchases of investments of $29.3 million, purchases of intangible assets of $11.2 million and proceeds loaned under notes receivable of $10.0 million.

Net cash used in investing activities was $91.8 million for the year ended December 31, 2021 and consisted of cash used in the acquisitions of $40.0 million comprising $35.0 million in payments of purchase price from our 2020 acquisition of NanoSemi that were previously deferred under the terms of the merger agreement and $5.0 million to purchase a business, purchases of property and equipment of $39.2 million, purchases of intangible assets of $7.6 million, and purchases of investments in a private entity of $5.0 million.

**Cash Flows from Financing Activities**

Net cash used in financing activities was $240.4 million for the year ended December 31, 2022. Net cash used in financing activities consisted of repayments of debt of $185.0 million, common stock repurchases of $31.5 million, minimum tax withholding paid on behalf of employees for restricted stock units of $28.9 million, partially offset by cash inflows from net proceeds from the issuance of common stock upon exercise of stock options of $5.0 million.

Net cash used in financing activities was $91.9 million for the year ended December 31, 2021. Net cash used in financing activities consisted primarily of repayments of principal on outstanding debt of $409.8 million, common stock repurchases of $23.5 million, minimum tax withholding paid on behalf of employees for restricted stock units of $13.1 million, and payments of debt issuance costs of $4.2 million, partially offset by cash inflows from net proceeds from the issuance of debt of $350.0 million and from issuance of common stock upon exercise of stock options of $8.8 million.
We believe that our $187.4 million of cash and cash equivalents at December 31, 2022 will be sufficient to fund our projected operating requirements for at least the next twelve months, excluding anticipated cash expenditures for the pending merger and related integration costs which will be financed primarily through additional debt under the Senior Secured Credit Facilities. As of December 31, 2022, our indebtedness totaled $125.0 million, which consists of outstanding principal under the Initial Term Loan under the June 23, 2021 Credit Agreement. Upon consummation of our merger with Silicon Motion and execution of related merger financing agreements, we expect that a portion of the proceeds from the Senior Secured Credit Facilities associated with the merger, described in more detail above, will be used to repay our existing indebtedness in full, and our indebtedness may increase up to $3.5 billion under the Senior Secured Credit Facilities. The Revolving Facility in an aggregate principal amount of up to $100.0 million remained undrawn as of December 31, 2022.

The Initial Term Loan under the June 23, 2021 Credit Agreement has a seven-year term expiring in June 2028 and bears interest, at the Company’s option, at a per annum rate equal to either (i) a base rate equal to the highest of (x) the federal funds rate, plus 0.50%, (y) the prime rate then in effect and (z) an adjusted LIBOR rate determined on the basis of a one-month interest period plus 1.00%, in each case, plus an applicable margin of 1.25% or (ii) an adjusted LIBOR rate, subject to a floor of 0.50%, plus an applicable margin of 2.25%. Loans under the Revolving Facility initially bear interest, at a per annum rate equal to either (i) a base rate (as calculated above) plus an applicable margin of 1.00%. Following delivery of financial statements for the Company’s fiscal quarter ending June 30, 2021, the applicable margin for loans under the Revolving Facility will range from 0.00% to 0.75% in the case of base rate loans and 1.00% to 1.75% in the case of LIBOR rate loans, in each case, depending on the Company’s secured net leverage ratio as of the most recently ended fiscal quarter. The Company is required to pay commitment fees ranging from 0.175% to 0.25% per annum on the daily undrawn commitments under the Revolving Facility, depending on the Company’s secured net leverage ratio as of the most recently ended fiscal quarter. During the year ended December 31, 2022, the initial term loan under the June 23, 2021 Credit Agreement amortizes in equal quarterly installments equal to 0.25% of the original principal amount, with the balance payable at maturity on June 23, 2028. The June 23, 2021 Credit Agreement contains customary provisions specifying alternative interest rate calculations to be employed at such time as LIBOR ceases to be available as a benchmark for establishing the interest rate on floating interest rate borrowings.

Our cash and cash equivalents in recent years have been favorably affected by our implementation of an equity-based bonus program for our employees, including executives. In connection with that bonus program, in February 2022, we issued 0.5 million freely-tradable shares of our common stock in settlement of bonus awards for the 2021 performance period. We expect to implement a similar equity-based plan for fiscal 2022, but our compensation committee retains discretion to effect payment in cash, stock, or a combination of cash and stock.

**Warranties and Indemnifications**

In connection with the sale of products in the ordinary course of business, we often make representations affirming, among other things, that our products do not infringe on the intellectual property rights of others, and agree to indemnify customers against third-party claims for such infringement. Further, our certificate of incorporation and bylaws require us to indemnify our officers and directors against any action that may arise out of their services in that capacity, and we have also entered into indemnification agreements with respect to all of our directors and certain controlling persons.

**ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in foreign currency exchange rates and interest rates.

**Foreign Currency Risk**

To date, our international customer and vendor agreements have been denominated mostly in United States dollars. Accordingly, we have limited exposure to foreign currency exchange rates and do not enter into foreign currency hedging transactions. The functional currency of certain foreign subsidiaries is the local currency. Accordingly, the effects of exchange rate fluctuations on the net assets of these foreign subsidiaries’ operations are accounted for as translation gains or losses in accumulated other comprehensive income within stockholders’ equity. A hypothetical change of 100 basis points in such foreign currency exchange rates during the year ended December 31, 2022 would result in a change to translation gain in accumulated other comprehensive income of approximately $0.9 million.
Interest Rate Risk

We are subject to a variable amount of interest on the principal balance of our credit agreements described above and could be adversely impacted by rising interest rates in the future. If LIBOR interest rates had increased by 10% during the periods presented, the rate increase would have resulted in an immaterial increase to interest expense. We are currently mitigating the impact of rising interest rates with prepayments of principal on our indebtedness and we believe our operating cash held primarily for working capital purpose is sufficient to cover our interest obligations.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements and supplementary data required by this item are included in Part IV, Item 15 of this Report.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic reports filed with the SEC is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and no evaluation of controls and procedures can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected. Management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by Rule 13a-15(b) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, prior to filing this Form 10-K, we carried out an evaluation, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) as of the end of the period covered by this Form 10-K. Based on their evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this Form 10-K.

Management’s Annual Report on Internal Controls over Financial Reporting

Our management, including our principal executive officer and principal financial officer, is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our management, including our principal executive officer and principal financial officer, evaluated the effectiveness of our internal control over financial reporting based on criteria established in the Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based upon that evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2022. The effectiveness of our internal control over financial reporting as of December 31, 2022 has been audited by Grant Thornton LLP, an independent registered public accounting firm, and Grant Thornton LLP has issued a report on our internal control over financial reporting, which is included herein.
Changes in Internal Control over Financial Reporting

An evaluation was performed under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, to determine whether any change in our internal control over financial reporting occurred during the fiscal quarter ended December 31, 2022 that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. There were no changes in our internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Rule 13a-15 or Rule 15d-15 of the Exchange Act, as amended, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.
REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders
MaxLinear, Inc.

Opinion on internal control over financial reporting
We have audited the internal control over financial reporting of MaxLinear, Inc. (a Delaware corporation) and subsidiaries (the “Company”) as of December 31, 2022, based on criteria established in the 2013 Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in the 2013 Internal Control—Integrated Framework issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the consolidated financial statements of the Company as of and for the year ended December 31, 2022, and our report dated February 1, 2023 expressed an unqualified opinion on those financial statements.

Basis for opinion
The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Annual Report on Internal Control over Financial Reporting (“Management’s Report”). Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and limitations of internal control over financial reporting
A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Grant Thornton LLP
Newport Beach, California
February 1, 2023
ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTION

Not applicable.
PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by Item 10 with respect to our directors and executive officers will be either (i) included in an amendment to this Annual Report on Form 10-K or (ii) incorporated by reference to our Definitive Proxy Statement to be filed in connection with our 2023 Annual Meeting of Stockholders, or the 2023 Proxy Statement. Such amendment in the 2023 Proxy Statement will be filed with the SEC no later than 120 days after December 31, 2022.

Item 405 of Regulation S-K calls for disclosure of any known late filing or failure by an insider to file a report required by Section 16(a) of the Exchange Act. This information will be contained under the caption “Related Person Transactions and Section 16(a) Beneficial Ownership Reporting Compliance” in either an amendment to this Annual Report on Form 10-K or the 2023 Proxy Statement and is incorporated herein by reference.

Code of Conduct

We have adopted a code of ethics and employee conduct that applies to our board of directors and all of our employees, including our chief executive officer and principal financial officer.

Our code of conduct is available at our website by visiting www.maxlinear.com and clicking through “Investors,” “Corporate Governance,” “Governance,” “Governance Documents,” and “Code of Conduct.” When required by the rules of the Nasdaq Stock Market LLC, or Nasdaq, or the SEC, we will disclose any future amendment to, or waiver of, any provision of the code of conduct for our chief executive officer and principal financial officer or any member or members of our board of directors on our website within four business days following the date of such amendment or waiver.

The information required by Item 10 with respect to our audit committee is incorporated by reference from the information set forth under the caption “Corporate Governance and Board of Directors — Board Committees” in either an amendment to this Annual Report on Form 10-K or the 2023 Proxy Statement.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Item 11 is incorporated by reference from the information set forth under the captions “Compensation of Non-Employee Directors” and “Executive Compensation” in either an amendment to this Annual Report on Form 10-K or our 2023 Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by Item 12 is incorporated by reference from the information set forth under the captions “Executive Compensation — Equity Compensation Plan Information” and “Security Ownership” in either an amendment to this Annual Report on Form 10-K or our 2023 Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Item 13 is incorporated by reference from the information set forth under the captions “Corporate Governance and Board of Directors — Director Independence” and “Related Person Transactions and Section 16(a) Beneficial Ownership Reporting Compliance” in either an amendment to this Annual Report on Form 10-K or our 2023 Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by Item 14 is incorporated by reference from the information set forth under the caption “Proposal Number 3 — Ratification of Appointment of Independent Registered Public Accounting Firm” in either an amendment to this Annual Report on Form 10-K or our 2023 Proxy Statement.
ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

a) Documents filed as part of the report

1. Financial Statements
   Our consolidated financial statements are attached hereto and listed on the Index to Consolidated Financial Statements of this Annual Report on Form 10-K.

2. Financial Statement Schedules
   Schedule II. Valuation and Qualifying Accounts — Years ended December 31, 2022, 2021 and 2020
   All other schedules are omitted as the required information is inapplicable, or the information is presented in the financial statements or related notes.

SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS (in thousands):

<table>
<thead>
<tr>
<th>Classification</th>
<th>Balance at beginning of year</th>
<th>Additions (deductions) charged to expenses</th>
<th>Other Additions</th>
<th>(Deductions)</th>
<th>Balance at end of year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowance for credit losses (previously, allowance for doubtful accounts)</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
</tr>
<tr>
<td>2022</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
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<tr>
<td>2021</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
</tr>
<tr>
<td>2020</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
<td>$ —</td>
</tr>
<tr>
<td>Warranty reserves</td>
<td>$ 774</td>
<td>$ 358</td>
<td>$ —</td>
<td>$ (659)</td>
<td>$ 473</td>
</tr>
<tr>
<td>2022</td>
<td>$ 700</td>
<td>$ 514</td>
<td>$ —</td>
<td>$ (440)</td>
<td>$ 774</td>
</tr>
<tr>
<td>2021</td>
<td>$ 553</td>
<td>$ 300</td>
<td>$ —</td>
<td>$ (153)</td>
<td>$ 700</td>
</tr>
<tr>
<td>Valuation allowance for deferred tax assets</td>
<td>$ 68,151</td>
<td>$ 4,169</td>
<td>$ —</td>
<td>$ (6,047)</td>
<td>$ 66,273</td>
</tr>
<tr>
<td>2022</td>
<td>$ 71,811</td>
<td>$ (3,660)</td>
<td>$ —</td>
<td>$ —</td>
<td>$ 68,151</td>
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<tr>
<td>2020</td>
<td>$ 77,857</td>
<td>$ (7,385)</td>
<td>$ 1,239</td>
<td>$ —</td>
<td>$ 71,811</td>
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<tr>
<td>Exhibit Number</td>
<td>Exhibit Title</td>
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<tr>
<td>2.1</td>
<td>Asset Purchase Agreement, dated as of April 5, 2020, by and among MaxLinear, Inc., a Delaware corporation, Intel Corporation, a Delaware corporation, and MaxLinear Asia Singapore Private Limited, a wholly-owned subsidiary of MaxLinear (incorporated by reference to Exhibit 2.1 to the Registrant’s Current Report on Form 8-K filed on April 6, 2020 (File No. 001-34666)).</td>
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<tr>
<td>3.1</td>
<td>Registrant’s Amended and Restated Certificate of Incorporation, as filed with the Secretary of State of the State of Delaware on March 29, 2010 (incorporated by reference to Exhibit 3.5 of the Registrant’s Registration Statement on Form S-1 and all amendments thereto (File No. 333-162947)).</td>
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<tr>
<td>3.2</td>
<td>Registrant’s Certificate of Retirement (incorporated by reference to Exhibit 3.1 of Registrant’s Form 8-A/A filed on July 30, 2017).</td>
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<tr>
<td>3.3</td>
<td>Registrant’s Amended and Restated Bylaws, as amended to date (incorporated by reference to Exhibit 3.1 to the Registrant’s Current Report on Form 8-K filed on November 17, 2022 (File No. 001-34666)).</td>
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<tr>
<td>4.1</td>
<td>Specimen common stock certificate of Registrant (incorporated by reference to Exhibit 4.1 of the Registrant’s Amendment No. 1 on Form 8-A filed on March 30, 2017 (File No. 001-34666)).</td>
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<tr>
<td>*4.2</td>
<td>Description of the registrant’s securities registered pursuant to Section 12 of the Securities Exchange Act of 1934.</td>
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<tr>
<td>+10.1</td>
<td>Form of Director and Executive Officer Indemnification Agreement (incorporated by reference to Exhibit 10.1 of the Registrant’s Registration Statement on Form S-1 and all amendments thereto (File No. 333-162947)).</td>
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<tr>
<td>+10.2</td>
<td>Form of Director and Controlling Person Indemnification Agreement (incorporated by reference to Exhibit 10.2 of the Registrant’s Registration Statement on Form S-1 and all amendments thereto (File No. 333-162947)).</td>
<td></td>
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<tr>
<td>+10.3</td>
<td>2010 Equity Incentive Plan, as amended on December 13, 2018 (incorporated by reference to Exhibit 10.3 of the Registrant’s Current Report on Form 8-K filed on December 19, 2018 (File No. 001-34666)).</td>
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<tr>
<td>+10.4</td>
<td>Form of Agreement under the 2010 Equity Incentive (incorporated by reference to Exhibit 10.7 of the Registrant’s Quarterly Report on Form 10-Q filed on July 28, 2011 (File No. 001-34666)).</td>
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<tr>
<td>+10.5</td>
<td>2010 Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 10.8 of the Registrant’s Current Report on Form 8-K filed on August 15, 2016 (File No. 001-34666)).</td>
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<td>+10.6</td>
<td>Form of Change in Control Agreement for Executive Officers (incorporated herein by reference to Exhibit 10.13 of the Registrant's Annual Report on Form 10-K filed on February 17, 2016).</td>
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<tr>
<td>†10.7</td>
<td>Intellectual Property License Agreement, dated June 18, 2009, between the Registrant and Intel Corporation, (incorporated by reference to Exhibit 10.16 of the Registrant’s Registration Statement on Form S-1 and all amendments thereto (File No. 333-162947)).</td>
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<tr>
<td>†10.8</td>
<td>Employment Offer Letter, dated November 9, 2012, between the Registrant and Will Torgerson (incorporated by reference to Exhibit 10.17 of the Registrant’s Annual Report on Form 10-K filed on February 6, 2013 (File No. 001-34666)).</td>
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<tr>
<td>10.9</td>
<td>Lease Agreement, dated December 17, 2013, between Registrant and The Campus Carlsbad, LLC (incorporated by reference to Exhibit 10.26 of the Registrant’s Annual Report on Form 10-K filed on February 7, 2014 (File No. 001-34666)).</td>
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<tr>
<td>10.10</td>
<td>First Amendment to Lease, dated May 6, 2015, between Registrant, on the one hand, and Brookwood CB I, LLC and Brookwood CB II, LLC, as tenants in common and successors-in-interest to The Campus Carlsbad, LLC, on the other hand (incorporated by reference to Exhibit 10.1 of Registrant’s Quarterly Report on Form 10-Q filed on August 10, 2015 (File No. 333-34666)).</td>
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<td>Exhibit Number</td>
<td>Exhibit Title</td>
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<td>10.14</td>
<td>Credit Agreement, dated as of May 12, 2017, by and among MaxLinear, Inc., the lenders from time to time party thereto, and JPMorgan Chase Bank, N.A., as administrative agent and collateral agent (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 12, 2017 (File No. 001-34666)).</td>
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<tr>
<td>10.15</td>
<td>Security Agreement, dated as of May 12, 2017, by and among MaxLinear, Inc., the subsidiary guarantors from time to time party thereto, and JPMorgan Chase Bank, N.A., as collateral agent (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on May 12, 2017 (File No. 001-34666)).</td>
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<td>+10.16</td>
<td>Employment Offer Letter, dated June 7, 2018, between the Registrant and Steven Litchfield (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 10-Q filed on August 7, 2018 (File No. 001-34666)).</td>
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<td>+10.17</td>
<td>Employment Offer Letter, dated June 27, 2018, between the Registrant and Michael Bollesen (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 10-Q filed on August 7, 2018 (File No. 001-34666)).</td>
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<tr>
<td>+10.18</td>
<td>Form of Change in Control Agreement for Chief Executive Officer and Chief Financial Officer, as amended (incorporated herein by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on December 19, 2018 (File No. 001-34666)).</td>
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<td>+10.19</td>
<td>Form of Change in Control Agreement for Executive Officers, as amended (incorporated herein by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on December 19, 2018 (File No. 001-34666)).</td>
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<tr>
<td>+10.20</td>
<td>Executive Incentive Bonus Plan, as amended on December 13, 2018 (incorporated by reference to Exhibit 10.4 of the Registrant's Current Report on Form 8-K filed on December 19, 2018 (File No. 001-34666)).</td>
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<td>+10.21</td>
<td>Clawback Policy, as adopted on December 13, 2018 (incorporated by reference to Exhibit 10.5 of the Registrant’s Current Report on Form 8-K filed on December 19, 2018 (File No. 001-34666)).</td>
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<tr>
<td>+†10.22</td>
<td>Form of Restricted Stock Unit Award Agreement for Performance-Based Awards under the 2010 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.1 of the Registrant’s Form 10-Q filed on July 25, 2019 (File No. 001-34666)).</td>
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<td>10.23</td>
<td>Debt Commitment Letter by and among MaxLinear, Inc., MUFG Union Bank, and Wells Fargo Bank, N.A., dated as of April 5, 2020 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on April 6, 2020 (File No. 001-34666)).</td>
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<tr>
<td>10.24</td>
<td>Incremental Amendment No. 1, dated as of July 31, 2020, by and among MaxLinear, the guarantors party thereto, the lenders party thereto, MUFG Bank, Ltd., as administrative agent, and MUFG as collateral agent.</td>
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<tr>
<td>10.25</td>
<td>Incremental Amendment No. 1, dated as of July 31, 2020, by and among MaxLinear, the guarantors party thereto, the lenders party thereto, MUFG Bank, Ltd., as administrative agent, and MUFG as collateral agent (incorporated by reference to Exhibit 99.1 to the Registrant’s Current Report on Form 8-K filed on June 7, 2021).</td>
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<tr>
<td>10.26</td>
<td>Credit Agreement, dated as of June 23, 2021, by and among MaxLinear, Inc., the lenders from time to time party thereto, and Wells Fargo Bank, National Association, as administrative agent and collateral agent (incorporated by reference to Exhibit 10.1 to the Registrant’s Current Report on Form 8-K filed on June 24, 2021).</td>
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<tr>
<td>10.27</td>
<td>Security Agreement, dated as of June 23, 2021, by and among MaxLinear, Inc., the subsidiary guarantors from time to time party thereto, and Wells Fargo Bank, National Association, as collateral agent (incorporated by reference to Exhibit 10.2 to the Registrant’s Current Report on Form 8-K filed on June 24, 2021).</td>
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<tr>
<td>10.29</td>
<td>Agreement and Plan of Merger, dated as of May 5, 2022, by and among MaxLinear, Inc., Silicon Motion Technology Corporation and Shark Merger Sub (incorporated by reference to Exhibit 2.1 to the Registrant’s Current Report on Form 8-K filed on May 5, 2022).</td>
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</tbody>
</table>
Exhibit Number | Exhibit Title
---|---
*11.1 | Statement re computation of income (loss) per share (included in Part IV, Item 14 of this Form 10-K).
*21.1 | Subsidiaries of the Registrant.
*23.1 | Consent of Independent Registered Public Accounting Firm.
*24.1 | Power of Attorney (included on the signature page of this Form 10-K).
*31.1 | Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
*31.2 | Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
#32.1 | Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS | XBRL Instance Document - the instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.
101.SCH |XBRL Taxonomy Extension Schema Document
101.CAL |XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF |XBRL Taxonomy Extension Definition Linkbase Document
101.LAB |XBRL Taxonomy Extension Label Linkbase Document
101.PRE |XBRL Taxonomy Extension Presentation Linkbase Document
104 |Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Filed herewith.
# In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release No. 33-8238 and 34-47986, Final Rule: Management’s Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, the certifications furnished pursuant to this item will not be deemed “filed” for purposes of Section 18 of the Exchange Act (15 U.S.C. 78r), or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the registrant specifically incorporates it by reference.
+ Indicates a management contract or compensatory plan.
† Confidential treatment has been requested and received for certain portions of these exhibits.
(b) Exhibits
The exhibits filed as part of this report are listed in Item 15(a)(3) of this Form 10-K.
(c) Schedules
The financial statement schedule required by Regulation S-X and Item 8 of this form is listed in Item 15(a)(2) of this Form 10-K.
SIGNATURES

Pursuant to the requirements of Section 13 or 15 (d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

MAXLINEAR, INC.

(Registrant)

By: /s/ KISHORE SEEDEPRIPU, Ph.D.

Kishore Seendripu, Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)

Date: February 1, 2023

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POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Kishore Seendripu, Ph.D. and Steven Litchfield, and each of them, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, to sign any and all amendments (including post-effective amendments) to this Annual Report on Form 10-K and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto each of said attorneys-in-fact and agents, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-facts and agents, or his substitute or substitutes, or any of them, shall do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

<table>
<thead>
<tr>
<th>Signature</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>/s/ KISHORE SEENDRIPU, Ph.D.</td>
<td>President, Chief Executive Officer, and Director</td>
<td>February 1, 2023</td>
</tr>
<tr>
<td></td>
<td>(Principal Executive Officer)</td>
<td></td>
</tr>
<tr>
<td>/s/ STEVEN G. LITCHFIELD</td>
<td>Chief Financial Officer and Chief Corporate Strategy Officer</td>
<td>February 1, 2023</td>
</tr>
<tr>
<td></td>
<td>(Principal Financial Officer)</td>
<td></td>
</tr>
<tr>
<td>/s/ CONNIE KWONG</td>
<td>Corporate Controller</td>
<td>February 1, 2023</td>
</tr>
<tr>
<td></td>
<td>(Principal Accounting Officer)</td>
<td></td>
</tr>
<tr>
<td>/s/ THOMAS E. PARDUN</td>
<td>Lead Director</td>
<td>February 1, 2023</td>
</tr>
<tr>
<td></td>
<td>Thomas E. Pardun</td>
<td></td>
</tr>
<tr>
<td>/s/ DANIEL A. ARTUSI</td>
<td>Director</td>
<td>February 1, 2023</td>
</tr>
<tr>
<td></td>
<td>Daniel A. Artusi</td>
<td></td>
</tr>
<tr>
<td>/s/ CAROLYN D. BEAVER</td>
<td>Director</td>
<td>February 1, 2023</td>
</tr>
<tr>
<td></td>
<td>Carolyn D. Beaver</td>
<td></td>
</tr>
<tr>
<td>/s/ GREGORY P. DOUGHERTY</td>
<td>Director</td>
<td>February 1, 2023</td>
</tr>
<tr>
<td></td>
<td>Gregory P. Dougherty</td>
<td></td>
</tr>
<tr>
<td>/s/ TSU-JAE KING LIU, Ph.D.</td>
<td>Director</td>
<td>February 1, 2023</td>
</tr>
<tr>
<td></td>
<td>Tsu-Jae King Liu, Ph.D.</td>
<td></td>
</tr>
<tr>
<td>/s/ ALBERT J. MOYER</td>
<td>Director</td>
<td>February 1, 2023</td>
</tr>
<tr>
<td></td>
<td>Albert J. Moyer</td>
<td></td>
</tr>
<tr>
<td>/s/ THEODORE TEWKSBURY, Ph.D.</td>
<td>Director</td>
<td>February 1, 2023</td>
</tr>
<tr>
<td></td>
<td>Theodore Tewksbury, Ph.D.</td>
<td></td>
</tr>
</tbody>
</table>
### MaxLinear, Inc.

**Index to Consolidated Financial Statements**

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<th>Section</th>
<th>Page</th>
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</thead>
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<td>86</td>
</tr>
</tbody>
</table>
REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders
MaxLinear, Inc.

Opinion on the financial statements
We have audited the accompanying consolidated balance sheets of MaxLinear, Inc. (a Delaware corporation) and subsidiaries (the “Company”) as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive income (loss), stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and financial statement schedule included under Item 15(a) (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of December 31, 2022, based on criteria established in the 2013 Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”), and our report dated February 1, 2023 expressed an unqualified opinion.

Basis for opinion
These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical audit matters
The critical audit matters communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Realizability of deferred tax assets
As discussed in Note 1 to the financial statements, management records valuation allowances to reduce deferred tax assets when a judgment is made, that is considered more likely than not, that a tax benefit will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences will become deductible. The Company assesses the need for a valuation allowance by evaluating both positive and negative evidence that may exist.

We identified the realizability of deferred tax assets as a critical audit matter. The principal consideration for our determination that the realizability of deferred tax assets as a critical audit matter is that the forecast of future taxable income is an accounting estimate subject to a high level of estimation. There is inherent uncertainty and subjectivity related to management’s judgments and assumptions regarding the Company’s international tax structure and transfer pricing agreements, determination of the taxable income by jurisdiction and the impacts of the Tax Act on future taxable income, which are complex in nature and require significant auditor judgment.
Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. With the assistance of engagement team members possessing specialized skill in income tax matters, our audit procedures related to the realizability of deferred tax assets included the following, among others:

- Reviewing management’s application of the rules under the Tax Act with a focus on Section 174, Global Intangible Low-Taxed Income and its expected impact on estimated future taxable income;
- Comparing the scheduled reversals of deferred tax liabilities to the underlying financial and tax accounting records;
- Comparing the forecast of future taxable income to the following:
  - Prior year actual results by jurisdiction to evaluate the reasonableness of significant changes contemplated for the following year;
  - Forecasts of future information used in other areas, to evaluate completeness and consistency
- Reviewing the Company’s transfer pricing assumptions, including royalty rates and cost-plus markups, applied by the Company and its non-US subsidiaries; and
- Testing the design and operating effectiveness of management’s internal controls over the completeness and accuracy of the forecast of future taxable income and the proper application of relevant tax law to support the realizability of deferred tax assets.

/s/ Grant Thornton LLP

We have served as the Company’s auditor since 2016.

Newport Beach, California
February 1, 2023
MAXLINEAR, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except par value amounts)

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current assets:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$ 187,353</td>
<td>$ 130,572</td>
</tr>
<tr>
<td>Short-term restricted cash</td>
<td>982</td>
<td>105</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>18,529</td>
<td>—</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>170,971</td>
<td>119,724</td>
</tr>
<tr>
<td>Inventory</td>
<td>160,544</td>
<td>131,703</td>
</tr>
<tr>
<td>Prepaid expenses and other current assets</td>
<td>24,745</td>
<td>22,000</td>
</tr>
<tr>
<td>Total current assets</td>
<td>563,124</td>
<td>404,104</td>
</tr>
<tr>
<td>Long-term restricted cash</td>
<td>22</td>
<td>1,061</td>
</tr>
<tr>
<td>Property and equipment, net</td>
<td>79,018</td>
<td>60,924</td>
</tr>
<tr>
<td>Leased right-of-use assets</td>
<td>28,515</td>
<td>27,269</td>
</tr>
<tr>
<td>Intangible assets, net</td>
<td>109,316</td>
<td>152,540</td>
</tr>
<tr>
<td>Goodwill</td>
<td>306,739</td>
<td>306,668</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>66,491</td>
<td>89,168</td>
</tr>
<tr>
<td>Other long-term assets</td>
<td>26,800</td>
<td>8,650</td>
</tr>
<tr>
<td>Total assets</td>
<td>$ 1,180,025</td>
<td>$ 1,050,384</td>
</tr>
<tr>
<td><strong>Liabilities and stockholders’ equity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$ 68,576</td>
<td>$ 52,976</td>
</tr>
<tr>
<td>Accrued price protection liability</td>
<td>113,274</td>
<td>40,509</td>
</tr>
<tr>
<td>Accrued expenses and other current liabilities</td>
<td>100,155</td>
<td>57,268</td>
</tr>
<tr>
<td>Accrued compensation</td>
<td>59,081</td>
<td>56,642</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>341,086</td>
<td>207,395</td>
</tr>
<tr>
<td>Long-term lease liabilities</td>
<td>23,353</td>
<td>24,640</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>121,757</td>
<td>306,153</td>
</tr>
<tr>
<td>Other long-term liabilities</td>
<td>17,444</td>
<td>22,998</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>503,640</td>
<td>561,186</td>
</tr>
<tr>
<td>Commitments and contingencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stockholders’ equity:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preferred stock, $0.0001 par value; 25,000 shares authorized, no shares issued or outstanding</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Common stock, $0.0001 par value; 550,000 shares authorized; 78,745 shares issued and outstanding at December 31, 2022 and 76,778 shares issued and outstanding December 31, 2021</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>722,778</td>
<td>657,485</td>
</tr>
<tr>
<td>Accumulated other comprehensive income (loss)</td>
<td>(1,021)</td>
<td>2,125</td>
</tr>
<tr>
<td>Accumulated deficit</td>
<td>(45,380)</td>
<td>(170,420)</td>
</tr>
<tr>
<td>Total stockholders’ equity</td>
<td>676,385</td>
<td>489,198</td>
</tr>
<tr>
<td>Total liabilities and stockholders’ equity</td>
<td>$ 1,180,025</td>
<td>$ 1,050,384</td>
</tr>
</tbody>
</table>

See accompanying notes.
# MAXLINEAR, INC.
## CONSOLIDATED STATEMENTS OF OPERATIONS
**(in thousands, except per share data)**

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net revenue</strong></td>
<td>$1,120,252</td>
<td>$892,398</td>
<td>$478,596</td>
</tr>
<tr>
<td><strong>Cost of net revenue</strong></td>
<td>470,483</td>
<td>396,566</td>
<td>265,798</td>
</tr>
<tr>
<td><strong>Gross profit</strong></td>
<td>649,769</td>
<td>495,832</td>
<td>212,798</td>
</tr>
<tr>
<td><strong>Operating expenses:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research and development</td>
<td>296,442</td>
<td>278,440</td>
<td>179,993</td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>168,008</td>
<td>149,943</td>
<td>130,025</td>
</tr>
<tr>
<td>Impairment losses</td>
<td>2,811</td>
<td>—</td>
<td>86</td>
</tr>
<tr>
<td>Restructuring charges</td>
<td>2,265</td>
<td>2,204</td>
<td>3,833</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>469,526</td>
<td>430,587</td>
<td>313,937</td>
</tr>
<tr>
<td><strong>Income (loss) from operations</strong></td>
<td>180,243</td>
<td>65,245</td>
<td>(101,139)</td>
</tr>
<tr>
<td><strong>Interest income</strong></td>
<td>245</td>
<td>78</td>
<td>409</td>
</tr>
<tr>
<td><strong>Interest expense</strong></td>
<td>(9,768)</td>
<td>(12,996)</td>
<td>(12,952)</td>
</tr>
<tr>
<td>Loss on extinguishment of debt</td>
<td>—</td>
<td>(5,221)</td>
<td>—</td>
</tr>
<tr>
<td>Other income (expense), net</td>
<td>3,478</td>
<td>764</td>
<td>(1,170)</td>
</tr>
<tr>
<td><strong>Total other income (expense), net</strong></td>
<td>(6,045)</td>
<td>(17,375)</td>
<td>(13,713)</td>
</tr>
<tr>
<td><strong>Income (loss) before income taxes</strong></td>
<td>174,198</td>
<td>47,870</td>
<td>(114,852)</td>
</tr>
<tr>
<td><strong>Income tax provision (benefit)</strong></td>
<td>49,158</td>
<td>5,901</td>
<td>(16,259)</td>
</tr>
<tr>
<td><strong>Net income (loss)</strong></td>
<td>$125,040</td>
<td>$41,969</td>
<td>$98,593</td>
</tr>
<tr>
<td><strong>Net income (loss) per share:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>$1.60</td>
<td>$0.55</td>
<td>(1.35)</td>
</tr>
<tr>
<td>Diluted</td>
<td>$1.55</td>
<td>$0.53</td>
<td>(1.35)</td>
</tr>
</tbody>
</table>

**Shares used to compute net income (loss) per share:**

|                      |         |         |
| Basic                | 78,039  | 76,037  |
| Diluted              | 80,852  | 79,679  |

See accompanying notes.
### MAXLINEAR, INC.

#### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

*(in thousands)*

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income (loss)</td>
<td>$125,040</td>
<td>$41,969</td>
<td>$(98,593)</td>
</tr>
<tr>
<td>Other comprehensive income (loss), net of tax:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign currency translation adjustments, net of tax benefit of $455 in 2022, expense of $93 in 2021 and expense of $216 in 2020</td>
<td>$(5,201)</td>
<td>$(242)</td>
<td>1,010</td>
</tr>
<tr>
<td>Net actuarial gain on pension and other defined benefit plans, net of tax expense of $782 in 2022, $792 in 2021 and $0 in 2020</td>
<td>2,055</td>
<td>932</td>
<td>1,172</td>
</tr>
<tr>
<td>Unrealized gain on interest rate swap, net of tax expense of $8 in 2020</td>
<td>—</td>
<td>—</td>
<td>225</td>
</tr>
<tr>
<td>Less: Reclassification adjustments of unrealized gain on interest rate swap, net of tax of $0 in 2020</td>
<td>—</td>
<td>—</td>
<td>(85)</td>
</tr>
<tr>
<td>Unrealized gain on interest rate swap, net of tax</td>
<td>—</td>
<td>—</td>
<td>140</td>
</tr>
<tr>
<td>Other comprehensive income (loss)</td>
<td>$(3,146)</td>
<td>690</td>
<td>2,322</td>
</tr>
<tr>
<td>Total comprehensive income (loss)</td>
<td>$121,894</td>
<td>$42,659</td>
<td>$(96,271)</td>
</tr>
</tbody>
</table>

See accompanying notes.
## MAXLINEAR, INC.
### CONSOLIDATED STATEMENTS OF STOCKHOLDERS’ EQUITY
(in thousands)

<table>
<thead>
<tr>
<th>Shares</th>
<th>Amount</th>
<th>Additional Paid-In Capital</th>
<th>Accumulated Other Comprehensive Income (Loss)</th>
<th>Accumulated Deficit</th>
<th>Total Stockholders' Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>71,931</td>
<td>$ 7</td>
<td>$ 529,596</td>
<td>$ (887)</td>
<td>$ (113,796)</td>
<td>$ 414,920</td>
</tr>
</tbody>
</table>

- **Balance at December 31, 2019**
- **Common stock issued pursuant to equity awards, net**
  - 1,515
  - 3,997
  - 3,997
- **Common stock issued for merger, net**
  - 804
  - 17,080
  - 17,080
- **Employee stock purchase plan**
  - 286
  - 3,794
  - 3,794
- **Stock-based compensation**
  - 286
  - 47,597
  - 47,597
- **Other comprehensive income**
  - 2,322
  - 2,322
- **Net loss**
  - (98,593)
  - (98,593)

<table>
<thead>
<tr>
<th>Shares</th>
<th>Amount</th>
<th>Additional Paid-In Capital</th>
<th>Accumulated Other Comprehensive Income (Loss)</th>
<th>Accumulated Deficit</th>
<th>Total Stockholders' Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>74,536</td>
<td>7</td>
<td>602,064</td>
<td>1,435</td>
<td>(212,389)</td>
<td>391,117</td>
</tr>
</tbody>
</table>

- **Balance at December 31, 2020**
- **Common stock issued pursuant to equity awards, net**
  - 2,501
  - 14,613
  - 14,614
- **Repurchase of common stock**
  - (455)
  - (23,548)
  - (23,548)
- **Employee stock purchase plan**
  - 196
  - 4,998
  - 4,998
- **Stock-based compensation**
  - 690
  - 690
- **Other comprehensive income**
  - (98,593)
  - (98,593)

<table>
<thead>
<tr>
<th>Shares</th>
<th>Amount</th>
<th>Additional Paid-In Capital</th>
<th>Accumulated Other Comprehensive Income (Loss)</th>
<th>Accumulated Deficit</th>
<th>Total Stockholders' Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>76,778</td>
<td>8</td>
<td>657,485</td>
<td>2,125</td>
<td>(170,420)</td>
<td>489,198</td>
</tr>
</tbody>
</table>

- **Balance at December 31, 2021**
- **Common stock issued pursuant to equity awards, net**
  - 2,391
  - 10,252
  - 10,252
- **Repurchase of common stock**
  - (564)
  - (31,511)
  - (31,511)
- **Employee stock purchase plan**
  - 140
  - 4,684
  - 4,684
- **Stock-based compensation**
  - 140
  - 81,868
  - 81,868
- **Other comprehensive loss**
  - (3,146)
  - (3,146)

<table>
<thead>
<tr>
<th>Shares</th>
<th>Amount</th>
<th>Additional Paid-In Capital</th>
<th>Accumulated Other Comprehensive Income (Loss)</th>
<th>Accumulated Deficit</th>
<th>Total Stockholders' Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>78,745</td>
<td>8</td>
<td>722,778</td>
<td>(1,021)</td>
<td>(45,380)</td>
<td>676,385</td>
</tr>
</tbody>
</table>

- **Balance at December 31, 2022**
- **Net income**
  - 125,040
  - 125,040

See accompanying notes.
Operating Activities

Net income (loss) $ 125,040 $ 41,969 $ (98,593)

Adjustments to reconcile net income (loss) to cash provided by operating activities:
- Amortization and depreciation $ 80,731 $ 91,792 $ 76,513
- Impairment losses $ 2,811 — —
- Inventory fair value adjustments — — $ 32,945
- Amortization of debt issuance costs and accretion of discounts $ 1,975 $ 3,000 $ 2,201
- Stock-based compensation $ 81,704 $ 59,358 $ 47,597
- Deferred income taxes $ 23,454 $ (3,235) $ (18,488)
- Loss on disposal of property and equipment $ 170 $ 533 —
- Gain on sale of investments $ (3,375) — —
- Unrealized holding loss on investments $ 1,476 — —
- Impairment of leasehold improvements — $ 226 $ 319
- Impairment of leased right-of-use assets $ 462 $ 429 $ 1,508
- Loss on extinguishment of debt — $ 5,221 —
- (Gain) loss on foreign currency $ (1,829) $ 634 $ 1,289

Excess tax benefits on stock-based awards $ (9,921) $ (7,415) $ (677)

Changes in operating assets and liabilities, net of effects of acquisitions:
- Accounts receivable $ (50,875) $ (51,690) $ (16,856)
- Inventory $ (28,841) $ (33,689) $ (31,837)
- Prepaid expenses and other assets $ 1,789 $ 24,186 $ (38,954)
- Leased right-of-use assets — $ 72 $ 441
- Accounts payable, accrued expenses and other current liabilities $ 65,815 $ 12,771 $ 57,094
- Accrued compensation $ 42,003 $ 33,595 $ 32,606
- Accrued price protection liability $ 73,574 $ (7,320) $ 34,719
- Lease liabilities $ (11,440) $ (9,905) $ (6,386)
- Other long-term liabilities $ (5,997) $ 7,701 $ (1,934)

Net cash provided by operating activities $ 388,726 $ 168,233 $ 73,593

Investing Activities

Purchases of property and equipment $ (41,253) $ (39,176) $ (12,487)
Purchases of intangible assets $ (11,184) $ (7,581) $ (2,799)
Cash used in acquisitions, net of cash acquired — $ (40,000) $ (160,000)
Proceeds loaned under notes receivable $ (10,000) — —
Purchases of long-term investments $ (29,325) $ (5,000) —

Net cash used in investing activities $ (91,702) $ (91,757) $ (175,286)

Financing Activities

Proceeds from the issuance of debt — $ 350,000 $ 175,000
Payment of debt issuance cost — $ (4,173) $ (2,696)
Repayment of debt $ (185,000) $ (409,813) $ (17,188)
Net proceeds from issuance of common stock $ 5,066 $ 8,780 $ 8,068
Minimum tax withholding paid on behalf of employees for restricted stock units $ (28,896) $ (13,149) $ (3,535)
Repurchase of common stock $ (31,511) $ (23,548) —
Net cash provided by (used in) financing activities $ (240,401) $ (91,903) $ 159,649

Effect of exchange rate changes on cash and cash equivalents $ 56 $ (2,869) $ (1,039)
Increase (decrease) in cash, cash equivalents and restricted cash $ 56,619 $ (18,296) $ 56,917
Cash, cash equivalents and restricted cash at beginning of period $ 131,738 $ 150,034 $ 93,117
Cash, cash equivalents and restricted cash at end of period $ 188,357 $ 131,738 $ 150,034

Supplemental disclosures of cash flow information:

Cash paid for interest $ 9,078 $ 11,034 $ 11,082
Cash paid for income taxes $ 23,826 $ 3,839 $ 2,822

Supplemental disclosures of non-cash activities:

Common stock issued in acquisitions, at fair value $ — $ — $ 17,080
Deferred payments of purchase price for acquisitions, at fair value $ — $ — $ 34,100
Issuance of shares for payment of bonuses $ 38,826 $ 23,981 $ 5,258

See accompanying notes.
1. Organization and Summary of Significant Accounting Policies

Description of Business
MaxLinear, Inc. was incorporated in Delaware in September 2003. MaxLinear, Inc., together with its directly and indirectly wholly-owned subsidiaries, collectively referred to as MaxLinear, or the Company, is a provider of communications systems-on-chip, or SoC, solutions used in broadband, mobile and wireline infrastructure, data center, and industrial and multi-market applications. MaxLinear is a fabless integrated circuit design company whose products integrate all or substantial portions of a high-speed communication system, including radio frequency, or RF, high-performance analog, digital signal processing, security engines, data compression and networking layers, and power management. MaxLinear’s customers include electronics distributors, module makers, original equipment manufacturers, or OEMs, and original design manufacturers, or ODMs, who incorporate the Company’s products in a wide range of electronic devices, including cable Data Over Cable Service Interface Specifications, or DOCSIS, fiber and DSL broadband modems and gateways; Wi-Fi and wireline routers for home networking; radio transceivers and modems for 4G/5G base-station and backhaul infrastructure; fiber-optic modules for data center, metro, and long-haul transport networks; as well as power management and interface products used in these and many other markets.

Basis of Presentation and Principles of Consolidation
The consolidated financial statements include the accounts of MaxLinear, Inc. and its directly and indirectly wholly-owned subsidiaries and have been prepared in accordance with accounting principles generally accepted in the United States of America, or GAAP. All intercompany transactions and investments have been eliminated in consolidation.

The functional currency of certain foreign subsidiaries is the local currency. Accordingly, assets and liabilities of these foreign subsidiaries are translated at the current exchange rate at the balance sheet date and historical rates for equity. Revenue and expense components are translated at weighted average exchange rates in effect during the period. Gains and losses resulting from foreign currency translation are included as a component of stockholders’ equity. Foreign currency transaction gains and losses are included in the results of operations, and to date, have not been material.

Use of Estimates and Significant Risks and Uncertainties
The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes of the consolidated financial statements. Actual results could differ from those estimates.

Inflation, and uncertainty in customer demand and the worldwide economy has continued, and the Company may experience continued volatility in its sales and revenues in the near future. The Company’s management believes an economic downturn and inventory oversupply due to changes in customer demand will add to volatility in managing the business. However, the magnitude of such volatility on the Company’s business and its duration is uncertain and cannot be reasonably estimated at this time.

The Company also believes that its $188.4 million of cash and cash equivalents at December 31, 2022 will be sufficient to fund its projected operating requirements for at least the next twelve months, excluding its pending acquisition of Silicon Motion which it intends to fund with proceeds from additional debt (Note 3). The Company’s future capital requirements will depend on many factors, including the timing of the closing of the pending transaction to acquire Silicon Motion, changes in revenue, the expansion of engineering, sales and marketing activities, the timing and extent of expansion into new territories, the timing of introductions of new products and enhancements to existing products, the continuing market acceptance of the Company’s products and potential material investments in, or acquisitions of, complementary businesses, services or technologies. Additional funds may not be available on terms favorable to the Company or at all. If the Company is unable to raise additional funds when needed, it may not be able to sustain its operations or execute its strategic plans.

The Company is not aware of any specific event or circumstance that would require an update to its estimates or adjustments to the carrying value of its assets and liabilities as of February 1, 2023, the issuance date of this Annual Report on Form 10-K. Actual results could differ from those estimates.
Business Combinations

The Company applies the provisions of ASC 805, Business Combinations, in accounting for its acquisitions. It requires the Company to recognize separately from goodwill the assets acquired and the liabilities assumed, at the acquisition date fair values. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the acquisition date fair values of the net assets acquired and the liabilities assumed. While the Company uses its best estimates and assumptions to accurately value assets acquired and liabilities assumed at the acquisition date as well as contingent consideration, where applicable, its estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, the Company records adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the consolidated statements of operations.

Costs to exit or restructure certain activities of an acquired company or the Company’s internal operations are accounted for as termination and exit costs pursuant to ASC 420, Exit or Disposal Cost Obligations, and are accounted for separately from the business combination. A liability for costs associated with an exit or disposal activity is recognized and measured at its fair value in the consolidated statements of operations in the period in which the liability is incurred.

For a given acquisition, the Company may identify certain pre-acquisition contingencies as of the acquisition date and may extend its review, evaluation, and adjustment of these pre-acquisition contingencies throughout the measurement period in order to obtain sufficient information to assess whether the Company includes these contingencies as a part of the fair value estimates of assets acquired and liabilities assumed and, if so, to determine their estimated amounts. A pre-acquisition contingency (non-income tax related) is only recognized as an asset or a liability if: (i) it is probable that an asset existed or a liability had been incurred at the acquisition date and (ii) the amount of the asset or liability can be reasonably estimated. Subsequent to the measurement period, changes in estimates of such contingencies will affect earnings and could have a material effect on the Company’s results of operations and financial position.

In addition, uncertain tax positions and tax-related valuation allowances assumed, if any, in connection with a business combination are initially estimated as of the acquisition date. The Company re-evaluates these items quarterly based upon facts and circumstances that existed as of the acquisition date with any adjustments to the preliminary estimates being recorded to goodwill if identified within the measurement period. Subsequent to the end of the measurement period or final determination of the estimated value of the tax allowance or contingency, whichever comes first, changes to these uncertain tax positions and tax related valuation allowances will affect the income tax provision (benefit) in the consolidated statements of operations and could have a material impact on the results of operations and financial position.

Cash and Cash Equivalents

The Company considers all liquid investments with a maturity of three months or less when purchased to be cash equivalents. Cash equivalents are recorded at cost, which approximates market value.

Accounts Receivable

The Company performs ongoing credit evaluations of its customers and assesses each customer’s credit worthiness. The Company monitors collections and payments from its customers and maintains an allowance for doubtful accounts, which is based upon applying an expected credit loss rate to receivables based on the historical loss rate from similar high-risk customers adjusted for current conditions, including any specific customer collection issues identified, and forecasts of economic conditions. Delinquent account balances are written off after management has determined that the likelihood of collection is remote. The allowance for credit losses as of December 31, 2022 and 2021 and the activity in this account, including the current-period provision for expected credit losses for the years ended December 31, 2022, 2021, and 2020, were not material.

Inventory

The Company assesses the recoverability of its inventory based on assumptions about demand and market conditions. Forecasted demand is determined based on historical sales and expected future sales. Inventory is stated at the lower of cost or net realizable value. Cost is computed using standard cost, which approximates actual cost on a first-in, first-out basis and net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. The Company reduces its inventory to the lower of its cost or net realizable value on a part-by-part basis to account for obsolescence or lack of marketability. Reductions are calculated as the difference between the cost of
inventory and its net realizable value based upon assumptions about future demand, market conditions and costs. Once established, these adjustments are considered permanent and are
not revised until the related inventory is sold or disposed of.

**Fair Value of Financial Instruments**

The carrying amount of cash and cash equivalents, restricted cash, accounts receivable, accounts payable and accrued expenses and compensation are considered to be representative of their respective fair values because of the short-term nature of these accounts.

**Property and Equipment**

Property and equipment is carried at cost and depreciated over the estimated useful lives of the assets, ranging from two to five years, using the straight-line method. Leasehold improvements are stated at cost and amortized over the shorter of the estimated useful lives of the assets or the lease term.

**Production Masks**

Production masks with alternative future uses or discernible future benefits are capitalized and amortized over their estimated useful lives of two to five years. To determine if a production mask has alternative future uses or benefits, the Company evaluates risks associated with developing new technologies and capabilities, and the related risks associated with entering new markets. Production masks that do not meet the criteria for capitalization are expensed as research and development costs.

**Goodwill and Intangible Assets**

Goodwill is the excess of the purchase price over the fair value of identifiable net assets acquired in business combinations accounted for under the acquisition method. Intangible assets represent purchased intangible assets including developed technology, in-process research and development, or IPR&D, technologies acquired or licensed from other companies, customer relationships, non-compete covenants, backlog, and trademarks and tradenames. Purchased finite-lived intangible assets are capitalized and amortized over their estimated useful lives. Technologies acquired or licensed from other companies, customer relationships, non-compete covenants, backlog, and trademarks and tradenames are capitalized and amortized over the lesser of the terms of the agreement, or estimated useful life. The Company capitalizes IPR&D projects acquired as part of a business combination. On completion of each project, IPR&D assets are reclassified to developed technology and amortized over their estimated useful lives.

**Impairment of Goodwill and Long-Lived Assets**

Goodwill is not amortized but is tested for impairment using either a qualitative assessment, and/or quantitative assessment, which is based on comparing the fair value of a reporting unit with its carrying amount. If the carrying amount of a reporting unit exceeds its fair value, a goodwill impairment loss is recorded. The Company tests by reporting unit, goodwill and other indefinite-lived intangible assets for impairment as of October 31 each year or more frequently if it believes indicators of impairment exist.

During development, IPR&D is not subject to amortization and is tested for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired. The Company reviews indefinite-lived intangible assets for impairment using a qualitative assessment, followed by a quantitative assessment, as needed, each year as of October 31, the date of its annual goodwill impairment review, or whenever events or changes in circumstances indicate the carrying value may not be recoverable. Recoverability of indefinite-lived intangible assets is measured by comparing the carrying amount of the asset to its fair value. In certain cases, the Company utilizes the relief-from-royalty method when appropriate, and a fair value will be obtained based on analysis over the costs saved by owning the right instead of leasing it.

Once an IPR&D project is complete, it becomes a finite-lived intangible asset and is evaluated for impairment both immediately prior to its change in classification and thereafter in accordance with the Company’s policy for long-lived assets.

The Company regularly reviews the carrying amount of its long-lived assets subject to depreciation and amortization, as well as the useful lives, to determine whether indicators of impairment may exist which warrant adjustments to carrying values or estimated useful lives. An impairment loss would be recognized when the sum of the expected future undiscounted net cash flows is less than the carrying amount of the asset. Should impairment exist, the impairment loss would be measured based on the excess of the carrying amount of the asset over the asset’s fair value.

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During the years 2022, 2021, and 2020, the Company recorded impairment of intangible assets of $2.8 million, $0 and $0.1 million, respectively. Refer to Goodwill and Intangible Assets; Note 5 for more information.

Revenue Recognition

The Company’s revenue is primarily generated from sales of the Company’s integrated circuits to electronics distributors, module makers, OEMs, and ODMs under individual customer purchase orders, some of which have underlying master sales agreements that specify terms governing the product sales. The Company recognizes such revenue at the point in time when control of the products is transferred to the customer at the estimated net consideration for which collection is probable, taking into account the customer’s rights to price protection, other pricing credits, unit rebates, and rights to return unsold product. Transfer of control occurs either when products are shipped to or received by the distributor or direct customer, based on the terms of the specific agreement with the customer, if the Company has a present right to payment and transfer of legal title and the risks and rewards of ownership to the customer has occurred. For most of the Company’s product sales, transfer of control occurs upon shipment to the distributor or direct customer. In assessing whether collection of consideration from a customer is probable, the Company considers the customer’s ability and intention to pay that amount of consideration when it is due. Payment of invoices is due as specified in the underlying customer agreement, typically 30 days from the invoice date, which occurs on the date of transfer of control of the products to the customer. Since payment terms are less than a year, the Company has elected the practical expedient and does not assess whether a customer contract has a significant financing component.

A five-step approach is applied in the recognition of revenue: (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenue when the Company satisfies a performance obligation. Customer purchase orders plus the underlying master sales agreements are considered to be contracts with the customer for purposes of applying the five-step approach.

Pricing adjustments and estimates of returns under contractual stock rotation rights are treated as variable consideration for purposes of determining the transaction price, and are estimated at the time control transfers using the expected value method based on the Company’s analysis of actual price adjustment claims by distributors and historical product return rates, and then reassessed at the end of each reporting period. The Company also considers whether any variable consideration is constrained, since such amounts for which it is probable that a significant reversal will occur when the contingency is subsequently resolved are required to be excluded from revenues. Price adjustments are finalized at the time the products are sold through to the end customer and the distributor or end customer submits a claim to reduce the sale price to a pre-approved net price. Stock rotation allowances are capped at a fixed percentage of the Company’s sales to a distributor for a period of time, up to six months, as specified in the individual distributor contract. If the Company’s current estimates of such credits and rights are materially inaccurate, it may result in adjustments that affect future revenues and gross profits. Returns under the Company’s general assurance warranty of products for a period of one to three years have not been material and warranty-related services are not considered a separate performance obligation under the customer contracts. Most of the Company’s customers resell the Company’s product as part of their product and thus are tax-exempt; however, to the extent the Company collects and remits taxes on product sales from customers, it has elected to exclude from the measurement of transaction price such taxes.

Each distinct promise to transfer products is considered to be an identified performance obligation for which revenue is recognized upon transfer of control of the products to the customer. Although customers may place orders for products to be delivered on multiple dates that may be in different quarterly reporting periods, all of the orders are scheduled within one year from the order date. The Company has opted to not disclose the portion of revenues allocated to partially unsatisfied performance obligations, which represent products to be shipped within 12 months under open customer purchase orders, at the end of the current reporting period. The Company has also elected to record sales commissions when incurred, as the period over which the sales commission asset that would have been recognized is less than one year.

Customer contract liabilities consist primarily of obligations to deliver rebates to customers in the form of units of products which are included in accrued expenses and other current liabilities in the consolidated balance sheets. Other obligations to customers consist of estimates of price protection rights offered to the Company’s end customers, which are included in accrued price protection liability in the consolidated balance sheets, as well as price adjustments expected to be claimed by the distributor upon sell-through of the products to their customers, and amounts expected to be returned by distributors under stock rotation rights, which are included in accrued expenses and other current liabilities in the consolidated balance sheets. The Company also records a right of return asset, consisting of amounts representing the products the Company expects to receive from customers in returns, which is included in inventory in the consolidated balance sheets, and is typically
settled within six months of transfer of control to the customer, or the period over which stock rotation rights are based. Upon lapse of the time period for stock rotations, or the contractual end to price protection and rebate programs, which is approximately one to two years, and when the Company believes unclaimed amounts are no longer subject to payment and will not be paid, any remaining asset or liability is derecognized by an offsetting entry to cost of net revenue and net revenue. For additional disclosures regarding contract liabilities and other obligations to customers, see Note 12.

The Company assesses customer accounts receivable and contract assets for impairment in accordance with ASC 310-10-35.

Warranty

The Company generally provides a warranty on its products for a period of one to three years. The Company makes estimates of product return rates and expected costs to replace the products under warranty at the time revenue is recognized based on historical warranty experience and any known product warranty issues. If actual return rates and/or replacement costs differ significantly from these estimates, adjustments to recognize additional warranty expenses in cost of net revenue may be required in future periods. As of December 31, 2022 and 2021, the Company has warranty reserves of $0.5 million and $0.8 million, respectively, based on the Company’s estimates.

Segment Information

The Company operates under one segment as it has developed, marketed and sold primarily only one class of similar products, radio-frequency, high-performance analog and mixed-signal communications system-on-chip solutions for the connected home, wired and wireless infrastructure markets and industrial and multi-market applications.

Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company’s chief operating decision maker is its Chief Executive Officer. The Company’s Chief Executive Officer reviews financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. The Company has one business activity and there are no segment managers who are held accountable for operations, operating results and plans for products or components below the consolidated unit level. Accordingly, the Company reports under a single operating segment.

Stock-based Compensation

The Company measures the cost of employee services received in exchange for equity incentive awards, including restricted stock units, employee stock purchase rights and stock options based on the grant date fair value of the award. The Company calculates the fair value of restricted stock units and performance-based restricted stock units based on the fair market value of the Company’s common stock on the grant date. Stock-based compensation expense is then determined based on the number of restricted stock units that are expected to vest; for performance-based restricted stock units, this is the number of units that are expected to vest during the performance period if it is probable that the Company will achieve the performance metrics specified in the underlying award agreement. The Company uses the Black-Scholes valuation model to calculate the fair value of stock options and employee stock purchase rights granted to employees. Stock-based compensation expense is recognized over the period during which the employee is required to provide services in exchange for the award, which is usually the vesting period. The Company recognizes compensation expense over the vesting period using the straight-line method and classifies these amounts in the consolidated statements of operations based on the department to which the related employee reports.

Research and Development

Costs incurred in connection with the development of the Company’s technology and future products are charged to research and development expense as incurred.

Leases

The Company’s leases primarily consist of facility leases which are classified as operating leases. The Company assesses whether an arrangement contains a lease at inception. The Company recognizes a lease liability to make contractual payments under all leases with terms greater than twelve months and a corresponding right-of-use asset, representing its right to use the underlying asset for the lease term. The lease liability is initially measured at the present value of the lease payments over the lease term using the collateralized incremental borrowing rate when the implicit rate is unknown. Options to extend or terminate
a lease are included in the lease term when it is reasonably certain that the Company will exercise such an option. The right-of-use asset is initially measured as the contractual lease liability plus any initial direct costs and prepaid lease payments made, less any lease incentives. Upon adoption of ASC 842 on January 1, 2019, the carrying value of lease-related restructuring liabilities for certain restructured leases existing at that date was offset against the related right-of-use assets. Lease expense is recognized on a straight-line basis over the lease term.

Upon adoption of ASC 842, the Company elected certain practical expedients and accordingly has (1) carried forward its prior assessments of (a) whether existing contracts on the January 1, 2019 adoption date contain leases, (b) classification of leases as operating or financing and (c) initial direct costs for existing leases and (2) considered hindsight in determining the lease term and assessing impairment of the right-of-use-asset. In addition, the Company used a portfolio approach for its facility leases when making judgments and estimates, such as the discount rate.

Leased right-of-use assets are subject to impairment testing as a long-lived asset at the asset-group level. The Company monitors its long-lived assets for indicators of impairment. As the Company’s leased right-of-use assets primarily relate to facility leases, early abandonment of all or part of a facility as part of a restructuring plan is typically an indicator of impairment. If impairment indicators are present, the Company tests whether the carrying amount of the leased right-of-use asset is recoverable including consideration of sublease income, and if not recoverable, measures impairment loss for the right-of-use asset or asset group.

Pension and Other Defined Benefit Retirement Obligations

The costs of pension and certain other defined benefit employee retirement benefits are required to be recognized based upon actuarial valuations. The related net retirement benefit obligation is recognized as the excess of the projected benefit obligation over the fair value of the plan assets. In measuring the retirement benefit obligation, the discount rate, expected long-term rate of return on plan assets, and long-term rate of salary increase are the most significant assumptions. Retirement benefit costs primarily represent the increase in the actuarial present value of the retirement benefit obligation.

Income Taxes

The Company provides for income taxes utilizing the asset and liability approach of accounting for income taxes. Under this approach, deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid. Deferred taxes are presented net as noncurrent. The provision for income taxes generally represents income taxes paid or payable for the current year plus the change in deferred taxes during the year. Deferred taxes result from the differences between the financial and tax bases of the Company’s assets and liabilities and are adjusted for changes in tax rates and tax laws when changes are enacted. Valuation allowances are recorded to reduce deferred tax assets when a judgment is made that is considered more likely than not that a tax benefit will not be realized. A decision to record a valuation allowance results in an increase in income tax expense or a decrease in income tax benefit. If the valuation allowance is released in a future period, income tax expense will be reduced accordingly.

The calculation of tax liabilities involves dealing with uncertainties in the application of complex global tax regulations. The impact of an uncertain income tax position is recognized at the largest amount that is “more likely than not” to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. If the estimate of tax liabilities proves to be less than the ultimate assessment, a further charge to expense would result.

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. The Company continually assesses the need for a valuation allowance on the deferred tax asset by evaluating both positive and negative evidence that may exist. Any adjustment to the net deferred tax asset valuation allowance would be recorded in the consolidated statement of operations for the period that the adjustment is determined to be required.

On December 22, 2017, the Tax Cuts and Jobs Act, or the Tax Act, was enacted into U.S. tax law. In 2018, the Company made an accounting policy election to treat Global Intangible Low Taxed Income in accordance with the Tax Act as a period cost.
Comprehensive Income (Loss)

Comprehensive income (loss) is defined as the change in equity (net assets) of a business entity during a period from transactions and other events and circumstances from non-owner sources. Other comprehensive income (loss) includes certain changes in equity that are excluded from net income (loss), net of tax, such as foreign currency translation gains and losses and changes in fair value of projected benefit obligations for defined benefit plans.

Litigation and Settlement Costs

Legal costs are expensed as incurred. The Company is involved in disputes, litigation and other legal actions in the ordinary course of business. The Company continually evaluates uncertainties associated with litigation and records a charge equal to at least the minimum estimated liability for a loss contingency when both of the following conditions are met: (i) information available prior to issuance of the financial statements indicates that it is probable that an asset had been impaired or a liability had been incurred at the date of the financial statements and (ii) the loss or range of loss can be reasonably estimated.

Recently Issued Accounting Pronouncements

In October 2021, the FASB issued ASU No. 2021-08, Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers, to provide specific guidance to eliminate diversity in practice on how to recognize and measure acquired contract assets and contract liabilities from revenue contracts from customers in a business combination consistent with revenue contracts with customers not acquired in an acquisition. The amendments in this update provide that the acquirer should consider the terms of the acquired contracts, such as timing of payment, identify each performance obligation in the contracts, and allocate the total transaction price to each identified performance obligation on a relative standalone selling price basis as of contract inception (that is, the date the acquiree entered into the contracts) or contract modification to determine what should be recorded at the acquisition date. These amendments are effective for the Company in 2023. The impact of the adoption of the amendments in this update will depend on the magnitude of any customer contracts assumed in a business combination in 2023 and beyond.

2. Net Income (Loss) Per Share

Basic earnings per share, or EPS, is calculated by dividing net income (loss) by the weighted-average number of common shares outstanding for the period, without consideration for common stock equivalents. Diluted EPS is computed by dividing net income (loss) by the weighted-average number of common shares outstanding for the period and the weighted-average number of dilutive common stock equivalents outstanding for the period determined using the treasury-stock method. For purposes of this calculation, common stock options and restricted stock units are considered to be common stock equivalents and are only included in the calculation of diluted EPS when their effect is dilutive. In periods in which the Company has a net loss, dilutive common stock equivalents are excluded from the calculation of diluted EPS.

The table below presents the computation of basic and diluted EPS:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in thousands, except per share amounts)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerator:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income (loss)</td>
<td>$125,040</td>
<td>$41,969</td>
<td>$(98,593)</td>
</tr>
<tr>
<td>Denominator:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted average common shares outstanding—basic</td>
<td>78,039</td>
<td>76,037</td>
<td>73,133</td>
</tr>
<tr>
<td>Dilutive common stock equivalents</td>
<td>2,813</td>
<td>3,642</td>
<td>—</td>
</tr>
<tr>
<td>Weighted average common shares outstanding—diluted</td>
<td>80,852</td>
<td>79,679</td>
<td>73,133</td>
</tr>
</tbody>
</table>

Net income (loss) per share:

<table>
<thead>
<tr>
<th></th>
<th>Basic</th>
<th>Diluted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$1.60</td>
<td>$1.55</td>
</tr>
<tr>
<td></td>
<td>$0.55</td>
<td>$0.53</td>
</tr>
<tr>
<td></td>
<td>$(1.35)</td>
<td>$(1.35)</td>
</tr>
</tbody>
</table>

For each of the years ended December 31, 2022, 2021, and 2020, the Company excluded common stock equivalents for outstanding stock-based awards, which represented potentially dilutive securities of 1.8 million for 2022, 0.07 million for 2021, and 3.2 million for 2020 from the calculation of diluted net income (loss) per share due to their anti-dilutive nature.
3. Business Combinations

**Silicon Motion Merger**

On May 5, 2022, MaxLinear entered into an agreement and plan of merger, or the Merger Agreement, with Silicon Motion Technology Corporation, or Silicon Motion, an exempted company with limited liability incorporated under the Law of the Cayman Islands, pursuant to which, subject to the terms and conditions thereof, MaxLinear agreed to acquire Silicon Motion pursuant to a statutory merger of Shark Merger Sub, a wholly-owned subsidiary of MaxLinear, with and into Silicon Motion, with Silicon Motion surviving the merger as a wholly-owned subsidiary of MaxLinear. Silicon Motion is a provider of NAND flash controllers for solid state drives, or SSDs, and other solid state storage devices.

Under the terms of the Merger Agreement, the transaction consideration will consist of $3.54 in cash and 0.388 shares of MaxLinear stock for each Silicon Motion American Depositary Share, or ADS, and $23.385 in cash and 0.097 shares of MaxLinear common stock for each Silicon Motion ordinary share not represented by an ADS. Upon closing of the transaction, the current MaxLinear stockholders will own approximately 86% of the combined company and former Silicon Motion securityholders will own approximately 14% of the combined company. Based on the closing price of MaxLinear shares on May 4, 2022, the implied value of the total transaction consideration for Silicon Motion is approximately $4.3 billion. MaxLinear may fund up to $3.5 billion of cash consideration with cash on hand and fully committed debt financing from Wells Fargo Bank, N.A., or Wells Fargo Bank, and other lenders as described below. MaxLinear will also assume Silicon Motion’s vested and unvested employee stock-based compensation awards.

The merger is not subject to any financing conditions but is pending satisfaction of customary closing conditions, including regulatory approval in the People’s Republic of China, or China. On June 27, 2022, the Hart-Scott-Rodino Antitrust Improvements Act of 1976, or HSR, waiting period expired with respect to the pending merger. On July 13, 2022, the registration statement on Form S-4 was declared effective by the SEC. On August 31, 2022, the Silicon Motion securityholders approved the merger at the extraordinary general meeting.

On June 17, 2022, MaxLinear entered into an amended and restated commitment letter with Wells Fargo Bank and other lenders pursuant to which, subject to the terms and conditions set forth therein, the lenders have committed to provide (i) a senior secured term B loan facility in an aggregate principal amount of up to $2.7375 billion, or the Term B Loan Facility, (ii) a senior secured term A loan facility in an aggregate principal amount of up to $512.5 million, or the Term A Loan Facility, and (iii) a senior secured revolving credit facility in an aggregate principal amount of up to $250.0 million, which we collectively refer to as the Senior Secured Credit Facilities. The funding of the Senior Secured Credit Facilities is contingent on the satisfaction of customary conditions, including (i) the execution and delivery of definitive documentation with respect to credit facilities in accordance with the terms in the amended and restated commitment letter, and (ii) the consummation of the acquisition by MaxLinear of Silicon Motion in accordance with the Merger Agreement. A portion of the proceeds from the Senior Secured Credit Facilities will be used to repay existing debt (Note 8) in full.

On October 24, 2022, MaxLinear entered into a second amended and restated commitment letter with Wells Fargo Bank and other lenders, which allows for additional commitments in respect of the Term A Loan Facility to be effected by way of the joinder of additional commitment parties to the second amended and restated commitment letter, and allows for an increase in the Term Loan A Loan Facility on a dollar-for-dollar basis by a corresponding decrease in the amount of the Term Loan B facility.

**Acquisition of Company X**

On December 8, 2021, the Company completed its acquisition of a business, or Company X, pursuant to a Purchase and Sale Agreement, or the Purchase Agreement to acquire Company X. The initial closing transaction consideration consisted of $5.0 million in cash. In addition, their stockholders may receive up to an additional $8.0 million in potential contingent consideration, subject to the acquired business satisfying certain financial and personnel objectives by March 31, 2023. The Company has integrated Company X into the Company’s existing business and has completed its purchase price allocation accounting associated with this acquisition, with an immaterial decrease to net operating assets and a corresponding increase in goodwill recorded in 2022 (Note 5).

4. Restructuring Activity

From time to time, the Company approves and implements restructuring plans as a result of internal resource alignment and cost saving measures. Such restructuring plans include terminating employees, vacating certain leased facilities, and cancellation of contracts.
The following table presents the activity related to the restructuring plans, which is included in restructuring charges in the consolidated statements of operations:

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
<td>2021</td>
<td>2020</td>
</tr>
<tr>
<td>(in thousands)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee separation expenses</td>
<td>$1,795</td>
<td>$1,273</td>
<td>$1,620</td>
</tr>
<tr>
<td>Lease related charges</td>
<td>462</td>
<td>608</td>
<td>1,998</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>323</td>
<td>215</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$2,265</strong></td>
<td><strong>$2,204</strong></td>
<td><strong>$3,833</strong></td>
</tr>
</tbody>
</table>

Lease related charges for the year ended December 31, 2022 included the impairment of leased right-of-use assets of $0.5 million related to exiting a redundant facility. Lease related charges for the year ended December 31, 2021 included the impairment of leased right-of-use assets and leasehold improvements of $4 million and $0.2 million, respectively.

Lease related and other charges for the year ended December 31, 2020 included the impairment of leased right-of-use assets of $5 million related to a reduction in expected cash inflows from subleases.

The following table presents a roll-forward of the Company’s restructuring liability for the years ended December 31, 2022 and 2021. The restructuring liability is included in accrued expenses and other current liabilities and other long-term liabilities in the consolidated balance sheets:

<table>
<thead>
<tr>
<th></th>
<th>Employee Separation Expenses</th>
<th>Lease Related Charges</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liability as of December 31, 2020</td>
<td>$3,274</td>
<td>$720</td>
<td>$3</td>
<td>$3,997</td>
</tr>
<tr>
<td>Restructuring charges</td>
<td>1,273</td>
<td>608</td>
<td>323</td>
<td>2,204</td>
</tr>
<tr>
<td>Cash payments</td>
<td>(1,833)</td>
<td>(329)</td>
<td>(25)</td>
<td>(2,187)</td>
</tr>
<tr>
<td>Reimbursement from Intel</td>
<td>(2,711)</td>
<td>—</td>
<td>—</td>
<td>(2,711)</td>
</tr>
<tr>
<td>Non-cash charges and adjustments</td>
<td>(3)</td>
<td>(555)</td>
<td>(301)</td>
<td>(859)</td>
</tr>
<tr>
<td>Liability as of December 31, 2021</td>
<td>—</td>
<td>444</td>
<td>—</td>
<td>444</td>
</tr>
<tr>
<td>Restructuring charges</td>
<td>1,795</td>
<td>462</td>
<td>8</td>
<td>2,265</td>
</tr>
<tr>
<td>Cash payments</td>
<td>(824)</td>
<td>(273)</td>
<td>—</td>
<td>(1,097)</td>
</tr>
<tr>
<td>Non-cash charges and adjustments</td>
<td>—</td>
<td>(530)</td>
<td>—</td>
<td>(530)</td>
</tr>
<tr>
<td>Liability as of December 31, 2022</td>
<td>971</td>
<td>103</td>
<td>8</td>
<td>1,082</td>
</tr>
<tr>
<td>Less: current portion as of December 31, 2022</td>
<td>(971)</td>
<td>(103)</td>
<td>(8)</td>
<td>(1,082)</td>
</tr>
<tr>
<td>Long-term portion as of December 31, 2022</td>
<td>$—</td>
<td>$—</td>
<td>$—</td>
<td>$—</td>
</tr>
</tbody>
</table>

As of December 31, 2022, the remaining lease-related charges primarily consist of common area maintenance obligations. The Company does not expect to incur additional material costs related to current restructuring plans.

5. Goodwill and Intangible Assets

**Goodwill**

Goodwill arises from the acquisition method of accounting for business combinations and represents the excess of the purchase price over the fair value of the net assets and other identifiable intangible assets acquired. The fair values of net tangible assets and intangible assets acquired are based upon preliminary valuations and the Company’s estimates and assumptions are subject to change within the measurement period (potentially up to one year from the acquisition date).
The following table presents the changes in the carrying amount of goodwill for the periods indicated:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in thousands)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning balance</td>
<td>$306,668</td>
<td>$302,828</td>
</tr>
<tr>
<td>Acquisitions (Note 3)</td>
<td>71</td>
<td>3,840</td>
</tr>
<tr>
<td>Ending balance</td>
<td>$306,739</td>
<td>$306,668</td>
</tr>
</tbody>
</table>

During the year ended December 31, 2022, the increase in the carrying value of goodwill related to minor adjustments to the assets and liabilities in the purchase price allocation for Company X (Note 3).

The Company performs an annual goodwill impairment assessment on October 31st each year, using a quantitative assessment comparing the fair value of each reporting unit, which the Company has determined to be the entity itself, with its carrying amount, including goodwill. If the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recorded. As a result of the Company’s impairment assessment, no goodwill impairment was recognized as of October 31, 2022.

In addition to its annual review, the Company performs a test of impairment when indicators of impairment are present. During the years ended December 31, 2022, 2021, and 2020, there were no indications of impairment of the Company’s goodwill balances.

**Acquired Intangibles**

**Finite-lived Intangible Assets**

The following table sets forth the Company’s finite-lived intangible assets resulting from business acquisitions and other purchases, which are amortized over their estimated useful lives:

<table>
<thead>
<tr>
<th>Weighted Average Useful Life (in Years)</th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gross Carrying Amount</td>
<td>Accumulated Amortization</td>
</tr>
<tr>
<td>Licensed technology</td>
<td>$21,764</td>
<td>$(580)</td>
</tr>
<tr>
<td>Developed technology</td>
<td>311,261</td>
<td>(228,532)</td>
</tr>
<tr>
<td>Trademarks and trade names</td>
<td>14,800</td>
<td>(13,461)</td>
</tr>
<tr>
<td>Customer relationships</td>
<td>128,800</td>
<td>(124,807)</td>
</tr>
<tr>
<td>Backlog</td>
<td>500</td>
<td>(429)</td>
</tr>
<tr>
<td>6.1</td>
<td>$477,125</td>
<td>$(367,809)</td>
</tr>
</tbody>
</table>

The following table sets forth amortization expense associated with finite-lived intangible assets, which is included in the consolidated statements of operations as follows:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in thousands)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of net revenue</td>
<td>$39,638</td>
<td>$43,078</td>
<td>$37,784</td>
</tr>
<tr>
<td>Research and development</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>11,955</td>
<td>23,625</td>
<td>23,529</td>
</tr>
<tr>
<td>51,597</td>
<td>$66,707</td>
<td>$61,318</td>
<td></td>
</tr>
</tbody>
</table>
The following table sets forth the activity related to finite-lived intangible assets:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
<td>2021</td>
</tr>
<tr>
<td><strong>Beginning balance</strong></td>
<td>$149,940</td>
<td>$200,066</td>
</tr>
<tr>
<td><strong>Acquisitions (Note 3)</strong></td>
<td></td>
<td>4,400</td>
</tr>
<tr>
<td><strong>Additions</strong></td>
<td>11,184</td>
<td>7,581</td>
</tr>
<tr>
<td><strong>Transfers to developed technology from IPR&amp;D</strong></td>
<td>2,600</td>
<td>4,600</td>
</tr>
<tr>
<td><strong>Amortization</strong></td>
<td>(51,597)</td>
<td>(66,707)</td>
</tr>
<tr>
<td><strong>Impairment losses</strong></td>
<td>(2,811)</td>
<td></td>
</tr>
<tr>
<td><strong>Ending balance</strong></td>
<td>$109,316</td>
<td>$149,940</td>
</tr>
</tbody>
</table>

The Company regularly reviews the carrying amount of its long-lived assets subject to depreciation and amortization, as well as the related useful lives, to determine whether indicators of impairment may exist that warrant adjustments to carrying values or estimated useful lives. An impairment loss is recognized when the sum of the expected future undiscounted net cash flows is less than the carrying amount of the asset. Should impairment exist, the impairment loss is measured based on the excess of the carrying amount of the asset over the asset’s fair value.

During the year ended December 31, 2022, the Company recognized impairment losses related to finite-lived intangible assets of $2.8 million, which was attributable to certain acquired licensed technology. During the year ended December 31, 2021, no impairment losses related to finite-lived intangible assets were recognized. During the year ended December 31, 2020, the Company recognized impairment losses related to finite-lived intangible assets of $0.1 million, which was attributable to certain purchased licensed technology.

The following table presents future amortization of the Company’s finite-lived intangible assets at December 31, 2022:

<table>
<thead>
<tr>
<th>Amount (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
</tr>
<tr>
<td>2024</td>
</tr>
<tr>
<td>2025</td>
</tr>
<tr>
<td>2026</td>
</tr>
<tr>
<td>2027</td>
</tr>
<tr>
<td>Thereafter</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

**Indefinite-lived Intangible Assets**

Indefinite-lived intangible assets consist entirely of acquired in-process research and development technology, or IPR&D. The following table sets forth the Company’s activities related to indefinite-lived intangible assets:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning balance</strong></td>
<td>$2,600</td>
<td>$7,200</td>
</tr>
<tr>
<td><strong>Transfers to developed technology from IPR&amp;D</strong></td>
<td>(2,600)</td>
<td>(4,600)</td>
</tr>
<tr>
<td><strong>Ending balance</strong></td>
<td>$ —</td>
<td>$2,600</td>
</tr>
</tbody>
</table>

The Company performs its annual assessment of indefinite-lived intangible assets on October 31st each year or more frequently if events or changes in circumstances indicate that the asset might be impaired utilizing a qualitative test as a precursor to the quantitative test comparing the fair value of the assets with their carrying amount. Based on the qualitative test, if it is more likely than not that indicators of impairment exist, the Company proceeds to perform a quantitative analysis. Based on the Company’s assessment as of October 31, 2022, no indicators of impairment were identified.
In addition to its annual review, the Company performs a test of impairment when indicators of impairment are present. During the years ended December 31, 2022, 2021, and 2020, no indicators of impairment were identified and, as a result, no IPR&D impairment losses were recorded.

6. Financial Instruments

The composition of financial instruments is as follows:

<table>
<thead>
<tr>
<th>Assets</th>
<th>December 31, 2022</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketable equity investments</td>
<td>$20,005</td>
<td>$20,005</td>
<td>$0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent consideration (Note 3)</td>
<td>$2,941</td>
<td>$2,700</td>
</tr>
</tbody>
</table>

At December 31, 2022, the Company held marketable equity investments with an aggregate fair value of $8.5 million that were in an unrealized loss position for less than 12 months. The net unrealized loss of $1.5 million as of December 31, 2022 represents stock price fluctuations in the underlying securities held, and was recorded to other income (expense), net in the consolidated statement of operations.

The Company evaluates securities for other-than-temporary impairment on a quarterly basis. Impairment is evaluated considering numerous factors, and their relative significance varies depending on the situation. Factors considered include the length of time and extent to which fair value has been less than the cost basis, the financial condition and near-term prospects of the issuer; including changes in the financial condition of any underlying collateral of the security; any downgrades of the security by analysts or rating agencies; nonpayment of any scheduled interest, or the reduction or elimination of dividends; as well as our intent and ability to hold the security in order to allow for an anticipated recovery in fair value.

The fair value of the Company’s financial instruments is the amount that would be received in an asset sale or paid to transfer a liability in an orderly transaction between unaffiliated market participants and is recorded using a hierarchical disclosure framework based upon the level of subjectivity of the inputs used in measuring assets and liabilities. The levels are described below:

- Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities.
- Level 2: Observable prices that are based on inputs not quoted on active markets, but corroborated by market data.
- Level 3: Unobservable inputs are used when little or no market data is available.

The Company classifies its financial instruments within Level 1 or Level 2 of the fair value hierarchy on the basis of valuations using quoted market prices or alternate pricing sources and models utilizing market observable inputs, respectively. The marketable equity investments held by the Company have been valued on the basis of quoted market prices and are therefore classified as Level 1.

The contingent consideration liability is associated with the Company’s acquisition of Company X (Note 3) and is classified as a Level 3 financial instrument that is subject to the acquired business’ satisfaction of certain financial and personnel objectives by March 31, 2023, under the Purchase Agreement. The fair value of the contingent consideration is based on (1) applying the Monte Carlo simulation method, with underlying forecast mathematics based on Geometric Brownian motion in a risk-neutral framework, to forecast achievement of the acquired business’ financial objectives under various possible contingent consideration events and (2) a probability based methodology using management’s inputs and assumptions to forecast achievement of the acquired business’ personnel objectives which combined may result in up to $3.0 million in total payments to the acquired business. Key inputs in the valuation include forecasted revenue, revenue volatility, discount rate and
discount term as it relates to the financial objectives and probability of achievement, discount term and discount rate as it relates to the personnel objectives.

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Balance at December 31, 2022</th>
<th>Quoted Prices in Active Markets for Identical Assets (Level 1)</th>
<th>Significant Other Observable Inputs (Level 2)</th>
<th>Significant Unobservable Inputs (Level 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketable equity securities</td>
<td>$18,529</td>
<td>$18,529</td>
<td>$—</td>
<td>$2,941</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingent consideration</td>
<td>$2,941</td>
<td>$—</td>
<td>$—</td>
<td>$2,941</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Balance at December 31, 2021</th>
<th>Quoted Prices in Active Markets for Identical Assets (Level 1)</th>
<th>Significant Other Observable Inputs (Level 2)</th>
<th>Significant Unobservable Inputs (Level 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingent consideration</td>
<td>$2,700</td>
<td>$—</td>
<td>$—</td>
<td>$2,700</td>
</tr>
</tbody>
</table>

The following summarizes the activity in Level 3 financial instruments:

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Year Ended December 31, 2022</th>
<th>Year Ended December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in thousands)</td>
<td>(in thousands)</td>
</tr>
<tr>
<td>Contingent consideration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning balance</td>
<td>$2,700</td>
<td>$2,700</td>
</tr>
<tr>
<td>Accretion of discount&lt;sup&gt;1&lt;/sup&gt;</td>
<td>$241</td>
<td>$241</td>
</tr>
<tr>
<td>Ending balance</td>
<td>$2,941</td>
<td>$2,941</td>
</tr>
</tbody>
</table>

<sup>1</sup>Changes to the balance associated with the estimated fair value of contingent consideration for the year ended December 31, 2022 were primarily due to accretion of the related discount.

There were no transfers between Level 1, Level 2 or Level 3 fair value hierarchy categories of financial instruments in the years ended December 31, 2022, 2021 and 2020.

**Financial Instruments Not Recorded at Fair Value on a Recurring Basis**

Some of the Company’s financial instruments are recorded at amounts that approximate fair value due to their liquid or short-term nature or by election on investments in privately-held entities as described below. Such financial assets and financial liabilities include cash and cash equivalents, restricted cash, net receivables, investments in privately-held entities, certain other assets, accounts payable, accrued price protection liability, accrued expenses, accrued compensation costs, and other current liabilities.

The Company’s long-term debt is not recorded at fair value on a recurring basis, but is measured at fair value for disclosure purposes (Note 8).

Included in other long-term assets are investments in privately held entities of $1.8 million and $5.0 million as of December 31, 2022 and December 31, 2021, respectively. The Company does not have the ability to exercise significant influence or control over such entity and has accounted for the investments as financial instruments. Given that fair values for
such investments are not readily determinable, the Company is electing to measure these investments at cost, less any impairment, and adjust the carrying value to fair value if any observable price changes for similar investments in the same entity are identified.

7. Balance Sheet Details

Cash, cash equivalents and restricted cash consist of the following:

<table>
<thead>
<tr>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in thousands)</td>
<td>(in thousands)</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$ 187,353</td>
</tr>
<tr>
<td>Short-term restricted cash</td>
<td>982</td>
</tr>
<tr>
<td>Long-term restricted cash</td>
<td>22</td>
</tr>
</tbody>
</table>

Total cash, cash equivalents and restricted cash | $ 188,357 | $ 131,738

As of December 31, 2022 and December 31, 2021, cash and cash equivalents included money market funds of approximately $0.4 million and $20.4 million, respectively. As of December 31, 2022 and December 31, 2021, the Company had restricted cash of approximately $1.0 million and $1.2 million, respectively. The cash is restricted in connection with guarantees for certain import duties and office leases.

Inventory consists of the following:

<table>
<thead>
<tr>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in thousands)</td>
<td>(in thousands)</td>
</tr>
<tr>
<td>Work-in-process</td>
<td>$ 97,840</td>
</tr>
<tr>
<td>Finished goods</td>
<td>62,704</td>
</tr>
</tbody>
</table>

Total inventory | $ 160,544 | $ 131,703

Property and equipment, net consists of the following:

<table>
<thead>
<tr>
<th>Useful Life (in Years)</th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in thousands)</td>
<td>(in thousands)</td>
<td></td>
</tr>
<tr>
<td>Furniture and fixtures</td>
<td>$ 3,924</td>
<td>$ 3,917</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>74,258</td>
<td>65,004</td>
</tr>
<tr>
<td>Masks and production equipment</td>
<td>50,970</td>
<td>32,099</td>
</tr>
<tr>
<td>Software</td>
<td>10,111</td>
<td>8,763</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>34,236</td>
<td>30,889</td>
</tr>
<tr>
<td>Construction in progress</td>
<td>7,602</td>
<td>4,647</td>
</tr>
</tbody>
</table>

Total property and equipment, net | 181,101 | 145,319

Less: accumulated depreciation and amortization

<table>
<thead>
<tr>
<th>(in thousands)</th>
<th>(in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 102,083</td>
<td>(84,395)</td>
</tr>
</tbody>
</table>

Depreciation expense for the years ended December 31, 2022, 2021, and 2020 was $0.3 million, $17.7 million and $11.3 million, respectively.

In March 2022, the Company entered into a note receivable with a supplier for $0.0 million, which is included in other long-term assets in the consolidated balance sheet. Repayments of $2.0 million per year are due annually by March 31, in years 2024 through 2027, provided that certain production utilization targets for the prior year are met.
Accrued price protection liability consists of the following activity:

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
<td>2021</td>
</tr>
<tr>
<td>Beginning balance</td>
<td>$40,509</td>
<td>$47,766</td>
</tr>
<tr>
<td>Charged as a reduction of revenue</td>
<td>180,538</td>
<td>81,116</td>
</tr>
<tr>
<td>Payments</td>
<td>(107,773)</td>
<td>(88,373)</td>
</tr>
<tr>
<td>Ending balance</td>
<td>$113,274</td>
<td>$40,509</td>
</tr>
</tbody>
</table>

Accrued expenses and other current liabilities consist of the following:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated price protection</td>
<td>(in thousands)</td>
<td>(in thousands)</td>
</tr>
<tr>
<td>Beginning balance</td>
<td>$7,402</td>
<td>$7,337</td>
</tr>
<tr>
<td>Charged as a reduction of revenue</td>
<td>4,072</td>
<td>3,651</td>
</tr>
<tr>
<td>Payments</td>
<td>2,560</td>
<td>2,934</td>
</tr>
<tr>
<td>Ending balance</td>
<td>1,662</td>
<td>2,080</td>
</tr>
<tr>
<td>Short-term lease liabilities</td>
<td>10,489</td>
<td>8,888</td>
</tr>
<tr>
<td>Accrued customer credits</td>
<td>304</td>
<td>5,136</td>
</tr>
<tr>
<td>Income tax liability</td>
<td>8,895</td>
<td>7,105</td>
</tr>
<tr>
<td>Customer contract liabilities</td>
<td>1,072</td>
<td>1,044</td>
</tr>
<tr>
<td>Accrued obligations to customers for price adjustments</td>
<td>52,392</td>
<td>6,721</td>
</tr>
<tr>
<td>Accrued obligations to customers for stock rotation rights</td>
<td>605</td>
<td>2,847</td>
</tr>
<tr>
<td>Contingent consideration</td>
<td>2,941</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>6,679</td>
<td>9,205</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$100,155</strong></td>
<td><strong>$57,268</strong></td>
</tr>
</tbody>
</table>

The following table summarizes the change in balances of accumulated other comprehensive income (loss) by component:

<table>
<thead>
<tr>
<th></th>
<th>Cumulative Translation Adjustments</th>
<th>Pension and Other Defined Benefit Plan Obligation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in thousands)</td>
<td>(in thousands)</td>
<td></td>
</tr>
<tr>
<td>Balance at December 31, 2020</td>
<td>$263</td>
<td>$1,172</td>
<td>$1,435</td>
</tr>
<tr>
<td>Other comprehensive income (loss) before reclassifications, net of tax</td>
<td>(242)</td>
<td>932</td>
<td>690</td>
</tr>
<tr>
<td>Balance at December 31, 2021</td>
<td>21</td>
<td>2,104</td>
<td>2,125</td>
</tr>
<tr>
<td>Other comprehensive income (loss) before reclassifications, net of tax</td>
<td>(5,201)</td>
<td>2,055</td>
<td>(3,146)</td>
</tr>
<tr>
<td>Balance at December 31, 2022</td>
<td>$ (5,180)</td>
<td>$ 4,159</td>
<td>$(1,021)</td>
</tr>
</tbody>
</table>
8. Debt and Interest Rate Swap

Debt

The carrying amount of the Company’s long-term debt consists of the following:

<table>
<thead>
<tr>
<th>Principal balance:</th>
<th>December 31, 2022 (in thousands)</th>
<th>December 31, 2021 (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial term loan under June 23, 2021 credit agreement</td>
<td>$125,000</td>
<td>$310,000</td>
</tr>
<tr>
<td>Total principal balance</td>
<td>$125,000</td>
<td>$310,000</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unamortized debt discount</td>
<td>$(695)</td>
<td>$(816)</td>
</tr>
<tr>
<td>Unamortized debt issuance costs</td>
<td>$(2,548)</td>
<td>$(3,031)</td>
</tr>
<tr>
<td>Net carrying amount of long-term debt</td>
<td>$121,757</td>
<td>$306,153</td>
</tr>
<tr>
<td>Less: current portion of long-term debt</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Long-term debt, non-current portion</td>
<td>$121,757</td>
<td>$306,153</td>
</tr>
</tbody>
</table>

As of December 31, 2022 and December 31, 2021, the weighted average effective interest rate on aggregate debt was approximately 3.8% and 3.2%, respectively.

During the years ended December 31, 2022, 2021 and 2020, the Company recognized total amortization of debt discount and debt issuance costs of $0.6 million, $1.3 million, and $1.5 million, respectively, to interest expense.

The approximate aggregate fair value of the term loans outstanding as of December 31, 2022 and December 31, 2021 was $137.4 million and $311.0 million, respectively, which was estimated on the basis of inputs that are observable in the market and which is considered a Level 2 measurement method in the fair value hierarchy (Note 6).

As of December 31, 2022, the outstanding principal balance of $125.0 million is due in full on June 23, 2028 upon maturity of the loan.

Initial Term Loan and Revolving Facility under June 23, 2021 Credit Agreement

On June 23, 2021, the Company entered into a Credit Agreement, or the June 23, 2021 Credit Agreement, by and among the Company, the lenders from time to time party thereto, and Wells Fargo Bank, National Association, as administrative agent and collateral agent, that provides for a senior secured term B loan facility, or the Initial Term Loan under the June 23, 2021 Credit Agreement, in an aggregate principal amount of $350.0 million and a senior secured revolving credit facility, or the Revolving Facility, in an aggregate principal amount of up to $100.0 million. The proceeds of the Initial Term Loan under the June 23, 2021 Credit Agreement were used (i) to repay in full all outstanding indebtedness under that certain Credit Agreement dated May 12, 2017, by and among the Company, MUFG Bank Ltd., as administrative agent and MUFG Union Bank, N.A., as collateral agent, and the lenders from time to time party thereto (as amended by Amendment No. 1, dated July 31, 2020) and (ii) to pay fees and expenses incurred in connection therewith. The remaining proceeds of the Initial Term Loan under the June 23, 2021 Credit Agreement are available for general corporate purposes and the proceeds of the Revolving Facility may be used to finance the working capital needs and other general corporate purposes of the Company and its subsidiaries. As of December 31, 2022, the Revolving Facility was undrawn. Under the amended and restated commitment letter with Wells Fargo Bank and other lenders entered into in connection with the pending merger with Silicon Motion (Note 3), the Company expects to repay the remaining outstanding term loans under this agreement upon closing of the merger.

The June 23, 2021 Credit Agreement permits the Company to request incremental loans in an aggregate principal amount not to exceed the sum of an amount equal to the greater of (x) $175.0 million and (y) 100% of consolidated EBITDA, plus the amount of certain voluntary prepayments, plus an unlimited amount that is subject to pro forma compliance with certain first lien net leverage ratio, secured net leverage ratio and total net leverage ratio tests. Incremental loans are subject to certain additional conditions, including obtaining additional commitments from the lenders then party to the June 23, 2021 Credit Agreement or new lenders.
Under the June 23, 2021 Credit Agreement, the Initial Term Loan bears interest, at the Company’s option, at a per annum rate equal to either (i) a base rate equal to the highest of (x) the federal funds rate, plus 0.50%, (y) the prime rate then in effect and (z) an adjusted LIBOR rate determined on the basis of one-month interest period plus 1.00%, in each case, plus an applicable margin of 1.25% or (ii) an adjusted LIBOR rate, subject to a floor of 0.50%, plus an applicable margin of 2.25%. Loans under the Revolving Facility initially bear interest, at a per annum rate equal to either (i) a base rate (as calculated above) plus an applicable margin of 0.00%, or (ii) an adjusted LIBOR rate (as calculated above) plus an applicable margin of 1.00%. Following delivery of financial statements for the Company’s fiscal quarter ending June 30, 2021, the applicable margin for loans under the Revolving Facility will range from 0.00% to 0.75% in the case of base rate loans and 1.00% to 1.75% in the case of LIBOR rate loans, in each case, depending on the Company’s secured net leverage ratio as of the most recently ended fiscal quarter. The Company is required to pay commitment fees ranging from 0.175% to 0.25% per annum on the undrawn commitments under the Revolving Facility, depending on the Company’s secured net leverage ratio as of the most recently ended fiscal quarter. Commencing on September 30, 2021, the Initial Term Loan under the June 23, 2021 Credit Agreement will amortize in equal quarterly installments equal to 0.25% of the original principal amount of the Initial Term Loan under the June 23, 2021 Credit Agreement, with the balance payable on the maturity date. The June 23, 2021 Credit Agreement contains customary provisions specifying alternative interest rate calculations to be employed at such time as LIBOR ceases to be available as a benchmark for establishing the interest rate on floating interest rate borrowings.

The Company is required to make mandatory prepayments of the outstanding principal amount of term loans under the June 23, 2021 Credit Agreement with the net cash proceeds from the disposition of certain assets and the receipt of insurance proceeds upon certain casualty and condemnation events, in each case, to the extent not reinvested within a specified time period, from excess cash flow beyond stated threshold amounts, and from the incurrence of certain indebtedness. The Company has the right to prepay its term loans under the June 23, 2021 Credit Agreement, in whole or in part, at any time without premium or penalty, subject to certain limitations and a 1.0% soft call premium applicable during the first six months following the closing date of the June 23, 2021 Credit Agreement. The Initial Term Loan under the June 23, 2021 Credit Agreement will mature on June 23, 2028, at which time all outstanding principal and accrued and unpaid interest on the Initial Term Loan under the June 23, 2021 Credit Agreement must be repaid. The Revolving Facility will mature on June 23, 2026, at which time all outstanding principal and accrued and unpaid interest under the Revolving Facility must be repaid. The Company is also obligated to pay fees customary for a credit facility of this size and type.

The Company’s obligations under the June 23, 2021 Credit Agreement are required to be guaranteed by certain of its domestic subsidiaries meeting materiality thresholds set forth in the June 23, 2021 Credit Agreement. Such obligations, including the guarantees, are secured by substantially all of the assets of the Company and the subsidiary guarantors pursuant to a Security Agreement, dated as of June 23, 2021, by and among the Company, the subsidiary guarantors from time to time party thereto, and Wells Fargo Bank, National Association, as collateral agent.

The June 23, 2021 Credit Agreement contains customary affirmative and negative covenants, including covenants limiting the ability of the Company and its restricted subsidiaries to, among other things, incur debt, grant liens, undergo certain fundamental changes, make investments, make certain restricted payments, and sell assets, in each case, subject to limitations and exceptions set forth in the June 23, 2021 Credit Agreement. The Revolving Facility also prohibits the Company from having a secured net leverage ratio in excess of 3.50:1.00 (subject to a temporary increase to 3.75:1.00 following the consummation of certain material permitted acquisitions) as of the last day of any fiscal quarter of the Company (commencing with the fiscal quarter ending September 30, 2021) if the aggregate borrowings under the Revolving Facility exceed 1% of the aggregate commitments thereunder (subject to certain exceptions set forth in the June 23, 2021 Credit Agreement) as of such date. As of December 31, 2022, the Company was in compliance with such covenants. The June 23, 2021 Credit Agreement also contains customary events of default that include, among other things, certain payment defaults, cross defaults to other indebtedness, covenant defaults, change in control defaults, judgment defaults, and bankruptcy and insolvency defaults. If an event of default exists, the lenders may require immediate payment of all obligations under the June 23, 2021 Credit Agreement and may exercise certain other rights and remedies provided for under the June 23, 2021 Credit Agreement, the other loan documents and applicable law.

The debt is carried at its principal amount, net of unamortized debt discount and issuance costs, and is not adjusted to fair value each period. The issuance date fair value of the liability component of the debt in the amount of $350.2 million was determined using a discounted cash flow analysis, in which the projected interest and principal payments were discounted back to the issuance date of the term loan at a market interest rate for nonconvertible debt of 3.4%, which represents a Level 2 fair value measurement. The debt discount of $6.9 million and debt issuance costs of $2.9 million associated with the Initial Term Loan under the June 23, 2021 Credit Agreement are being amortized to interest expense using the effective interest method over
its seven-year term. Debt issuance costs of $0.4 million associated with the Revolving Facility are being amortized to interest expense over its five-year term.

9. Stock-Based Compensation

Common Stock

Each share of common stock is entitled to one vote per share and holders of the common stock vote as a single class of stock on any matter that is submitted to a vote of stockholders.

Employee Stock-Based Compensation Plans

At December 31, 2022, the Company had stock-based compensation awards outstanding under the following plans: the 2010 Equity Incentive Plan, as amended, or 2010 Plan, and the 2010 Employee Stock Purchase Plan, or ESPP.

2010 Equity Incentive Plan

The 2010 Plan, as amended, provides for the grant of incentive stock options, non-statutory stock options, restricted stock awards, restricted stock unit awards, stock appreciation rights, performance-based stock awards, and other forms of equity compensation, or collectively, stock awards. The number of shares of common stock reserved for issuance will automatically increase on the first day of each fiscal year, equal to the lesser of: 2,583,311 shares of the Company’s common stock; four percent (4%) of the outstanding shares of the Company’s common stock on the last day of the immediately preceding fiscal year; or such lesser amount as the Company’s board of directors may determine. Options granted will generally vest over a period of four years and the term can be from seven to ten years. The plan expires in August 2026, unless terminated earlier by action of the board of directors.

The 2010 plan, as amended, contains a clawback policy, which requires the Company’s executive officers to repay to MaxLinear certain incentive compensation if (i) the Company restates its financial statements as a result of a material error or due to material non-compliance with reporting requirements under applicable law; (ii) no more than three (3) years have elapsed since the original filing date of the financial statements; and (iii) an independent committee of the board’s compensation committee determines, in its sole discretion, that the misreporting event occurred due to fraud or intentional misconduct within MaxLinear and, following consideration of such factors as the committee may deem reasonable and appropriate, including the extent to which an executive officer knew or should have known of the factors resulting in the misreporting, that the executive officer should repay any “recoverable compensation.” Recoverable compensation is defined in the clawback policy but generally includes any cash or equity compensation paid to executive officers under the Company’s Executive Incentive Bonus Plan or 2010 Equity Incentive Plan, as amended, to the extent the amount actually paid by MaxLinear exceeds the amount that would have been paid if the financial misreporting event had not occurred. To date, there has been no repayment of compensation from executive officers pursuant to such clawback policy.

As of December 31, 2022, the number of shares of common stock available for future issuance under the 2010 Plan was 5,302,296 shares.

2010 Employee Stock Purchase Plan

The ESPP authorizes the issuance of shares of the Company’s common stock pursuant to purchase rights granted to the Company’s employees. The number of shares of the Company’s common stock reserved for issuance will automatically increase on the first day of each fiscal year, equal to the least of: 968,741 shares of the Company’s common stock; one and a quarter percent (1.25%) of the outstanding shares of the Company’s common stock on the first day of the fiscal year; or such lesser amount as may be determined by the Company’s board of directors or a committee appointed by the Company’s board of directors to administer the ESPP. The ESPP is implemented through a series of offerings of purchase rights to eligible employees. Under the ESPP, the Company may specify offerings with a duration of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of the Company’s common stock will be purchased for employees participating in the offering. An offering may be terminated under certain circumstances. Generally, all eligible employees, including executive officers, employed by the Company may participate in the ESPP and may contribute up to 15% of their earnings for the purchase of the Company’s common stock under the ESPP. Unless otherwise determined by the Company’s board of directors, common stock will be purchased for accounts of employees participating in the ESPP at a price per share equal to the lower of (a) 85% of the fair market value of a share of the Company’s common stock on the first date of an offering or (b) 85% of the fair market value of a share of the Company’s
common stock on the date of purchase. As of December 31, 2022, the number of shares of common stock available for future issuance under the ESPP was 921,614 shares.

**Employee Incentive Bonus**

The Company’s Executive Incentive Bonus Plan permits the settlement of awards under the plan in any combination of cash or shares of its common stock. The Company settles a majority of bonus awards for its employees, including executives, in shares of common stock under the 2010 Equity Incentive Plan. When bonus awards are settled in common stock issued under the 2010 Equity Incentive Plan, the number of shares issuable to plan participants is determined based on the closing price of the Company’s common stock as determined in trading on the applicable stock exchange on a date approved by the Board of Directors. In connection with the Company’s bonus programs, in February 2022 and February 2021, the Company issued 0.5 million and 0.5 million freely-tradable shares, respectively, of the Company’s common stock in settlement of bonus awards to employees, including executives, for the 2021 and 2020 performance periods. At December 31, 2022, the Company has an accrual of $42.6 million for bonus awards for employees for achievement in the 2022 performance period, which the Company intends to settle primarily in shares of its common stock, unless otherwise required to be settled in cash due to local laws or agreements. The Company’s compensation committee retains discretion to effect payment in cash, stock, or a combination of cash and stock.

**Stock-Based Compensation**

The Company recognizes stock-based compensation in the consolidated statements of operations, based on the department to which the related employee reports, as follows:

<table>
<thead>
<tr>
<th></th>
<th>2022 (in thousands)</th>
<th>2021 (in thousands)</th>
<th>2020 (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of net revenue</td>
<td>$734</td>
<td>$620</td>
<td>$577</td>
</tr>
<tr>
<td>Research and development</td>
<td>40,635</td>
<td>30,364</td>
<td>22,252</td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>40,335</td>
<td>28,374</td>
<td>24,172</td>
</tr>
<tr>
<td>Restructuring expense</td>
<td>—</td>
<td>—</td>
<td>596</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$81,704</strong></td>
<td><strong>$59,358</strong></td>
<td><strong>$47,597</strong></td>
</tr>
</tbody>
</table>

The total unrecognized compensation cost related to unvested restricted stock units as of December 31, 2022 was $37.0 million, and the weighted average period over which these equity awards are expected to vest is 2.55 years. The total unrecognized compensation cost related to unvested performance-based restricted stock units as of December 31, 2022 was $23.1 million, and the weighted average period over which these equity awards are expected to vest is 0.82 years. There was no unrecognized compensation cost related to unvested stock options as of December 31, 2022.

**Restricted Stock Units**

A summary of the Company’s restricted stock unit activity is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Number of Shares (in thousands)</th>
<th>Weighted-Average Grant-Date Fair Value per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding at December 31, 2021</td>
<td>5,233</td>
<td>25.14</td>
</tr>
<tr>
<td>Granted</td>
<td>3,516</td>
<td>49.64</td>
</tr>
<tr>
<td>Vested</td>
<td>(2,183)</td>
<td>35.20</td>
</tr>
<tr>
<td>Canceled</td>
<td>(486)</td>
<td>33.81</td>
</tr>
<tr>
<td>Outstanding at December 31, 2022</td>
<td>6,080</td>
<td>35.01</td>
</tr>
</tbody>
</table>

**Performance-Based Restricted Stock Units**

Performance-based restricted stock units are eligible to vest at the end of each period in a three-year performance period based on the Company’s annual growth rate in net sales and non-GAAP diluted earnings per share (subject to certain adjustments) over baseline results relative to the growth rates for a peer group of companies for the same metrics and periods.
For the performance-based restricted stock units granted to date, 60% of each performance-based award is subject to the net sales metric for the performance period and 40% is subject to the non-GAAP diluted earnings per share metric for the performance period. The maximum percentage for a particular metric is 250% of the target number of units subject to the award related to that metric, however, vesting of the performance stock units is capped at 30% and 100%, respectively, of the target number of units subject to the award in years one and two, respectively, of the three-year performance period.

As of December 31, 2022, the Company believes that it is probable that it will achieve certain performance metrics specified in the respective award agreements based on its expected revenue and non-GAAP diluted EPS results over the performance periods and calculated growth rates relative to its peers’ expected results based on data available, as defined in the respective award agreements.

A summary of the Company’s performance-based restricted stock unit activity is as follows:

<table>
<thead>
<tr>
<th>Number of Shares (in thousands)</th>
<th>Weighted-Average Grant-Date Fair Value per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding at December 31, 2021</td>
<td>2,005 $19.80</td>
</tr>
<tr>
<td>Granted(1)</td>
<td>654 $60.53</td>
</tr>
<tr>
<td>Vested</td>
<td>(701) $17.85</td>
</tr>
<tr>
<td>Canceled</td>
<td>(8) $40.51</td>
</tr>
<tr>
<td>Outstanding at December 31, 2022</td>
<td>1,950 $34.07</td>
</tr>
</tbody>
</table>

(1) Number of shares granted is based on the maximum percentage achievable in the performance-based restricted stock unit award.

**Employee Stock Purchase Rights and Stock Options**

**Employee Stock Purchase Rights**

During the year ended December 31, 2022, there were 139,758 shares of common stock purchased under the ESPP at a weighted average price of $33.52. During the year ended December 31, 2021, there were 195,752 shares of common stock purchased under the ESPP at a weighted average price of $25.53.

The fair values of employee stock purchase rights were estimated using the Black-Scholes option pricing model at their respective grant date using the following assumptions:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted-average grant date fair value per share</td>
<td>$11.97 - 14.25</td>
<td>$10.85 - 18.82</td>
<td>$6.41 - 8.66</td>
</tr>
<tr>
<td>Risk-free interest rate</td>
<td>1.54 - 4.54%</td>
<td>0.04 - 0.06%</td>
<td>0.12% - 0.15%</td>
</tr>
<tr>
<td>Dividend yield</td>
<td>—%</td>
<td>—%</td>
<td>—%</td>
</tr>
<tr>
<td>Expected life (in years)</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>Volatility</td>
<td>59.78% - 69.74%</td>
<td>43.83% - 61.1%</td>
<td>59.72% - 93.25%</td>
</tr>
</tbody>
</table>

The risk-free interest rate assumption was based on rates for United States (U.S.) Treasury zero-coupon bonds with maturities similar to those of the expected term of the award being valued. The assumed dividend yield was based on the Company’s expectation of not paying dividends in the foreseeable future. The expected term is the duration of the offering period for each grant date. In addition, the estimated volatility incorporates the historical volatility over the expected term based on the Company’s daily closing stock prices.
Stock Options

A summary of the Company’s stock options activity is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Number of Options (in thousands)</th>
<th>Weighted-Average Exercise Price</th>
<th>Weighted-Average Contractual Term (in years)</th>
<th>Aggregate Intrinsic Value (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding at Dec 31, 2021</td>
<td>417</td>
<td>$17.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercised</td>
<td>(24)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstanding at Dec 31, 2022</td>
<td>393</td>
<td>$17.22</td>
<td>2.43</td>
<td>$6,564</td>
</tr>
<tr>
<td>Vested and expected to vest at Dec 31, 2022</td>
<td>393</td>
<td>$17.22</td>
<td>2.43</td>
<td>$6,564</td>
</tr>
<tr>
<td>Exercisable at Dec 31, 2022</td>
<td>393</td>
<td>$17.22</td>
<td>2.43</td>
<td>$6,564</td>
</tr>
</tbody>
</table>

No stock options were granted by the Company during the years ended December 31, 2022 and 2021.

The intrinsic value of stock options exercised during 2022, 2021, and 2020 was $0.9 million, $9.8 million, and $4.9 million, respectively. Cash received from exercise of stock options was $0.3 million, $4.2 million and $4.4 million during the years ended December 31, 2022, 2021, and 2020, respectively. The tax benefit from stock options exercised was $1.20 million, $14.4 million and $5.2 million during the years ended December 31, 2022, 2021, and 2020, respectively.

10. Income Taxes

The domestic and international components of income (loss) before income taxes are presented as follows:

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31, 2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>$19,228</td>
<td>$31,975</td>
<td>$(112,778)</td>
</tr>
<tr>
<td>Foreign</td>
<td>154,970</td>
<td>79,845</td>
<td>$(2,074)</td>
</tr>
<tr>
<td>Income (loss) before income taxes</td>
<td>$174,198</td>
<td>$47,870</td>
<td>$(114,852)</td>
</tr>
</tbody>
</table>

The income tax provision (benefit) consists of the following:

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31, 2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>$12,002</td>
<td>$498</td>
<td>$(176)</td>
</tr>
<tr>
<td>State</td>
<td>237</td>
<td>84</td>
<td>12</td>
</tr>
<tr>
<td>Foreign</td>
<td>13,432</td>
<td>7,630</td>
<td>2,687</td>
</tr>
<tr>
<td>Total current</td>
<td>25,671</td>
<td>8,212</td>
<td>2,523</td>
</tr>
<tr>
<td>Deferred:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>32,317</td>
<td>5,108</td>
<td>(18,595)</td>
</tr>
<tr>
<td>State</td>
<td>(3,686)</td>
<td>(4,506)</td>
<td>(705)</td>
</tr>
<tr>
<td>Foreign</td>
<td>(3,490)</td>
<td>484</td>
<td>8,025</td>
</tr>
<tr>
<td>Change in valuation allowance</td>
<td>(1,654)</td>
<td>(3,397)</td>
<td>(7,507)</td>
</tr>
<tr>
<td>Total deferred</td>
<td>23,487</td>
<td>(2,311)</td>
<td>(18,782)</td>
</tr>
<tr>
<td>Total income tax provision (benefit)</td>
<td>$49,158</td>
<td>$5,901</td>
<td>$(16,259)</td>
</tr>
</tbody>
</table>

106
The actual income tax provision (benefit) differs from the amount computed using the federal statutory rate as follows:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in thousands)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision (benefit) at statutory rate</td>
<td>$36,582</td>
<td>$10,071</td>
<td>$(24,119)</td>
</tr>
<tr>
<td>State income taxes (net of federal benefit)</td>
<td>187</td>
<td>62</td>
<td>9</td>
</tr>
<tr>
<td>Research and development credits</td>
<td>(10,146)</td>
<td>(10,441)</td>
<td>(6,521)</td>
</tr>
<tr>
<td>Foreign rate differential</td>
<td>(21,629)</td>
<td>(10,063)</td>
<td>2,354</td>
</tr>
<tr>
<td>Stock compensation</td>
<td>6,186</td>
<td>4,029</td>
<td>5,425</td>
</tr>
<tr>
<td>Foreign income inclusion</td>
<td>27,971</td>
<td>14,119</td>
<td>1,446</td>
</tr>
<tr>
<td>Provision to return</td>
<td>6,236</td>
<td>(263)</td>
<td>(286)</td>
</tr>
<tr>
<td>Uncertain tax positions</td>
<td>2,551</td>
<td>1,072</td>
<td>222</td>
</tr>
<tr>
<td>Permanent and other</td>
<td>1,101</td>
<td>726</td>
<td>131</td>
</tr>
<tr>
<td>Foreign unremittted earnings</td>
<td>(490)</td>
<td>(59)</td>
<td>(233)</td>
</tr>
<tr>
<td>Transaction costs</td>
<td>5</td>
<td>45</td>
<td>883</td>
</tr>
<tr>
<td>Foreign tax credits</td>
<td>2,224</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Attribute expirations</td>
<td>34</td>
<td>—</td>
<td>11,937</td>
</tr>
<tr>
<td>Valuation allowance</td>
<td>(1,654)</td>
<td>(3,397)</td>
<td>(7,507)</td>
</tr>
<tr>
<td>Total income tax provision (benefit)</td>
<td>$49,158</td>
<td>$5,901</td>
<td>$(16,259)</td>
</tr>
</tbody>
</table>

The components of the deferred income tax assets are as follows:

<table>
<thead>
<tr>
<th>December 31,</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in thousands)</td>
<td></td>
</tr>
<tr>
<td>Deferred tax assets:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net operating loss carryforwards</td>
<td>$30,225</td>
<td>$46,062</td>
</tr>
<tr>
<td>Research and development credits</td>
<td>73,965</td>
<td>88,778</td>
</tr>
<tr>
<td>Foreign tax credits</td>
<td>—</td>
<td>7,695</td>
</tr>
<tr>
<td>Accrued expenses and other</td>
<td>10,271</td>
<td>2,748</td>
</tr>
<tr>
<td>Lease obligation</td>
<td>1,961</td>
<td>1,041</td>
</tr>
<tr>
<td>Accrued compensation</td>
<td>6,919</td>
<td>5,057</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>9,976</td>
<td>8,014</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>5,582</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>138,899</td>
<td>159,395</td>
</tr>
<tr>
<td>Less valuation allowance</td>
<td>(66,273)</td>
<td>(68,151)</td>
</tr>
<tr>
<td></td>
<td>72,626</td>
<td>91,244</td>
</tr>
<tr>
<td>Deferred tax liabilities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed assets</td>
<td>(4,350)</td>
<td>(701)</td>
</tr>
<tr>
<td>Leased right-of-use assets</td>
<td>(1,784)</td>
<td>(735)</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>—</td>
<td>(640)</td>
</tr>
<tr>
<td>Pension liability</td>
<td>(1,569)</td>
<td>(792)</td>
</tr>
<tr>
<td>Net deferred tax assets</td>
<td>$64,923</td>
<td>$88,376</td>
</tr>
</tbody>
</table>

At December 31, 2022, the Company had federal, state and foreign tax net operating loss carryforwards of approximately $15.7 million, $72.5 million and $0, respectively. The federal and state tax loss carryforwards will begin to expire in 2025 and 2030, and foreign tax loss will not expire, unless previously utilized.
At December 31, 2022, the Company had federal, state and foreign tax credit carryforwards of approximately $30.6 million, $100.7 million and $1.5 million, respectively. The federal, state and foreign tax credit carryforwards will begin to expire in 2023, 2030 and 2029, respectively, unless previously utilized. The Company also has foreign incentive deductions of approximately $7.4 million that do not expire.

The Company utilizes the asset and liability method of accounting for income taxes, under which deferred taxes are determined based on temporary differences between the financial statement and tax basis of assets and liabilities using tax rates expected to be in effect during the years in which the temporary differences reverse. The Company records a valuation allowance to reduce its deferred taxes to the amount it believes is more likely than not to be realized. In making such determination, the Company considers all available positive and negative evidence quarterly, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies, and recent financial performance. Forming a conclusion that a valuation allowance is not required is difficult when there is negative evidence such as cumulative losses in recent years. Based upon the Company’s review of all positive and negative evidence, the Company continues to have a valuation allowance on its state deferred tax assets, certain of its federal deferred tax assets, and certain foreign deferred tax assets in jurisdictions where the Company has cumulative losses or otherwise is not expected to utilize certain tax attributes. The Company does not incur expense or benefit in certain tax-free jurisdictions in which it operates.

The Company recorded an income tax provision of $49.2 million in the year ended December 31, 2022 and an income tax provision of $5.9 million in the year ended December 31, 2021.

The difference between the Company’s effective tax rate and the 21.0% United States federal statutory rate for the year ended December 31, 2022 resulted primarily from a mix of pre-tax income among jurisdictions, permanent tax items including a tax on global intangible low-taxed income, stock based compensation, excess tax benefits related to stock-based compensation, release of uncertain tax positions under ASC 740-10, and release of the valuation allowance on certain federal research and development credits. The permanent tax item related to global intangible low-taxed income also reflects recent legislative changes requiring the capitalization of research and experimentation costs, as well as limitations on the creditability of certain foreign income taxes.

The difference between the Company’s effective tax rate and the 21.0% United States federal statutory rate for the year ended December 31, 2022 resulted primarily from a tax on global intangible low-taxed income, or GILTI, and non-deductible foreign stock-based compensation, offset by a benefit related to research and development tax credits, foreign earnings taxed at rates other than the federal statutory rate and the effect of a release of valuation allowance against certain Singapore deferred tax assets pertaining to usage of net operating losses.

Income tax positions must meet a more-likely-than-not threshold to be recognized. Income tax positions that previously failed to meet the more-likely-than-not threshold are recognized in the first subsequent financial reporting period in which that threshold is met. Previously recognized tax positions that no longer meet the more-likely-than-not threshold are de-recognized in the first financial reporting period in which that threshold is no longer met. The Company records potential penalties and interest accrued related to unrecognized tax benefits within the consolidated statements of operations as income tax expense.

During the year ended December 31, 2022, the Company’s unrecognized tax benefits increased by $4.4 million. At December 31, 2022, the Company’s unrecognized tax benefits totaled $67.1 million, $57.2 million of which, if recognized at a time when the valuation allowance no longer exists, would affect the effective tax rate. The unrecognized tax benefits are not expected to materially change in next 12 months. At December 31, 2022, the Company had accrued approximately $0.4 million of interest and penalties. The total amounts of interest and penalties recognized for the years ended December 31, 2022, 2021 and 2020 were not material.
The following table summarizes the changes to the unrecognized tax benefits during 2022, 2021 and 2020:

<table>
<thead>
<tr>
<th>Year</th>
<th>(in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as of December 31, 2019</td>
<td>62,027</td>
</tr>
<tr>
<td>Additions based on tax positions related to the current year</td>
<td>1,506</td>
</tr>
<tr>
<td>Additions related to acquisitions</td>
<td>1,154</td>
</tr>
<tr>
<td>Decreases based on tax positions of prior year</td>
<td>(922)</td>
</tr>
<tr>
<td><strong>Balance as of December 31, 2020</strong></td>
<td><strong>63,765</strong></td>
</tr>
<tr>
<td>Additions based on tax positions related to the current year</td>
<td>3,366</td>
</tr>
<tr>
<td>Additions related to acquisitions</td>
<td>241</td>
</tr>
<tr>
<td>Decreases based on tax positions of prior year</td>
<td>(1,688)</td>
</tr>
<tr>
<td><strong>Balance as of December 31, 2021</strong></td>
<td><strong>65,684</strong></td>
</tr>
<tr>
<td>Additions based on tax positions related to the current year</td>
<td>3,431</td>
</tr>
<tr>
<td>Decreases based on tax positions of prior year</td>
<td>(1,981)</td>
</tr>
<tr>
<td><strong>Balance as of December 31, 2022</strong></td>
<td><strong>$ 67,134</strong></td>
</tr>
</tbody>
</table>

The Company is subject to federal and state income tax in the United States and is also subject to income tax in certain other foreign tax jurisdictions. At December 31, 2022, the statutes of limitations for the assessment of federal, state, and foreign income taxes are closed for the years before 2019, 2018, and 2017, respectively.

The Company’s subsidiary in Singapore operates under certain tax incentives in Singapore, which are generally effective through March 2027, and are conditional upon meeting certain employment and investment thresholds in Singapore. Under the incentives, qualifying income derived from certain sales of the Company’s integrated circuits is taxed at a concessional rate over the incentive period, and there are reduced Singapore withholding taxes on certain intercompany royalties during the incentive period. The Company recorded a tax provision in the year ended December 31, 2022 at the incentive rate. Due to the valuation allowance release in 2021 and the Company’s use of loss carry forwards, the Company recorded a tax benefit in the year ended December 31, 2021 at the incentive rate, net of any expected tax payable. Without the incentive rate, deferred taxes and the valuation allowance release would have provided an overall tax benefit, net of any current period payable.

On August 9, 2022, the CHIPS and Science Act of 2022, or the CHIPS Act, was enacted in the United States. The CHIPS Act will provide financial incentives to the semiconductor industry which are primarily directed at manufacturing activities within the United States for qualifying property placed in service after December 31, 2022. As the Company currently outsources its manufacturing, the CHIPS Act is not expected to have a material impact to the Company’s consolidated tax provision for the year ending December 31, 2023.

The Inflation Reduction Act of 2022, or IRA, was signed into law on August 16, 2022. The bill was meant to address the high inflation rate in the United States through various climate, energy, healthcare, and other incentives. These incentives are meant to be paid for by the tax provisions included in the IRA, such as a new 15 percent corporate minimum tax, a 1 percent new excise tax on stock buybacks, additional IRS funding to improve taxpayer compliance, and others. The IRA provisions are effective for tax years beginning after December 31, 2022. At this time, none of the IRA tax provisions are expected to have a material impact to the Company’s consolidated tax provision for the year ending December 31, 2023.

The Company will continue to monitor updates to our business along with guidance issued with respect to both Acts to determine whether any adjustments are needed to its consolidated tax provision in future periods.

11. Concentration of Credit Risk, Significant Customers and Geographic Information

Concentration of Credit Risk

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist primarily of cash and cash equivalents and accounts receivable. Collateral is generally not required for customer receivables. The Company limits its exposure to credit loss by placing its cash with high credit quality financial institutions. At times, such deposits may be in excess of insured limits. The Company has not experienced any losses on its deposits of cash and cash equivalents.
**Significant Customers**

The Company markets its products and services to manufacturers of a wide range of electronic devices (Note 1). The Company sells its products both directly to customers and through third-party distributors, and also tracks sales to the ultimate end customer (Note 12). The Company makes periodic evaluations of the credit worthiness of its customers.

End customers comprising greater than 10% of net revenues for each of the periods presented are as follows:

<table>
<thead>
<tr>
<th>Percentage of total net revenue</th>
<th>Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
</tr>
<tr>
<td>Customer A</td>
<td>21 %</td>
</tr>
<tr>
<td>Customer B</td>
<td>10 %</td>
</tr>
</tbody>
</table>

The following table presents balances that are 10% or greater of accounts receivable, based on the Company’s billings to its customers.

<table>
<thead>
<tr>
<th>Percentage of gross accounts receivable</th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer B</td>
<td>*</td>
<td>14 %</td>
</tr>
<tr>
<td>Customer C</td>
<td>11 %</td>
<td>*</td>
</tr>
<tr>
<td>Customer D</td>
<td>*</td>
<td>17 %</td>
</tr>
<tr>
<td>Customer E</td>
<td>28 %</td>
<td>*</td>
</tr>
<tr>
<td>Customer F</td>
<td>12 %</td>
<td>*</td>
</tr>
</tbody>
</table>

* Represents less than 10% of the gross accounts receivable as of the respective period end.

**Significant Suppliers**

Suppliers comprising greater than 10% of total inventory purchases are as follows:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
</tr>
<tr>
<td>Vendor A</td>
</tr>
<tr>
<td>Vendor B</td>
</tr>
<tr>
<td>Vendor C</td>
</tr>
<tr>
<td>Vendor D</td>
</tr>
</tbody>
</table>

* Represents less than 10% of the inventory purchases for the respective period.
Geographic Information

The Company’s consolidated net revenues by geographic area based on ship-to location are as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>% of total net revenue</th>
<th>2021</th>
<th>% of total net revenue</th>
<th>2020</th>
<th>% of total net revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>$915,024</td>
<td>82%</td>
<td>$736,808</td>
<td>83%</td>
<td>$393,579</td>
<td>82%</td>
</tr>
<tr>
<td>United States</td>
<td>40,077</td>
<td>3%</td>
<td>35,978</td>
<td>4%</td>
<td>15,501</td>
<td>3%</td>
</tr>
<tr>
<td>Rest of world</td>
<td>165,151</td>
<td>15%</td>
<td>119,612</td>
<td>13%</td>
<td>69,516</td>
<td>15%</td>
</tr>
<tr>
<td>Total</td>
<td>$1,120,252</td>
<td>100%</td>
<td>$892,398</td>
<td>100%</td>
<td>$478,596</td>
<td>100%</td>
</tr>
</tbody>
</table>

The products shipped to individual countries or territories representing greater than 10% of net revenue for each of the periods presented are as follows:

<table>
<thead>
<tr>
<th>Country</th>
<th>2022</th>
<th>% of total net revenue</th>
<th>2021</th>
<th>% of total net revenue</th>
<th>2020</th>
<th>% of total net revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong</td>
<td>43%</td>
<td></td>
<td>40%</td>
<td></td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>16%</td>
<td></td>
<td>12%</td>
<td></td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Vietnam</td>
<td>*</td>
<td></td>
<td>13%</td>
<td></td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

* Represents less than 10% of total revenue for the respective period.

The determination of which country a particular sale is allocated to is based on the destination of the product shipment. No other individual country accounted for more than 10% of net revenue during these periods. Although a large percentage of the Company’s products is shipped to Asia, and in particular, Hong Kong, China and Vietnam, the Company believes that a significant number of the systems designed by customers and incorporating the Company’s semiconductor products are subsequently sold outside Asia to Europe, Middle East, and Africa, or EMEA markets and North American markets.

Long-lived assets, which consists of property and equipment, net, leased right-of-use assets, intangible assets, net, and goodwill by geographic area are as follows (in thousands):

<table>
<thead>
<tr>
<th>Country</th>
<th>December 31, 2022</th>
<th>% of total</th>
<th>December 31, 2021</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>$368,882</td>
<td>70%</td>
<td>$382,650</td>
<td>70%</td>
</tr>
<tr>
<td>Singapore</td>
<td>109,613</td>
<td>21%</td>
<td>122,474</td>
<td>22%</td>
</tr>
<tr>
<td>Rest of world</td>
<td>45,093</td>
<td>9%</td>
<td>42,277</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>$523,588</td>
<td>100%</td>
<td>$547,401</td>
<td>100%</td>
</tr>
</tbody>
</table>
12. Revenue from Contracts with Customers

Revenue by Market

The table below presents disaggregated net revenues by market (in thousands):

<table>
<thead>
<tr>
<th>Market</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadband</td>
<td>$493,232</td>
<td>$492,482</td>
<td>$244,424</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>44%</td>
<td>55%</td>
<td>51%</td>
</tr>
<tr>
<td>Connectivity</td>
<td>303,925</td>
<td>149,285</td>
<td>70,739</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>27%</td>
<td>17%</td>
<td>15%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>136,274</td>
<td>119,421</td>
<td>76,166</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>12%</td>
<td>13%</td>
<td>16%</td>
</tr>
<tr>
<td>Industrial and multi-market</td>
<td>186,821</td>
<td>131,210</td>
<td>87,267</td>
</tr>
<tr>
<td>% of net revenue</td>
<td>17%</td>
<td>15%</td>
<td>18%</td>
</tr>
<tr>
<td>Total net revenue</td>
<td>$1,120,252</td>
<td>$892,398</td>
<td>$478,596</td>
</tr>
</tbody>
</table>

Revenues from sales through the Company’s distributors accounted for 46%, 47% and 49% of net revenue for the years ended December 31, 2022, 2021, and 2020, respectively.

Contract Liabilities

As of December 31, 2022, customer contract liabilities were approximately $1.1 million and $1.0 million, respectively, and consisted primarily of advanced payments received for which performance obligations have not been completed. Revenue recognized in each of the years ended December 31, 2022, 2021, and 2020 that was included in the contract liability balance as of the beginning of each of those respective periods was immaterial.

There were no material changes in the contract liabilities balance during the years ended December 31, 2022, 2021, and 2020, respectively.

Obligations to Customers for Price Adjustments and Returns and Assets for Right-of-Returns

As of December 31, 2022 and December 31, 2021, obligations to customers consisting of estimates of price protection rights offered to the Company’s end customers totaled $113.3 million and $40.5 million, respectively, and are included in accrued price protection liability in the consolidated balance sheets. For activity in this account, including amounts included in net revenue, refer to Note 7. Other obligations to customers representing estimates of price adjustments to be claimed by distributors upon sell-through of their inventory to their end customers and estimates of stock rotation returns to be claimed by distributors on products sold as of December 31, 2022 were $52.4 million and $0.6 million, respectively, and as of December 31, 2021 were $6.7 million and $2.8 million, respectively, and are included in accrued expenses and other current liabilities in the consolidated balance sheets (Note 7). The increase or decrease in revenue in the years ended December 31, 2022, 2021, and 2020 from net changes in transaction prices for amounts included in obligations to customers for price adjustments as of the beginning of those respective periods was not material.

As of December 31, 2022 and December 31, 2021, right of return assets under customer contracts representing the estimates of product inventory the Company expects to receive from customers in stock rotation returns were approximately $0.2 million and $1.1 million, respectively. Right of return assets are included in inventory in the consolidated balance sheets.

As of December 31, 2022 and December 31, 2021, there were no impairment losses recorded on customer accounts receivable.
13. Leases

Operating Leases

Operating lease arrangements primarily consist of office leases expiring in various years through 2028. These leases have original terms of approximately 2 to 8 years and some contain options to extend the lease up to 5 years or terminate the lease, which are included in right-of-use assets and lease liabilities when the Company is reasonably certain it will renew the underlying leases. Since the implicit rate of such leases is unknown and the Company is not reasonably certain to renew its leases, the Company has elected to apply a collateralized incremental borrowing rate to facility leases on the original lease term in calculating the present value of future lease payments. As of December 31, 2022 and December 31, 2021, the weighted average discount rate for operating leases was 3.4% and 3.6%, respectively, and the weighted average remaining lease term for operating leases was 3.9 years and 4.6 years, respectively, as of the end of each of these periods.

The table below presents aggregate future minimum payments due under leases, reconciled to total lease liabilities included in the consolidated balance sheet as of December 31, 2022:

<table>
<thead>
<tr>
<th></th>
<th>Operating Leases (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>$11,445</td>
</tr>
<tr>
<td>2024</td>
<td>8,184</td>
</tr>
<tr>
<td>2025</td>
<td>7,277</td>
</tr>
<tr>
<td>2026</td>
<td>5,184</td>
</tr>
<tr>
<td>2027</td>
<td>3,511</td>
</tr>
<tr>
<td>Thereafter</td>
<td>577</td>
</tr>
<tr>
<td>Total minimum payments</td>
<td>36,178</td>
</tr>
<tr>
<td>Less: imputed interest</td>
<td>(2,336)</td>
</tr>
<tr>
<td>Total lease liabilities</td>
<td>33,842</td>
</tr>
<tr>
<td>Less: short-term lease liabilities</td>
<td>(10,489)</td>
</tr>
<tr>
<td>Long-term lease liabilities</td>
<td>$23,353</td>
</tr>
</tbody>
</table>

Operating lease cost was $10.4 million, $9.4 million, and $5.2 million for the years ended December 31, 2022, 2021, and 2020, respectively.

Short-term lease costs for each of the years ended December 31, 2022, 2021, and 2020, respectively, were not material. There were $2.0 million, $13.2 million, and $15.9 million of right-of-use assets obtained in exchange for new lease liabilities for the years ended December 31, 2022, 2021, and 2020, respectively, including $0.05 million and $1.8 million from acquisitions in 2021 and 2020, respectively.

14. Employee Retirement Plans

Defined Contribution Plan

The Company has a 401(k) defined contribution retirement plan (the 401(k) Plan) covering all eligible employees. Participants may voluntarily contribute on a pre-tax basis an amount not to exceed a maximum contribution amount pursuant to Section 401(k) of the Internal Revenue Code. The Company is not required to contribute, nor has it contributed, to the 401(k) Plan for any of the periods presented.

Pension and Other Defined Benefit Retirement Obligations

The Company maintains certain defined benefit retirement plans, including a pension plan, in foreign jurisdictions. As of December 31, 2022 and December 31, 2021, the defined benefit obligation was $1.7 million and $4.5 million, respectively. The benefit is based on a formula applied to eligible employee earnings. Net periodic benefit costs were $0.3 million, $0.5 million, and $0.2 million respectively for the years ended December 31, 2022, 2021, and 2020 respectively, and were recorded to research and development expenses in the consolidated statements of operations.
Benefit Obligation and Plan Assets for Pension Benefit Plans

The vested benefit obligation for a defined-benefit pension or other retirement plan is the actuarial present value of the vested benefits to which the employee is currently entitled based on the employee’s expected date of separation or retirement.

### Changes in projected benefit obligation:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022 (in thousands)</th>
<th>December 31, 2021 (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected benefit obligation,</td>
<td>$9,733</td>
<td>$12,022</td>
</tr>
<tr>
<td>beginning of period</td>
<td>289</td>
<td>442</td>
</tr>
<tr>
<td>Service cost</td>
<td>79</td>
<td>66</td>
</tr>
<tr>
<td>Actuarial (gain) loss</td>
<td>(2,817)</td>
<td>(1,794)</td>
</tr>
<tr>
<td>Benefits paid</td>
<td>(124)</td>
<td>(157)</td>
</tr>
<tr>
<td>Currency exchange rate changes</td>
<td>(587)</td>
<td>(845)</td>
</tr>
<tr>
<td><strong>Projected benefit obligation,</strong></td>
<td><strong>6,573</strong></td>
<td><strong>9,733</strong></td>
</tr>
<tr>
<td><strong>end of period</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Changes in fair value of plan assets:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022 (in thousands)</th>
<th>December 31, 2021 (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of plan assets,</td>
<td>5,198</td>
<td>5,634</td>
</tr>
<tr>
<td>beginning of period</td>
<td>(24)</td>
<td>2</td>
</tr>
<tr>
<td>Actual return on plan assets</td>
<td>(279)</td>
<td>(439)</td>
</tr>
<tr>
<td><strong>Fair value of plan assets,</strong></td>
<td><strong>4,895</strong></td>
<td><strong>5,198</strong></td>
</tr>
<tr>
<td><strong>end of period</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Net unfunded status

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022 (in thousands)</th>
<th>December 31, 2021 (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued other comprehensive (income) loss, before tax</td>
<td>$1,678</td>
<td>$4,536</td>
</tr>
</tbody>
</table>

### Amounts recognized in the Consolidated Balance Sheets

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022 (in thousands)</th>
<th>December 31, 2021 (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other long-term liabilities</td>
<td>$1,678</td>
<td>$4,536</td>
</tr>
<tr>
<td>Accumulated other comprehensive (income) loss, before tax</td>
<td>$(2,837)</td>
<td>$(1,724)</td>
</tr>
</tbody>
</table>

Changes in actuarial gains and losses in the projected benefit obligation are primarily driven by discount rate movement. The Company uses the corridor approach to amortize actuarial gains and losses. Under this approach, net actuarial gains or losses in excess of 10% of the larger of the projected benefit obligation or the fair value of plan assets are amortized on a straight-line basis.

As of December 31, 2022 and December 31, 2021, all plans had accumulated benefit obligations and projected benefit obligations in excess of plan assets. As of December 31, 2022 and December 31, 2021, the accumulated benefit obligations were $6.3 million and $9.2 million for the pension plans.
## Plans with accumulated benefit obligation in excess of plan assets

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated benefit obligation</td>
<td>$6,258</td>
<td>$9,211</td>
</tr>
<tr>
<td>Plan assets</td>
<td>$4,895</td>
<td>$5,198</td>
</tr>
</tbody>
</table>

## Plans with projected benefit obligation in excess of plan assets

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected benefit obligation</td>
<td>$6,573</td>
<td>$9,733</td>
</tr>
<tr>
<td>Plan assets</td>
<td>$4,895</td>
<td>$5,198</td>
</tr>
</tbody>
</table>

## Assumptions for Pension Benefit Plans

### Weighted average actuarial assumptions used to determine benefit obligations

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount rate</td>
<td>3.5% - 3.9%</td>
<td>0.8% - 0.9%</td>
</tr>
<tr>
<td>Rate of compensation increase</td>
<td>3.0% - 3.8%</td>
<td>2.6% - 3.8%</td>
</tr>
</tbody>
</table>

### Weighted average actuarial assumptions used to determine costs

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount rate</td>
<td>3.5% - 3.9%</td>
<td>0.8% - 0.9%</td>
</tr>
<tr>
<td>Expected long-term rate of return on plan assets</td>
<td>— %</td>
<td>— %</td>
</tr>
<tr>
<td>Rate of compensation increase</td>
<td>3.0% - 3.8%</td>
<td>2.6% - 3.8%</td>
</tr>
</tbody>
</table>

The Company establishes the discount rate for each pension plan by analyzing current market long-term bond rates and matching the bond maturity with the average duration of the pension liabilities. The Company establishes the long-term expected rate of return by developing a forward-looking, long-term return assumption for each pension fund asset class, taking into account factors such as the expected real return for the specific asset class and inflation. A single, long-term rate of return is then calculated as the weighted average of the target asset allocation percentages and the long-term return assumption for each asset class.

### Pension Plan Assets

The plan assets are currently all in liquid cash and cash equivalents and an investment strategy is being developed to ensure that sufficient assets are available to pay pension benefits as they come due.

### Estimated Future Benefit Payments for Pension Benefit Plans

At December 31, 2022, the estimated benefit payments over the next five years and beyond are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Estimated Future Benefit Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in thousands)</td>
</tr>
<tr>
<td>2023</td>
<td>$123</td>
</tr>
<tr>
<td>2024</td>
<td>$143</td>
</tr>
<tr>
<td>2025</td>
<td>$180</td>
</tr>
<tr>
<td>2026</td>
<td>$185</td>
</tr>
<tr>
<td>2027</td>
<td>$185</td>
</tr>
<tr>
<td>Thereafter</td>
<td>$346</td>
</tr>
<tr>
<td></td>
<td>Total: $1,162</td>
</tr>
</tbody>
</table>
15. Commitments and Contingencies

Inventory Purchase and Other Contractual Obligations

As of December 31, 2022, future minimum payments under inventory purchase and other obligations are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Inventory Purchase Obligations</th>
<th>Other Obligations</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>$132,635</td>
<td>$20,820</td>
<td>$153,455</td>
</tr>
<tr>
<td>2024</td>
<td>137</td>
<td>8,921</td>
<td>9,058</td>
</tr>
<tr>
<td>2025</td>
<td>—</td>
<td>179</td>
<td>179</td>
</tr>
<tr>
<td></td>
<td>Total minimum payments</td>
<td></td>
<td>$162,692</td>
</tr>
</tbody>
</table>

Other obligations consist of contractual payments due for software licenses.

Jointly Funded Research and Development

From time to time, the Company enters into contracts for jointly funded research and development projects to develop technology that may be commercialized into a product in the future. As the Company may be required to repay all or a portion of the funds provided by the other parties under certain conditions, total funds received to date from the other parties of $8.0 million have been recorded in other long-term liabilities as of December 31, 2022. Additional amounts under the contracts are tied to certain milestones and will also be recorded as a long-term liability as payment due under such milestones are received. The Company de-recognizes the liabilities when the contingencies associated with the repayment conditions have been resolved.

During the years ended December 31, 2022 and 2021, the Company recognized $3.8 million and $0, respectively, in previously deferred amounts from other parties due to resolution of such repayment conditions.

Bell Semiconductor Litigation

On August 11, 2022, Bell Semiconductor LLC filed suit against MaxLinear in the Southern District of California alleging infringement of U.S. Patent Nos. 6,436,807 and 7,007,259. MaxLinear answered the complaint on January 26, 2023 and the case is presently early in the fact discovery phase. The case is tentatively scheduled for trial in February 2024.

On August 26, 2022, Bell Semiconductor LLC filed suit against MaxLinear in the Southern District of California alleging infringement of U.S. Patent Nos. 7,149,989 and 7,260,803. MaxLinear answered the complaint on January 26, 2023 and the case is presently early in the fact discovery phase. The case is tentatively scheduled for trial in February 2024.

On October 7, 2022 Bell Semiconductor LLC filed suit against MaxLinear in the Southern District of California alleging infringement of U.S. Patent No. 7,396,760. This action has been stayed pending a parallel ITC investigation involving the same patent.

Specifically, on October 13, 2023, Bell Semiconductor also filed suit against MaxLinear before the U.S. International Trade Commission alleging infringement of U.S. Patent No. 7,396,760. This was instituted by the Commission as Investigation No. 337-TA-1342 on November 23, 2022. A schedule was set by the administrative law judge and key deadlines include a close of fact discovery on May 1, 2023, a close of expert discovery June 5, 2023, and an evidentiary hearing beginning on August 7, 2023. An initial determination is expected from the judge on November 21, 2023, with a final determination from the Commission by March 21, 2024.

Other Matters

From time to time, the Company is subject to threats of litigation or actual litigation in the ordinary course of business as described in "Item 3 — Legal Proceedings," some of which may be material. The results of any litigation cannot be predicted with certainty, and regardless of the outcome, litigation can have a material adverse impact on the Company because of defense and settlement costs, diversion of management resources, and other factors. However, as of December 31, 2022, no loss contingencies have been accrued for these matters in the Company’s financial statements.
16. Stock Repurchases

On February 23, 2021, the Company’s board of directors authorized a plan to repurchase up to $100 million of the Company’s common stock over a period ending February 16, 2024. The amount and timing of repurchases are subject to a variety of factors including liquidity, share price, market conditions, and legal requirements. Any purchases will be funded from available working capital and may be effected through open market purchases, block transactions, and privately negotiated transactions. The share repurchase program does not obligate the Company to make any repurchases and may be modified, suspended, or terminated by the Company at any time without prior notice. The share repurchase program has been temporarily suspended since July 2022 due to the Company’s pending merger with Silicon Motion.

During the year ended December 31, 2022, the Company repurchased 564,449 shares of its common stock at a weighted average price of $55.7972 per share at an aggregate value of approximately $31.5 million under the repurchase program. During the year ended December 31, 2021, the Company repurchased 454,372 shares of its common stock at a weighted average price of $51.7998 per share at an aggregate value of approximately $23.5 million under the repurchase program.

As of December 31, 2022, the aggregate value of common stock repurchased under the program was approximately $55.0 million and approximately $45.0 million remained available for repurchase under the program.

17. Subsequent Event

Acquisition of Company Y

On January 17, 2023, the Company completed its acquisition of a business, or Company Y, pursuant to a Purchase and Sale Agreement, or the Purchase Agreement. The initial closing transaction consideration consisted of $9.9 million in cash. In addition, their stockholders may receive up to an additional $2.6 million in potential contingent consideration, subject to the acquired business satisfying certain personnel objectives by June 17, 2023.

Company Y is headquartered in Bangalore, India and operates as a provider of engineering design services.
MaxLinear, Inc.
5966 La Place Court, Suite 100
Carlsbad, California 92008

Attention: Steven G. Litchfield, Chief Financial Officer and Chief Corporate Strategy Officer

Ladies and Gentlemen:

MaxLinear, Inc. ("you" or the “Borrower”) has advised Wells Fargo Bank, N.A. ("WF Bank"), Wells Fargo Securities, LLC ("WF Securities"), Bank of Montreal ("BOM"), BMO Capital Markets Corp. ("BMOCM" and together with BOM, "BMO"), Citizens Bank, N.A. ("Citizens"), Truist Bank ("Truist Bank"), and Truist Securities, Inc. ("Truist Securities" and together with WF Bank, WF Securities, BMO, Citizens and Truist Bank, and, together with any Additional Pro Rata Lenders joined in accordance with the terms hereof, the “Commitment Parties”; “we” or “us”) that you intend to acquire (the “Acquisition”) an entity identified to us as “Shark” (the “Target”; the Target collectively with its subsidiaries, the “Acquired Business”). The Acquisition will be effected by way of a merger of a newly-formed exempted company with limited liability incorporated under the Law of the Cayman Islands wholly-owned by the Borrower (“Merger Sub”) with and into the Target, with the Target continuing as your direct wholly owned subsidiary (the date of consummation of the Acquisition, the “Acquisition Closing Date”). The consideration for the Acquisition shall be comprised of (i) the issuance by the Borrower of shares of its common stock (the “Equity Consideration”) and (ii) cash (the “Cash Consideration”). The Borrower, the Acquired Business and their respective subsidiaries are sometimes collectively referred to herein as the “Companies”. This Second Amended and Restated Commitment Letter (together with any exhibits, annexes or joinders hereto, this “Commitment Letter”) hereby amends and restates in its entirety that certain First Amended and Restated Commitment Letter (the “First Amended and Restated Commitment Letter”), dated as of June 17, 2022 (the “First A&R Date”) and that certain Commitment Letter (the “Original Commitment Letter”), dated as of May 5, 2022 (the “Original Signing Date”), by and among WF Bank, WF Securities and you and such First Amended and Restated Commitment Letter and Original Commitment Letter shall be of no further force and effect (other than sections 4, 6 and 8 thereof). It is understood and agreed that the Lead Arrangers (as defined below) shall be entitled to the benefits of the indemnification, expense reimbursement and confidentiality provisions of this Commitment Letter (including as they relate to the Original Fee Letter (as defined below)) as if they were in effect on the Original Signing Date.
You have also advised us that in connection with the Acquisition you intend to obtain senior secured credit facilities comprised of (i) a senior secured term B loan facility in an aggregate principal amount of $2,737.5 million (the “Term B Loan Facility”), (ii) a senior secured term A loan facility in an aggregate principal amount of $512.5 million (the “Term A Loan Facility” and together with the Term B Loan Facility, the “Term Facilities”), and (iii) a senior secured revolving credit facility in an aggregate principal amount of $250 million (the “Revolving Credit Facility” and, together with the Term Facilities, the “Senior Secured Credit Facilities”). The Acquisition, the Refinancing (as defined in Annex II), the funding of the Term B Loan Facility, the funding of the Term A Loan Facility, the effectiveness of the Revolving Credit Facility and all related transactions (including the payment of fees and expenses in connection therewith) are hereinafter collectively referred to as the “Transactions”. The date of the consummation of the Acquisition and initial funding of the Senior Secured Credit Facilities is referred to herein as the “Closing Date”.

1. Commitments. In connection with the foregoing, (a) each of WF Bank, BOM, Citizens and Truist Bank is pleased to advise you of its several, and not joint, commitment to provide (i) the principal amount of the Term B Loan Facility set forth opposite its name on the Commitments Schedule attached hereto (as such Commitments Schedule may be updated from time to time in connection with any Additional Pro Rata Lender Joinder, so long as the aggregate commitments in respect of the Senior Secured Credit Facilities, taken collectively, are not reduced below $3,500 million and the aggregate commitments in respect of the Term A Loan Facility and the Term B Loan Facility, taken collectively, are not reduced below $3,250 million) (the “Commitments Schedule”), (ii) the principal amount of the Term A Loan Facility set forth opposite its name on the Commitments Schedule attached hereto and (iii) the principal amount of the Revolving Credit Facility set forth opposite its name on the Commitments Schedule attached hereto (each in such capacity, and, together with any Additional Pro Rata Lenders joined pursuant to the first proviso of the next succeeding paragraph, the “Initial Lenders”), subject only to the conditions set forth in paragraph 5 hereto; and (b) WF Securities, BMOCM, Citizens and Truist Securities is pleased to advise you of its willingness, and you hereby engage WF Securities, BMOCM, Citizens and Truist Securities to act as joint lead arrangers and bookrunning managers (each in such capacity, and together with any additional arrangers appointed pursuant to the last proviso of the next succeeding paragraph, the “Lead Arrangers”) for the Senior Secured Credit Facilities, and in connection therewith to form a syndicate of lenders for the Senior Secured Credit Facilities (collectively, the “Lenders”), in consultation with you and reasonably acceptable to you. It is understood and agreed that (x) WF Securities shall have “top left” placement in any listing of the Lead Arrangers and (y) WF Bank shall act as administrative agent for the Senior Secured Credit Facilities (in such capacity, the “Administrative Agent”). Notwithstanding anything to the contrary contained herein, the commitments of the Initial Lenders with respect to the initial funding of the Senior Secured Credit Facilities will be subject only to the satisfaction (or waiver by the Lead Arrangers) of the conditions precedent set forth in paragraph 5 hereof. All capitalized terms used and not otherwise defined herein shall have the same meanings as specified therefor in Annex I (the “Summary of Terms”).

You agree that no other agents, co-agents, arrangers or bookrunners will be appointed, no other titles will be awarded and no compensation (other than compensation expressly contemplated by this Commitment Letter and the Fee Letter referred to below) will be paid to any Lender expressly in order to obtain its commitment to participate in any of the Senior Secured Credit Facilities unless you and we shall so agree; provided that the Commitment Parties and the Borrower hereby agree that, in connection with the ongoing syndication of the Pro Rata Facilities (the “Continuing Pro Rata Syndication”), this Commitment Letter may be amended after the date hereof (which amendment may take the form of customary joinder documentation satisfactory to WF Bank and the Borrower (such amendment or joinder, a “Additional Pro Rata Lender Joinder”)) with only the consent of WF Bank and the Borrower to reflect the commitments to the Senior Secured Credit Facilities of any additional Lender added in connection with the Revolving Credit Facility and/or the Term A Loan Facility in the Continuing Pro Rata Syndication (each such additional Lender, an “Additional Pro Rata Lender”); provided further that, the
commitments in respect of the Term B Loan Facility (and, to the extent agreed by the Commitment Parties as of the date hereof, the Revolving Credit Facility) of each of WF Bank and each of the other Initial Lenders (other than Additional Pro Rata Lenders) that consents to participate in connection with the joinder of such Additional Pro Rata Lender (it being understood that each of the Commitment Parties have consented to the allocations as separately agreed in writing by each of the Commitment Parties as of the date hereof) shall be reduced on a dollar for dollar basis by the commitments of the Additional Pro Rata Lenders, with such reduction applied on a ratable basis except that such reduction may be non-ratable to the extent necessary to reflect the allocations as separately agreed in writing by each of the Commitment Parties as of the date hereof; provided that, absent the consent of the Initial Lenders as of the effective date of the First Amended and Restated Commitment Letter, in no event shall the proportional economics (i.e. calculated as a percentage of its commitments in respect of the Senior Secured Credit Facilities) payable to any Additional Pro Rata Lender exceed the proportional economics payable to any Initial Lender party hereto on the date hereof in respect of the Pro Rata Facilities; provided, further, that any such Additional Pro Rata Lender may be appointed as a joint lead arranger, joint bookrunning manager, arranger, bookrunner, or other similar titles in connection with the Pro Rata Facilities if agreed by WF Bank and the Borrower.

2. **Syndication.** The Lead Arrangers intend to commence syndication of the Senior Secured Credit Facilities promptly after your acceptance of the terms of this Commitment Letter and the Fee Letter; provided that the Initial Lenders will not syndicate to (i) those persons identified by you by name in writing to us prior to the Original Signing Date or (ii) competitors of the Borrower, any of its subsidiaries or the Acquired Business that are identified by you by name in writing prior to the Original Signing Date (such persons, together with any person that is clearly identifiable as an affiliate of such person on the basis of its name, collectively, the “Disqualified Institutions”); provided, further, that the Borrower, upon reasonable written notice to the Lead Arranger after the Original Signing Date (or, after the Closing Date, the applicable Administrative Agent), shall be permitted to supplement in writing the list of persons that are Disqualified Institutions to the extent such supplemented person is or becomes a bona fide competitor of the Borrower, its subsidiaries and/or the Acquired Business; provided however, that such supplementation shall not apply retroactively to disqualify any parties that have previously acquired an assignment or participation interest in any loans under the Facilities; and provided, further, that a competitor or an affiliate of a competitor shall not include any bona fide debt fund or investment vehicle (other than a person which is excluded pursuant to clause (i) above). Without limiting your obligations to assist with syndication efforts as set forth herein, it is understood that the Initial Lenders’ commitments hereunder are not conditioned upon the syndication of, or receipt of commitments or participations in respect of, the Senior Secured Credit Facilities and in no event shall the commencement or successful completion of syndication of the Senior Secured Credit Facilities constitute a condition to the availability of the Senior Secured Credit Facilities on the Closing Date. You agree, until the Syndication Date (as hereinafter defined), to actively assist, and, to the extent provided for in the Acquisition Agreement, to use your commercially reasonable efforts to cause the Acquired Business to actively assist the Lead Arrangers in achieving a syndication of the Senior Secured Credit Facilities that is reasonably satisfactory to the Lead Arrangers and you; provided that, notwithstanding the Lead Arrangers’ right to syndicate the Senior Secured Credit Facilities and receive commitments with respect thereto, it is agreed that (i) syndication of, or receipt of commitments or participations in respect of, all or any portion of an Initial Lender’s commitments hereunder prior to the date of the consummation of the Acquisition and the date of the initial funding under the Senior Secured Credit Facilities shall not be a condition to such Initial Lender’s commitments and (ii) except as you in your sole discretion may otherwise agree in writing, the Initial Lenders shall not be relieved, released or novated from its obligations hereunder (including its obligation to fund the Senior Secured Credit Facilities on the Closing Date) in connection with any syndication, assignment or participation of the Senior Secured Credit Facilities, including its commitments in respect thereof, until after the initial funding of the Senior Secured Credit Facilities has occurred; (b) no assignment or novation shall become effective with respect to all or any portion of the Initial Lenders’ commitments in respect of the Senior Secured Credit Facilities
until after the initial funding of the Senior Secured Credit Facilities; and (c) the Initial Lenders shall retain exclusive control over all rights and
obligations with respect to its commitments in respect of the Senior Secured Credit Facilities, including all rights with respect to consents, modifications,
supplements, waivers and amendments, until the Closing Date has occurred and the initial funding under the Senior Secured Credit Facilities has been
made. Such assistance shall include (a) your providing and (subject to customary non-reliance agreements) using commercially reasonable efforts to
cause your advisors to provide, and, to the extent provided for in the Acquisition Agreement, using your commercially reasonable efforts to cause the
Acquired Business, its subsidiaries and its advisors to provide, the Lead Arrangers upon request with all customary and reasonably available information
reasonably deemed necessary by the Lead Arrangers to complete such syndication, including, but not limited to (x) customary and reasonably available
information relating to the Transactions as may be reasonably requested by us (including the Projections (as hereinafter defined)) and (y) customary
forecasts prepared by management of the Borrower of balance sheets, income statements and cash flow statements for each fiscal quarter for the first
twelve months following the Closing Date and for each year commencing with the first fiscal year following the Closing Date and for each of the
succeeding fiscal years thereafter through the fiscal year ended December 31, 2026; (b) your assistance in the preparation of a customary information
memorandum with respect to the Senior Secured Credit Facilities (an “Information Memorandum”) and other customary materials to be used in
connection with the syndication of the Senior Secured Credit Facilities (collectively with the Summary of Terms and any additional summary of terms
prepared for distribution to Lenders, the “Information Materials”); (c) your using commercially reasonable efforts to ensure that the syndication efforts
of the Lead Arrangers benefit from your existing lending relationships, if any, and, to the extent provided for in the Acquisition Agreement, the existing
banking relationships of the Acquired Business; (d) your using commercially reasonable efforts to obtain, prior to the launch of syndication of the Senior
Secured Credit Facilities, monitored public corporate credit or family ratings (but not any specific rating) for you after giving effect to the Transactions
and ratings of the Term B Loan Facility from Moody’s Investors Service, Inc. (“Moody’s”) and Standard & Poor’s Ratings Group, a Standard & Poor’s
Financial Services LLC business (“S&P”) (collectively, the “Ratings”); (e) until the later of the Syndication Date and the Closing Date, your ensuring,
and with respect to the Acquired Business, using your commercially reasonable efforts to ensure, to the extent not in contravention of the Acquisition
Agreement, that none of the Companies shall syndicate or issue, attempt to syndicate or issue, or announce or authorize the announcement of the
syndication or issuance of, any debt securities or credit facilities of the Companies (other than the Senior Secured Credit Facilities), in each case, that
would materially and adversely affect the primary syndication of the Senior Secured Credit Facilities without the prior written consent (not to be
unreasonably withheld) of the Lead Arrangers (it being understood that any debt incurred in the ordinary course of business, including corporate credit
cards, borrowings under ordinary course short term working capital facilities and ordinary course capital lease, intercompany indebtedness, purchase
money and equipment financings of any of the Companies, other indebtedness of the Acquired Business permitted to be outstanding or issued under the
Acquisition Agreement shall be permitted, and other indebtedness that has been consented to by the Lead Arrangers); and (f) your making appropriate
officers of you, and, to the extent provided for in the Acquisition Agreement, using your commercially reasonable efforts to make the appropriate
officers of the Acquired Business, available from time to time upon reasonable advance notice to attend and make presentations regarding the business
and prospects of the Companies and the Transactions at a reasonable number of meetings of prospective Lenders at mutually agreed upon times and
locations. Notwithstanding anything to the contrary contained in this Commitment Letter, the First Amended and Restated Commitment Letter, the
Original Commitment Letter, the Fee Letter, the First Amended and Restated Fee Letter or the Original Fee Letter, or any other letter agreement or
undertaking concerning the financing of the Transactions to the contrary, (i) neither the obtaining of the Ratings referenced above nor the compliance
with any of the other provisions set forth in clauses (a) through (f) above or any other provision of this paragraph shall constitute a condition to the
commitments hereunder or the funding of the Senior Secured Credit Facilities on the Closing Date and (ii) the only projections or pro forma or other
financial statements that shall be required to be provided to the Lead Arrangers in connection with the syndication of the Senior Secured
Credit Facilities shall be those required to be delivered pursuant to clause (v) of Annex II hereto. Your obligations under the Commitment Letter and Fee Letter to use commercially reasonable efforts to cause the Acquired Business or its management to take (or to refrain from taking) any action will not require you to take any action that is in contravention of, or terminate, the terms of the Acquisition Agreement.

It is understood and agreed that the Lead Arrangers will manage and control all aspects of the syndication of the Senior Secured Credit Facilities in consultation with you, including any titles offered to prospective Lenders (subject to your consent rights set forth herein and your rights of appointment set forth in Section 1), when commitments will be accepted, the final allocations of the commitments among the Lenders and the amount and distribution of the fees among the Lenders. It is further understood that the Initial Lenders’ commitments hereunder are not conditioned upon the syndication of, or receipt of commitments in respect of, the Senior Secured Credit Facilities and in no event shall the commencement or successful completion of syndication of the Senior Secured Credit Facilities constitute a condition to the availability of the Senior Secured Credit Facilities on the Closing Date.

3. **Information Requirements.** You hereby represent and warrant that (a) all written factual information (other than Projections (as defined below), budgets, estimates and other forward-looking information or information of a general economic or industry nature) that has been or is hereafter made available to the Lead Arrangers or any of the Lenders by or on behalf of you or any of your representatives in connection with any aspect of the Transactions (including, prior to the Closing Date, such information, to your knowledge, relating to the Acquired Business) (the “Information”), together with your filings with the Securities and Exchange Commission, is and will be correct when taken as a whole, in all material respects, and does not and will not, taken as a whole, contain any untrue statement of a fact or omit to state a fact necessary to make the statements contained therein, in the light of the circumstances under which they were made, not materially misleading (in each case, after giving effect to all supplements and updates with respect thereto) and (b) all financial projections concerning the Companies that have been or are hereafter made available to the Lead Arrangers or any of the Lenders by or on behalf of you or any of your representatives (the “Projections”) (prior to the Closing Date, to your knowledge, in the case of Projections provided by the Acquired Business) have been or will be prepared in good faith based upon assumptions believed by you to be reasonable at the time provided (it being understood and agreed that the Projections are as to future events and are not to be viewed as facts or a guarantee of performance or achievement, that the Projections are subject to significant uncertainties and contingencies, many of which are beyond your control, that no assurance can be given that any particular Projections will be realized and that actual results may differ from the Projections and such differences may be material). You agree that if at any time prior to the later of (a) the earlier of (i) the date on which a Successful Syndication (as defined in the Fee Letter) is achieved and (ii) 45 days following the Closing Date (the earlier of such dates, the “Syndication Date”) and (b) the Closing Date, you become aware that any of the representations in the preceding sentence would be incorrect in any material respect if the Information and Projections were being furnished, and such representations were being made, at such time, then you will promptly supplement, or cause to be supplemented (or in the case of Information or Projections relating to the Acquired Business, you will promptly notify the Lead Arrangers upon becoming aware that any such Information or Projections are incorrect in any material respect and, to the extent provided for in the Acquisition Agreement, will use commercially reasonable efforts to supplement), the Information and Projections so that such representations (prior to the Closing Date, to your knowledge, in the case of the Acquired Business) will be correct in all material respects at such time, it being understood in each case that such supplementation shall cure any breach of such representation and warranty. In issuing this commitment and in arranging and syndicating the Senior Secured Credit Facilities, each Commitment Party is and will be using and relying on the Information and the Projections without independent verification thereof. For the avoidance of doubt, nothing in this paragraph (including the making or supplementing of any representations or warranties, Information or Projections) will constitute a condition to the availability of the Senior Secured Credit Facilities on the Closing Date.
You acknowledge that (a) the Lead Arrangers, on your behalf will make available, on a confidential basis, Information Materials to the proposed syndicate of Lenders by posting the Information Materials on IntraLinks or another similar electronic system (the “Platform”) and (b) certain prospective Lenders (such Lenders, “Public Lenders”; all other Lenders, “Private Lenders”) may have personnel that do not wish to receive material non-public information (within the meaning of the United States federal and state securities laws, “MNPI”) with respect to the Companies, their respective affiliates or any other entity, or the respective securities of any of the foregoing, and who may be engaged in investment and other market-related activities with respect to such entities’ securities. If reasonably requested, you will assist the Lead Arrangers in preparing an additional version of the Information Materials not containing MNPI (the “Public Information Materials”) to be distributed to prospective Public Lenders.

Before distribution of any Information Materials (provided that such materials have been provided to you and your counsel for review a reasonable period of time prior thereto and appropriate revisions thereto have been made at your request) (a) to prospective Private Lenders, you shall provide the Lead Arrangers with a customary letter authorizing the dissemination of the Information Materials; and (b) to prospective Public Lenders, you shall provide the Lead Arrangers with a customary letter authorizing the dissemination of the Public Information Materials and confirming the absence of MNPI therefrom and, in each case, which exculpate the Companies and us and our affiliates with respect to any liability related to the use of the contents of the Information Materials or related marketing materials by the recipients thereof. In addition, you hereby agree that (x) you will use commercially reasonable efforts to identify (and, at the reasonable request of the Lead Arrangers or the Administrative Agent (or its affiliates), shall identify) that portion of the Information Materials that may be distributed to the Public Lenders; (y) all Information Materials identified as “PUBLIC” by you or on your behalf are permitted to be made available through a portion of the Platform designated “Public Investor”; and (z) the Lead Arrangers and the Administrative Agent (and its affiliates) shall be entitled to treat any Information Materials that are not identified as “PUBLIC” as being suitable only for posting on a portion of the Platform not designated “Public Investor”.

You agree that, subject to the confidentiality and other provisions of this Commitment Letter, the Lead Arrangers and the Administrative Agent (and its affiliates) on your behalf may distribute the following documents to all prospective Lenders, unless you advise the Lead Arrangers and the Administrative Agent in writing (including by email) within a reasonable time prior to their intended distributions that such material should only be distributed to prospective Private Lenders (provided that such materials have been provided to you and your counsel for review a reasonable period of time prior thereto): (a) administrative materials for prospective Lenders such as lender meeting invitations and funding and closing memoranda, (b) notifications of changes to the terms of the Senior Secured Credit Facilities and (c) drafts approved in writing by you and the Administrative Agent (or its affiliates) and final versions of definitive documents with respect to the Senior Secured Credit Facilities. If you advise the Lead Arrangers and the Administrative Agent that any of the foregoing items should be distributed only to Private Lenders, then the Lead Arrangers and the Administrative Agent will not distribute such materials to Public Lenders without your prior consent. You agree that Information Materials made available to prospective Public Lenders in accordance with this Commitment Letter shall not contain MNPI.

4. Fees; Indemnities; Limitation of Liability.

(a) You agree to reimburse the Commitment Parties from time to time upon receipt of a reasonably detailed invoice therefor for all reasonable and documented out-of-pocket fees and expenses (in the case of fees and expenses of counsel, limited to the reasonable and documented out-of-pocket expenses of (x) one firm of lead counsel to the Commitment Parties (it being understood and agreed that Cahill Gordon & Reindel LLP shall act as counsel to the Commitment Parties) and (y) one firm of local counsel in each relevant jurisdiction reasonably retained by the Administrative Agent) incurred in connection with the Senior Secured Credit Facilities, the
syndication thereof, the preparation of the Credit Documentation (as defined below) therefor and the other Transactions contemplated hereby, whether or not the Closing Date occurs or any of the Credit Documentation is executed and delivered or any extensions of credit are made under the Senior Secured Credit Facilities; provided, that if the Closing Date does not occur and no termination fee is paid to you pursuant to the Acquisition Agreement, the aggregate reimbursement by you of such fees and expenses shall not exceed $250,000. Such amounts shall be paid on the earlier of (i) the Closing Date or (ii) three (3) business days following the termination of this Commitment Letter as provided below (the “Payment Date”), in each case to the extent you have received a reasonably detailed invoice at least three (3) business days in advance of the Payment Date. You agree to pay (or cause to be paid) the fees set forth in the separate second amended and restated fee letter addressed to you dated the date hereof from the Commitment Parties (the “Fee Letter”), which amends and restates in its entirety that certain First Amended and Restated Fee Letter (the “First Amended and Restated Fee Letter”), dated as of the First A&R Date, and that certain Original Fee Letter (the “Original Fee Letter”), dated as of the Original Signing Date, by and among WF Bank, WF Securities and you, if and to the extent payable.

(b) You also agree to indemnify and hold harmless each of the Commitment Parties, each other Lender and each of their affiliates, successors and assigns and their respective partners, officers, directors, employees, trustees, agents, advisors, controlling persons and other representatives involved in the Transactions (each, an “Indemnified Party”) from and against (and will reimburse each Indemnified Party within 30 days following written demand (accompanied by reasonable back-up therefor)) any and all claims, damages, losses, liabilities and reasonable and documented out-of-pocket expenses (including, without limitation, the reasonable and documented fees, disbursements and other charges of one firm of counsel for all such Indemnified Parties, taken as a whole and, if necessary, by a single firm of local counsel in each appropriate jurisdiction (which may include a single firm of special counsel acting in multiple jurisdictions) for all such Indemnified Parties, taken as a whole (and, in the case of a conflict of interest where the Indemnified Party affected by such conflict notifies you of the existence of such conflict and thereafter retains its own counsel, by another firm of counsel for each group of similarly affected Indemnified Parties)) of amounts payable by you pursuant to clause (a) above that may be incurred by or asserted or awarded against any Indemnified Party, in each case arising out of or in connection with or by reason of (including, without limitation, in connection with any investigation, litigation or proceeding or preparation of a defense in connection therewith) (a) any aspect of the Transactions or (b) the Senior Secured Credit Facilities, or any use made or proposed to be made with the proceeds thereof, in each case, except to the extent such claim, damage, loss, liability or expense (A) is found in a final non-appealable judgment by a court of competent jurisdiction to have resulted from such Indemnified Party’s or any of its Related Parties’ gross negligence, bad faith or willful misconduct, (B) is found in a final non-appealable judgment by a court of competent jurisdiction to have resulted from a material breach of such Indemnified Party’s or any of its Related Parties’ obligations hereunder, under the First Amended and Restated Commitment Letter or under the Original Commitment Letter, (C) arises from a proceeding by an Indemnified Party against an Indemnified Party (or any of their respective affiliates or related parties) (other than an action involving (i) conduct by you or any of your affiliates or (ii) against an arranger or administrative agent in its capacity as such) or (D) resulted from any agreement governing any settlement by such Indemnified Party that is effective without your prior written consent (which consent shall not be unreasonably withheld). In the case of any claim, litigation, investigation or proceeding (any of the foregoing, a “Proceeding”) to which the indemnity in this paragraph applies, such indemnity shall be effective whether or not such Proceeding is brought by you, your equity holders or creditors or an Indemnified Party, whether or not an Indemnified Party is otherwise a party thereto and whether or not any aspect of the Transactions are consummated. It is agreed that none of you (or any of your subsidiaries), the Target (or any of its subsidiaries) or any Indemnified Party shall be liable (other than in respect of any such damages incurred or paid by an Indemnified Party to a third party) for any indirect, special, punitive or consequential damages (including, without limitation, any loss of profits, business or anticipated savings) in connection with this Commitment Letter, the First Amended and Restated Commitment Letter, the Original Commitment Letter, the Fee Letter, the First Amended and
Restated Fee Letter, the Original Fee Letter or with respect to any activities related to the Senior Secured Credit Facilities, including the preparation of
this Commitment Letter, the First Amended and Restated Commitment Letter, the Original Commitment Letter, the Fee Letter, the First Amended and
Restated Fee Letter, the Original Fee Letter and the Credit Documentation; provided that nothing in this sentence shall limit your indemnification
obligations set forth above.

(c) It is further agreed that the Commitment Parties shall only have liability to you (as opposed to any other person), and that the
Commitment Parties shall be severally liable solely in respect of their respective commitments to the Senior Secured Credit Facilities and agreements set
forth herein, on a several, and not joint, basis with any other Lender. Notwithstanding any other provision of this Commitment Letter, the First Amended
and Restated Commitment Letter or the Original Commitment Letter, no Indemnified Party shall be liable for any damages arising from the use by
others of information or other materials obtained through electronic telecommunications or other information transmission systems, other than for direct,
actual damages resulting from the gross negligence, bad faith or willful misconduct of such Indemnified Party or any of its Related Parties as determined
by a final non-appealable judgment of a court of competent jurisdiction. You shall not, without the prior written consent of an Indemnified Party, such
consent not to be unreasonably withheld or delayed, effect any settlement of any pending or threatened Proceeding against an Indemnified Party in
respect of which indemnity could have been sought hereunder, under the First Amended and Restated Commitment Letter or under the Original
Commitment Letter by such Indemnified Party unless (i) such settlement includes an unconditional release of such Indemnified Party from all liability or
claims that are the subject matter of such Proceeding and (ii) does not include any statement as to any admission of liability. In case any Proceeding is
instituted involving any Indemnified Party for which indemnification is to be sought hereunder, under the First Amended and Restated Commitment
Letter or under the Original Commitment Letter by such Indemnified Party, then such Indemnified Party will promptly notify you of the commencement
of any Proceedings. You shall not be liable for any settlement of any Proceeding affected without your written consent (which consent shall not be
unreasonably withheld, conditioned or delayed).

(d) “Related Parties” means, with respect to the any Commitment Party, such Commitment Party’s affiliates and their respective officers,
directors, employees, advisors, agents and representatives, in each case, providing services in connection with the subject matter of this Commitment
Letter, the First Amended and Restated Commitment Letter or the Original Commitment Letter. The foregoing provisions in paragraphs 4(b) and (c)
shall be superseded in each case, to the extent covered thereby, by the applicable provisions contained in the Credit Documentation upon execution
thereof and thereafter shall have no further force and effect.

5. Conditions to Financing. The commitments of the Initial Lenders with respect to the initial funding of the Senior Secured
Credit Facilities is subject solely to (a) the satisfaction (or waiver by the Lead Arrangers) of each of the conditions set forth in Annex II hereto and (b)
the execution and delivery of customary definitive credit documentation by the Borrower and the Guarantors with respect to the Senior Secured Credit
Facilities consistent with this Commitment Letter and the Fee Letter and subject in all respects to the Limited Conditionality Provisions and giving effect
to the Bank Documentation Standard (as defined in Annex I), in the case of the Senior Secured Credit Facilities (the “Credit Documentation”) prior to
such initial funding. There are no conditions (implied or otherwise) to the commitments hereunder, and there will be no conditions (implied or
otherwise) under the Credit Documentation to the initial funding of the Senior Secured Credit Facilities on the Closing Date, other than those that are
expressly referred to in the immediately preceding sentence.

Notwithstanding anything in this Commitment Letter, the First Amended and Restated Commitment Letter, the Original Commitment Letter, the
Fee Letter, the First Amended and Restated Fee Letter, the Original Fee Letter, the Credit Documentation or any other letter agreement or other
undertaking concerning the financing of the Transactions to the contrary, (a) the Credit Documentation
shall be in a form such that the terms thereof do not impair availability of the Senior Secured Credit Facilities on the Closing Date if the conditions in this paragraph 5 shall have been satisfied or waived by the Lead Arrangers (it being understood that to the extent any security interest in Collateral (including the creation or perfection of any security interest) (other than any Collateral the security interest in which may be perfected by the filing of a UCC financing statement or the delivery of certificates, if any, evidencing equity interests of any subsidiary Guarantors (after giving effect to the Acquisition) that is part of the Collateral; provided that stock or membership interest certificates for certificated stock for the entities comprising subsidiaries of the Target (to the extent required under the terms of Annex II hereto) will, to the extent you have used commercially reasonable efforts to obtain them, only be required to be delivered on the Closing Date to the extent received from the holders thereof prior to the Closing Date)) is not perfected or provided on the Closing Date after your use of commercially reasonable efforts to do so without undue burden or expense, the provision and perfection of such Collateral and security interest shall not constitute a condition precedent to the availability of the Senior Secured Credit Facilities on the Closing Date but shall be required to be perfected not later than 90 days (subject to extensions as may be agreed to by the Administrative Agent) after the Closing Date pursuant to arrangements to be mutually agreed by the Borrower and Administrative Agent), and (b) the only representations and warranties the accuracy of which shall be a condition to the availability of the Senior Secured Credit Facilities on the Closing Date shall be (x) such of the representations made by the Target in the Acquisition Agreement as are material to the interests of the Lenders, but only to the extent that you (or any of your affiliates that is a party to the Acquisition Agreement) have the right (taking into account any applicable notice and cure provisions) to terminate your (and/or its) obligations under the Acquisition Agreement pursuant to Section 7.1(g) of the Acquisition Agreement or decline to consummate the Acquisition pursuant to Section 6.3(a) of the Acquisition Agreement as a result of a breach of such representations in the Acquisition Agreement (to such extent, the “Acquisition Agreement Representations”) and (y) the Specified Representations (as defined below). “Specified Representations” shall mean the representations and warranties of the Borrower and Guarantors (after giving effect to the Acquisition) in the Credit Documentation relating to: (i) (A) corporate existence of the Borrower and the Guarantors and (B) corporate power and authority to enter into the Credit Documentation by the Borrower and the Guarantors, (ii) due authorization, execution, delivery and enforceability of the Credit Documentation by the Borrower and the Guarantors, (iii) no conflicts of the Credit Documentation with charter documents of the Borrower and the Guarantors, (iv) compliance with Federal Reserve margin regulations, the PATRIOT Act and the use of proceeds of the Senior Secured Credit Facilities not violating OFAC, AML and FCPA, (v) the Investment Company Act, (vi) solvency of the Borrower and its subsidiaries on a consolidated basis and on a pro forma basis for the Transactions (such representations to be substantially identical to those set forth in the Solvency Certificate attached as Annex III to this Commitment Letter (the “Solvency Certificate”)), and (vii) subject to the limitations set forth in this paragraph, the provision of guarantees and the creation, validity and perfection of the security interests granted in the Collateral. The provisions of this paragraph are referred to herein as the “Limited Conditionality Provisions”.

Each of the parties hereto agrees that each of this Commitment Letter and the Fee Letter is a binding and enforceable agreement (subject to the effects of bankruptcy, insolvency, fraudulent conveyance, reorganization and other similar laws relating to or affecting creditors’ rights generally and general principles of equity (whether considered in a proceeding in equity or law)) with respect to the subject matter contained herein, including an agreement to negotiate in good faith the Credit Documentation by the parties hereto in a manner consistent with this Commitment Letter and, to the extent applicable, the Fee Letter, it being acknowledged and agreed that the initial funding of the Senior Secured Credit Facilities is subject only to the conditions precedent as set forth in this paragraph 5. For clarity, all terms referenced herein to being defined in the Credit Documentation shall be defined in accordance with the Bank Documentation Standard (unless otherwise provided for herein).

6. **Confidentiality and Other Obligations.** This Commitment Letter, the First Amended and Restated Commitment Letter, the Original Commitment Letter, the Fee Letter, the First
Amended and Restated Fee Letter and the Original Fee Letter and the contents hereof and thereof are confidential and may not be disclosed in whole or in part to any person or entity without the prior written consent of the Commitment Parties (not to be unreasonably withheld, conditioned or delayed) except (i) this Commitment Letter, the First Amended and Restated Commitment Letter, the Original Commitment Letter, the Fee Letter, the First Amended and Restated Fee Letter and the Original Fee Letter and contents hereof and thereof may be disclosed (A) on a confidential basis to your subsidiaries, directors, officers, employees, accountants, attorneys and other representatives and professional advisors who need to know such information in connection with the Transactions and are informed of the confidential nature of such information, (B) pursuant to the order of any court or administrative agency in any pending legal or administrative proceeding, or otherwise as required by applicable law or stock exchange requirement or compulsory legal process (in which case you agree to use commercially reasonable efforts to inform the Commitment Parties promptly thereof prior to such disclosure to the extent permitted by applicable law) and (C) on a confidential basis to the affiliates, members, partners, stockholders, equity holders, controlling persons, directors, officers, employees, accountants, attorneys and other representatives and professional advisors of the Acquired Business; provided that any such disclosure of the Fee Letter, the First Amended and Restated Fee Letter or the Original Fee Letter shall be subject to customary redaction of the fees and the economic “market flex” provisions contained therein, (ii) Annex I, Annex II and this Commitment Letter and the Fee Letter may be disclosed to Moody’s, S&P and any other rating agency on a confidential basis provided that any such disclosure of the Fee Letter shall be subject to customary redaction of the fees and the economic “market flex” provisions contained therein, (iii) the aggregate amount of the fees (including upfront fees and original issue discount) payable under the Fee Letter may be disclosed as part of generic disclosure regarding sources and uses for closing of the Acquisition, projections, and pro forma information (but without disclosing any specific fees, market flex or other economic terms set forth therein), (iv) this Commitment Letter, the First Amended and Restated Commitment Letter, the Original Commitment Letter, the Fee Letter, the First Amended and Restated Fee Letter and the Original Fee Letter may be disclosed on a confidential basis to your auditors or persons performing customary accounting functions for customary accounting purposes, including accounting for deferred financing costs, (v) to the directors, officers, attorneys and other professional advisors of the Acquired Business on a confidential “need to know” basis in connection with the Transactions; provided that any disclosure of the Fee Letter, the First Amended and Restated Fee Letter or the Original Fee Letter and the contents thereof shall be redacted in a manner satisfactory to the Commitment Parties, (vi) you may disclose this Commitment Letter, the First Amended and Restated Commitment Letter and the Original Commitment Letter and its contents (and the existence of, but not the contents of, the Fee Letter, the First Amended and Restated Fee Letter or the Original Fee Letter) in any information memorandum or syndication distribution, as well as in any proxy statement or other public filing or other marketing materials relating to the Acquisition or the Senior Secured Credit Facilities and (vii) this Commitment Letter, the First Amended and Restated Commitment Letter, the Original Commitment Letter, the Fee Letter, the First Amended and Restated Fee Letter and the Original Fee Letter may be disclosed to a court, tribunal or any other applicable administrative agency or judicial authority in connection with the enforcement of your rights hereunder (in which case you agree to use commercially reasonable efforts to inform the Commitment Parties promptly thereof prior to such disclosure to the extent permitted by applicable law).

The Commitment Parties shall use all confidential information provided to them by or on behalf of you hereunder solely for the purpose of providing the services which are the subject of this Commitment Letter and otherwise in connection with the Transactions and shall treat confidentially all such information; provided, however, that nothing herein shall prevent any Commitment Party from disclosing any such information (i) pursuant to the order of any court or administrative agency or in any pending legal or administrative proceeding, or otherwise as required by applicable law or compulsory legal process (in which case such Commitment Party agrees to inform you promptly prior to disclosure to the extent not prohibited by law, rule or regulation), (ii) upon the request or demand of any regulatory authority having jurisdiction over such Commitment Party or any of its affiliates, (iii) to the extent that
such information becomes publicly available other than by reason of disclosure in violation of this Commitment Letter, the First Amended and Restated Commitment Letter, the Original Commitment Letter, the Fee Letter, the First Amended and Restated Fee Letter and the Original Fee Letter or other confidential obligation owed by the Commitment Parties, (iv) to such Commitment Party’s affiliates and its and their respective employees, legal counsel, independent auditors and other experts, professionals or agents who need to know such information in connection with the Transactions and are informed of the confidential nature of such information, (v) for purposes of establishing a “due diligence” defense available under securities laws, (vi) to the extent that such information is received by such Commitment Party from a third party that is not to such Commitment Party’s knowledge subject to confidentiality obligations to you, (vii) to the extent that such information is independently developed by such Commitment Party, (viii) to potential Lenders, participants, assignees or any direct or indirect contractual counterparties to any swap or derivative transaction relating to you or your obligations under the Senior Secured Credit Facilities, in each case, who agree to be bound by the terms of this paragraph (or language not less restrictive than this paragraph or as otherwise reasonably acceptable to you and the Commitment Parties, including as may be agreed in any confidential information memorandum or other marketing material), (ix) to Moody’s and S&P and to Bloomberg, LSTA and similar market data collectors with respect to the syndicated lending industry; provided that such information is limited to Annex I and Annex II and is supplied only on a confidential basis, or (x) with your prior written consent. This paragraph shall terminate on the earlier of (a) the initial funding under the Senior Secured Credit Facilities and (b) the second anniversary of the Original Commitment Letter.

You acknowledge that the Commitment Parties or their affiliates may be providing financing or other services to parties whose interests may conflict with yours. The Commitment Parties agree that they will not furnish confidential information obtained from you to any of their other customers and will treat confidential information relating to the Companies and their respective affiliates with the same degree of care as they treat their own confidential information. The Commitment Parties further advise you that they will not make available to you confidential information that they have obtained or may obtain from any other customer.

You acknowledge that certain of the Lead Arrangers or its lending affiliate is currently acting as a Lender under the Existing Credit Agreement and your and such Lead Arranger’s and its affiliates rights and obligations under the Existing Credit Agreement that currently or hereafter may exist are, and shall be, separate and distinct from the rights and obligations of the parties pursuant to this Commitment Letter, and none of such rights and obligations under such other agreements shall be affected by any Lead Arranger’s performance or lack of performance hereunder.

You hereby agree that the Lead Arrangers may render their respective services under this Commitment Letter notwithstanding any actual or potential conflict of interest presented by the foregoing and you hereby waive any conflict of interest claims relating to the relationship between any Lead Arranger and you and your affiliates in connection with the engagement contemplated hereby on the one hand, and the exercise by any Lead Arranger or any of its affiliates of any of their rights and duties under the Existing Credit Agreement, on the other hand.

In connection with all aspects of each transaction contemplated by this Commitment Letter, you acknowledge and agree, and acknowledge your affiliates’ understanding, that: (i) the Senior Secured Credit Facilities and any related arranging or other services described in this Commitment Letter are arm’s-length commercial transactions between you and your affiliates, on the one hand, and the Commitment Parties, on the other hand, (ii) the Commitment Parties have not provided any legal, accounting, regulatory or tax advice with respect to any of the transactions contemplated hereby and you have consulted your own legal, accounting, regulatory and tax advisors to the extent you have deemed appropriate, (iii) you are capable of evaluating, and understand and accept, the terms, risks and conditions of the transactions contemplated hereby, (iv) in connection with the financing transactions contemplated
hereby and the process leading to such transactions, each Commitment Party has been, is, and will be acting solely as a principal and has not been, is not, and will not be acting as an advisor, agent or fiduciary for you or any of your affiliates, stockholders, creditors or employees or any other party, (v) no Commitment Party has assumed nor will assume an advisory, agency or fiduciary responsibility in your or your affiliates’ favor with respect to any of the financing transactions contemplated hereby or the process leading thereto, and no Commitment Party has any obligation to you or your affiliates with respect to the financing transactions contemplated hereby except those obligations expressly set forth in this Commitment Letter, and (vi) the Commitment Parties and their respective affiliates may be engaged in a broad range of transactions that involve interests that differ from yours and those of your affiliates, and the Commitment Parties have no obligation to disclose any of such interests to you or your affiliates. Without limiting the provisions of paragraph 4(b), you hereby agree not to assert any claims against the Commitment Parties with respect to any alleged breach of agency or fiduciary duty in connection with any aspect of any financing transaction contemplated by this Commitment Letter.

The Commitment Parties hereby notify you that pursuant to the requirements of the USA PATRIOT Act, Title III of Pub. L. 107-56 (signed into law October 26, 2001) (the “U.S.A. Patriot Act”) and 31 C.F.R. § 1010.230 (as amended, the “Beneficial Ownership Regulation”), each of them is required to obtain, verify and record information that identifies the Borrower and the Guarantors, which information includes the name and address of such person and other information that will allow the Commitment Parties, as applicable, to identify each such person in accordance with the U.S.A. Patriot Act and the Beneficial Ownership Regulation.

7. Survival of Obligations. The provisions of sections 2, 3, 4, 6 and 8 of this Commitment Letter shall remain in full force and effect regardless of whether any Credit Documentation shall be executed and delivered and notwithstanding the termination of this Commitment Letter or any commitment or undertaking of the Commitment Parties hereunder, provided that (i) the provisions of sections 2 and 3 shall not survive if all of the commitments and undertakings of the Commitment Parties are terminated by any party hereto prior to the effectiveness of the Senior Secured Credit Facilities and (ii) if the Senior Secured Credit Facilities close and the Credit Documentation is executed and delivered, the provisions of sections 2 and 3 shall survive only until the Syndication Date and your obligations under this Commitment Letter, other than your obligations in sections 2 and 3, confidentiality of the Fee Letter, the First Amended and Restated Fee Letter and the Original Fee Letter and section 4 to the extent not addressed in the Credit Documentation, shall automatically terminate and be superseded by the provisions of the Credit Documentation upon the execution and delivery thereof, and you shall automatically be released from all liability in connection therewith at such time. You may terminate this Commitment Letter and/or the Initial Lenders' commitments with respect to any of the Senior Secured Credit Facilities (or any portion thereof, in each case on a pro rata basis between each Facility) hereunder at any time subject to the provisions of the preceding sentence.

8. Miscellaneous. This Commitment Letter and the Fee Letter may be executed in multiple counterparts and by different parties hereto in separate counterparts, all of which, taken together, shall be deemed an original. Delivery of an executed counterpart of a signature page to this Commitment Letter or the Fee Letter by telecopier, facsimile or other electronic transmission (e.g., a “pdf” or “tif”) shall be effective as delivery of a manually executed counterpart thereof. Headings are for convenience of reference only and shall not affect the construction of, or be taken into consideration when interpreting, this Commitment Letter or the Fee Letter. The words “execution,” “signed,” “signature” and words of like import in this Commitment Letter or the Fee Letter relating to the execution and delivery of this Commitment Letter or the Fee Letter shall be deemed to include electronic signatures, which shall be of the same legal effect, validity or enforceability as a manually executed signature to the extent and as provided in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.
This Commitment Letter and the Fee Letter shall be governed by, and construed in accordance with, the laws of the State of New York without regard to conflict of law principles that would result in the application of any other laws other than the state of New York; provided that, notwithstanding the foregoing, it is understood and agreed that (a) provisions related to the definition or occurrence of a “Company Material Adverse Effect” (as defined in Annex II) or the equivalent term under the Acquisition Agreement will be governed by, and construed in accordance with, the laws of the State of Delaware and (b)(x) the determination of the accuracy of any Acquisition Agreement Representation and whether as a result of any inaccuracy thereof you have the right (taking into account any applicable cure provisions) to terminate your obligations under the Acquisition Agreement or decline to consummate the Acquisition and (y) the determination of whether the Acquisition has been consummated in accordance with the terms of the Acquisition Agreement, in each case shall be governed by, and construed in accordance with, the laws of the Cayman Islands, in each case, regardless of the laws that might otherwise govern under applicable principles of conflicts of law thereof. EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS COMMITMENT LETTER, THE FEE LETTER, THE TRANSACTIONS AND THE OTHER TRANSACTIONS CONTEMPLATED HEREBY AND THEREBY OR THE ACTIONS OF THE COMMITMENT PARTIES IN THE NEGOTIATION, PERFORMANCE OR ENFORCEMENT HEREOF.

Each party hereto hereby irrevocably and unconditionally submits to the exclusive jurisdiction of any New York State court or Federal court of the United States of America sitting in the Borough of Manhattan in New York City in respect of any suit, action or proceeding arising out of or relating to the provisions of this Commitment Letter, the Fee Letter, the Transactions and the other transactions contemplated hereby and thereby and irrevocably agrees that all claims in respect of any such suit, action or proceeding may be heard and determined in any such court. The parties hereto agree that service of any process, summons, notice or document by registered mail addressed to you shall be effective service of process against you for any suit, action or proceeding relating to any such dispute. Each party hereto waives, to the fullest extent permitted by applicable law, any objection that it may now or hereafter have to the laying of the venue of any such suit, action or proceedings brought in any such court, and any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum. A final judgment in any such suit, action or proceeding brought in any such court may be enforced in any other courts to whose jurisdiction the applicable party is or may be subject by suit upon judgment.

This Commitment Letter, together with the Fee Letter and the administrative fee letter between you and WF Bank dated the Original Signing Date, embodies the entire agreement and understanding among the parties hereto and your affiliates with respect to the Senior Secured Credit Facilities and supersedes all prior agreements and understandings relating to the subject matter hereof. No party has been authorized by any Commitment Party to make any oral or written statements that are inconsistent with this Commitment Letter. Neither this Commitment Letter (including the attachments hereto) nor the Fee Letter may be amended or any term or provision hereof or thereof waived or modified except by an instrument in writing signed by each of the parties hereto.

This Commitment Letter may not be assigned by you without our prior written consent (and any purported assignment without such consent will be null and void), is intended to be solely for the benefit of the parties hereto and is not intended to confer any benefits upon, or create any rights in favor of, any person other than the parties hereto (and the Indemnified Parties). Each Commitment Party may assign its commitment hereunder, in whole or in part, to any of its affiliates or, subject to the provisions of this Commitment Letter, to any Lender; provided that, other than with respect to an assignment to which you otherwise consent in writing (which consent, in the case of an assignment by a Commitment Party to its affiliates, shall not be unreasonably withheld by you), such Commitment Party shall not be released from
the portion of its commitment hereunder so assigned to the extent such assignee fails to fund the portion of the commitment assigned to it on the Closing Date notwithstanding the satisfaction of the conditions to funding set forth herein.

Please indicate your acceptance of the terms of this Commitment Letter and the Fee Letter by returning to the Lead Arrangers executed counterparts of this Commitment Letter and the Fee Letter. Thereafter, all commitments and undertakings of the Commitment Parties hereunder will expire, unless extended by us in our sole discretion, on the earliest of (a) 11:59 p.m., New York City time, on the day that is five business days after the Outside Date (as defined in the Acquisition Agreement as in effect on the Original Signing Date, including as may be extended as provided pursuant to Section 7.1(d) of the Acquisition Agreement as in effect on the Original Signing Date) (the “Expiration Date”), unless the Closing Date occurs on or prior thereto, (b) the consummation of the Acquisition without the use of the Senior Secured Credit Facilities and (c) the termination of the Acquisition Agreement by you in accordance with its terms.

[The remainder of this page intentionally left blank.]
We are pleased to have the opportunity to work with you in connection with this important financing.

Very truly yours,

WELLS FARGO BANK, N.A.

By: /s/ Daniel Kurtz
   Name: Daniel Kurtz
   Title: Director

WELLS FARGO SECURITIES, LLC

By: /s/ Kevin Sanders
   Name: Kevin Sanders
   Title: Managing Director
BANK OF MONTREAL

By: /s/ Joan Murphy
    Name: Joan Murphy
    Title: Managing Director

BMO CAPITAL MARKETS CORP.

By: /s/ David Lynch
    Name: David Lynch
    Title: Managing Director
CITIZENS BANK, N.A.

By: /s/ Jonah Adkins
Name: Jonah Adkins
Title: Vice President
TRUIST BANK

By: /s/ Shae B. Patel

Name: Shae B. Patel
Title: Director

TRUIST SECURITIES, INC.

By: /s/ Stuart Johnston

Name: Stuart Johnston
Title: Managing Director
The provisions of this Commitment Letter are accepted and agreed to as of the date first written above:

MAXLINEAR, INC.

By: /s/ Steven G. Litchfield
    Name: Steven G. Litchfield
    Title: Chief Financial Officer and Chief
           Corporate Strategy Officer
<table>
<thead>
<tr>
<th>Initial Lenders</th>
<th>Principal Amount of Term B Loans</th>
<th>Principal Amount of Term A Loans</th>
<th>Principal Amount of Revolving Credit Loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wells Fargo Bank, National Association</td>
<td>$2,062,500,000</td>
<td>$82,500,000</td>
<td>$142,500,000</td>
</tr>
<tr>
<td>Bank of Montreal</td>
<td>$270,000,000</td>
<td>$150,000,000</td>
<td>$37,500,000</td>
</tr>
<tr>
<td>Citizens Bank, N.A.</td>
<td>$202,500,000</td>
<td>$140,000,000</td>
<td>$35,000,000</td>
</tr>
<tr>
<td>Truist Bank</td>
<td>$202,500,000</td>
<td>$140,000,000</td>
<td>$35,000,000</td>
</tr>
<tr>
<td>Total</td>
<td>$2,737,500,000</td>
<td>$512,500,000</td>
<td>$250,000,000</td>
</tr>
</tbody>
</table>
SUMMARY OF TERMS AND CONDITIONS
$2,737.5 MILLION TERM B LOAN FACILITY
$512.5 MILLION TERM A LOAN FACILITY
$250 MILLION REVOLVING CREDIT FACILITY

Capitalized terms not otherwise defined herein have the same meanings as specified therefor in the Commitment Letter to which this Annex I is attached.

Borrower: MaxLinear, Inc., a Delaware corporation (the “Borrower”).

Guarantors: The obligations of the Borrower (the “Borrower Obligations”) under the Senior Secured Credit Facilities (as hereinafter defined) will be unconditionally guaranteed jointly and severally on a senior basis (the “Guarantees”) by each of the Borrower’s wholly-owned restricted U.S. subsidiaries (and consistent with the principles set forth herein) (collectively, the “Guarantors”); provided that Guarantors shall not include any Excluded Subsidiary (subject to the Bank Documentation Standard, as defined in Borrower’s Existing Credit Agreement). In addition, the Bank Credit Documentation (as defined below) will contain customary carve outs for “non-ECP Guarantors”, consistent with the LSTA provisions. All guarantees will be guarantees of payment and not of collection. The Target and its subsidiaries included in the Acquired Business that are not excluded from the foregoing requirements pursuant to the terms described above shall be required to become Guarantors on the Closing Date. Notwithstanding the foregoing, it is understood and agreed that neither the Target nor any of its subsidiaries shall be required to be Guarantors until the Acquisition is consummated on the Acquisition Closing Date.

Administrative Agent and Collateral Agent: Wells Fargo Bank, National Association will act as sole and exclusive administrative and collateral agent for the Lenders (the “Administrative Agent”).

Lead Arranger and Bookrunner: Wells Fargo Securities, LLC, BMO Capital Markets Corp., Citizens Bank, N.A. and Truist Securities, Inc. will act as joint lead arrangers and joint bookrunners for the Senior Secured Credit Facilities (in such capacities, the “Lead Arrangers”).

Lenders: Banks, financial institutions and institutional lenders selected by the Lead Arrangers in consultation with and reasonably acceptable to the Borrower and, after the initial funding of the Senior Secured Credit Facilities, subject to the restrictions set forth in the Assignments and Participations section below (the “Lenders”).

Type and Amount: Term B Loan Facility: A senior secured first lien term loan B facility (the “Term B Loan Facility”, and the loans thereunder, the “Term B Loans”) in an aggregate principal amount of $2,737.5 million.
Term A Loan Facility: A senior secured first lien term loan A facility (the “Term A Loan Facility”, and the loans thereunder, the “Term A Loans”) in an aggregate principal amount of $512.5 million.

Revolving Credit Facility: A five-year senior secured revolving credit facility in US dollars (the “Revolving Credit Facility” and, together with the Term B Loan Facility and the Term A Loan Facility, the “Senior Secured Credit Facilities”; the commitments under the Revolving Credit Facility, the “Revolving Commitments”) in the initial amount of $250 million (the loans thereunder, the “Revolving Credit Loans” and, together with the Term B Loans and the Term A Loans, the “Loans”). The entirety of the Revolving Commitments will be available for borrowing in Base Rate on a “same-day notice” basis.

Letters of Credit: A portion of the Revolving Credit Facility not in excess of an amount to be agreed shall be available for the issuance of letters of credit in US dollars (the “Letters of Credit”) by Wells Fargo Bank, National Association and the other Revolving Lenders on a pro rata basis based on the Revolving Commitments of each Revolving Lender as of the Closing Date (in such capacity, each an “Issuing Lender”); provided that no Issuing Lender shall be required to issue trade or commercial Letters of Credit without its consent. No Letter of Credit shall have an expiration date after the earlier of (a) one year after the date of issuance unless consented to by the Issuing Lender and (b) five business days prior to the Revolving Credit Termination Date; provided that any Letter of Credit with a one-year tenor may provide for the renewal thereof for additional one-year periods (which shall in no event extend beyond the date referred to in clause (b) above). Letters of Credit issued by any Issuing Lender will be subject to the policies and procedures applicable to such Issuing Lender. Drawings under any Letter of Credit shall be reimbursed by the Borrower (whether with its own funds or with the proceeds of Revolving Credit Loans) within one business day after receipt of notice of drawing. To the extent that the Borrower does not so reimburse the applicable Issuing Lender, the Revolving Lenders shall be irrevocably and unconditionally obligated to fund participations in the reimbursement obligations on a pro rata basis.

The Bank Credit Documentation will include customary provisions to protect the Issuing Lenders in the event any Revolver Lender under the Revolving Credit Facility is a Defaulting Lender.

Purpose: Term Facilities: The proceeds of borrowings under the Term B Loan Facility, Term A Loan Facility and cash on the balance sheet of the Companies and other available sources, shall be used (i) to finance the Cash Consideration for the Acquisition, the Refinancing and the other Transactions and (ii) to pay fees and expenses incurred in connection therewith.
Revolving Credit Facility: The proceeds of the Revolving Credit Loans may be used (a) on the Closing Date (i) to fund any upfront fees or OID required to be funded in connection with the “market flex” provisions of the Fee Letter (ii) to fund working capital and other expenses related to the Transactions in an aggregate amount under this clause (ii) not to exceed $25.0 million and (b) after the Closing Date to finance the working capital needs and other general corporate purposes of the Borrower and its subsidiaries (including for capital expenditures, acquisitions, working capital and/or purchase price adjustments, the payment of transaction fees and expenses (in each case, including in connection with the Acquisition), other investments, restricted payments and any other purpose not prohibited by the Bank Credit Documentation).

Availability: Term Facilities: Each of the Term B Loan Facility and Term A Loan Facility will be available in a single drawing on the Closing Date. Amounts borrowed under the Term B Loan Facility and Term A Loan Facility that are repaid or prepaid may not be reborrowed.

Revolving Credit Facility: Subject to the provisions set forth under “Purpose” above, the Revolving Credit Facility shall be available on a revolving basis during the period commencing on the Closing Date and ending on the Revolving Credit Termination Date (as defined below).

Interest Rates and Fees: The interest rate per annum under (a) the Term B Loan Facility will be, at the option of the Borrower, (i) Adjusted Term SOFR plus the Applicable Margin (as hereinafter defined) or (ii) the Base Rate plus the Applicable Margin, (b) the Term A Loan Facility will be, at the option of the Borrower, (i) Adjusted Term SOFR plus the Applicable Margin or (ii) the Base Rate plus the Applicable Margin and (c) the Revolving Credit Facility will be, at the option of the Borrower, (i) Adjusted Term SOFR plus the Applicable Margin or (ii) the Base Rate plus the Applicable Margin. The Applicable Margin means (x) with respect to the Term B Loan Facility, 3.00% per annum, in the case of Adjusted Term SOFR advances, and 2.00% per annum, in the case of Base Rate advances, (y) with respect to the Term A Loan Facility, 2.50% per annum, in the case of Adjusted Term SOFR advances, and 1.50% per annum, in the case of Base Rate advances, and (z) with respect to the Revolving Credit Facility, 2.50% per annum, in the case of Adjusted Term SOFR advances, and 1.50% per annum, in the case of Base Rate advances; provided that, with respect to the Term A Loan Facility and the Revolving Credit Facility, following delivery of financial statements for the first full fiscal quarter after the Closing Date, the Applicable Margin shall be determined by reference to the Secured Leverage Ratios (as hereinafter defined in the table below).

<table>
<thead>
<tr>
<th>Level</th>
<th>Secured Leverage Ratio</th>
<th>Applicable Margin for Adjusted Term SOFR Advances</th>
<th>Applicable Margin for Base Rate Advances</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>≥ 3.50x</td>
<td>2.50%</td>
<td>1.50%</td>
</tr>
<tr>
<td>II</td>
<td>&lt; 3.50 ≥ 2.50x</td>
<td>2.25%</td>
<td>1.25%</td>
</tr>
</tbody>
</table>

Annex I-3
The Borrower may select interest periods of one, three or six months (and, if agreed to by all applicable Lenders, a period shorter than one month or a period of twelve months) for SOFR advances. Interest shall be payable at the end of the selected interest period, but no less frequently than quarterly.

“Adjusted Term SOFR” means, for purposes of any calculation, the rate per annum equal to (a) Term SOFR for such calculation plus (b) the Term SOFR Adjustment; provided that if Adjusted Term SOFR as so determined shall ever be less than the Floor, then Adjusted Term SOFR shall be deemed to be the Floor.

“Base Rate” will be defined consistent with the Bank Documentation Standard; provided that the Base Rate will be deemed to be not less than 100 basis points higher than one-month SOFR (after giving effect to the Floor).

“Floor” means a rate of interest equal to 0.00%, in respect of the Revolving Credit Facility and the Term A Loan Facility or 0.50%, in respect of the Term B Loan Facility.

“SOFR” means a rate equal to the secured overnight financing rate as administered by the SOFR Administrator.

“Term SOFR” means,

(a) for any calculation with respect to a SOFR Loan, the Term SOFR Reference Rate for a tenor comparable to the applicable Interest Period on the day (such day, the “Periodic Term SOFR Determination Day”) that is two (2) U.S. Government Securities Business Days prior to the first day of such Interest Period, as such rate is published by the Term SOFR Administrator; provided, however, that if as of 5:00 p.m. (New York City time) on any Periodic Term SOFR Determination Day the Term SOFR Reference Rate for the applicable tenor has not been published by the Term SOFR Administrator and a Benchmark Replacement Date with respect to the Term SOFR Reference Rate has not occurred, then Term SOFR will be the Term SOFR Reference Rate for such tenor as published by the Term SOFR Administrator on the first preceding U.S. Government Securities Business Day for which such Term SOFR Reference Rate for such tenor was published by the Term SOFR Administrator so long as such first preceding U.S. Government Securities Business Day is not more than three (3) U.S. Government Securities Business Days prior to such Periodic Term SOFR Determination Day, and

(b) for any calculation with respect to a Base Rate Loan on any day, the Term SOFR Reference Rate for a tenor of one month on the day (such day, the “Base Rate Term SOFR Determination Day”) that is two (2)

<table>
<thead>
<tr>
<th>Credit Rating</th>
<th>Margin 1</th>
<th>Margin 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2.50 ≥ 2.00</td>
<td>2.00%</td>
<td>1.00%</td>
</tr>
<tr>
<td>&lt; 2.00 ≥ 1.50</td>
<td>1.75%</td>
<td>0.75%</td>
</tr>
<tr>
<td>&lt; 1.50</td>
<td>1.50%</td>
<td>0.50%</td>
</tr>
</tbody>
</table>
“Term SOFR Adjustment” means, for any calculation, a percentage per annum as set forth below for the applicable

<table>
<thead>
<tr>
<th>Interest Period</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>One month</td>
<td>0.10%</td>
</tr>
<tr>
<td>Three months</td>
<td>0.15%</td>
</tr>
<tr>
<td>Six months</td>
<td>0.25%</td>
</tr>
</tbody>
</table>

U.S. Government Securities Business Days prior to such day, as such rate is published by the Term SOFR Administrator; provided, however, that if as of 5:00 p.m. (New York City time) on any Base Rate Term SOFR Determination Day, the Term SOFR Reference Rate for the applicable tenor has not been published by the Term SOFR Administrator and a Benchmark Replacement Date with respect to the Term SOFR Reference Rate has not occurred, then Term SOFR will be the Term SOFR Reference Rate for such tenor as published by the Term SOFR Administrator on the first preceding U.S. Government Securities Business Day for which such Term SOFR Reference Rate for such tenor was published by the Term SOFR Administrator so long as such first preceding U.S. Government Securities Business Day is not more than three (3) U.S. Government Securities Business Days prior to such Base Rate Term SOFR Determination Day.

“Term SOFR Administrator” means CME Group Benchmark Administration Limited (CBA) (or a successor administrator of the Term SOFR Reference Rate selected by Agent in its reasonable discretion).

“Term SOFR Reference Rate” means the forward-looking term rate based on SOFR.

“U.S. Government Securities Business Day” means any day except for (i) a Saturday, (ii) a Sunday or (iii) a day on which the Securities Industry and Financial Markets Association, or any successor thereto, recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in United States government securities. During the continuance of an event of default for non-payment of principal, interest or fees, interest will accrue on such overdue principal, interest or fees at the Default Rate (as defined below). During the continuance of a bankruptcy event of default, the principal amount of all outstanding obligations will bear interest at the Default Rate. As used herein, “Default Rate” means (i) on the principal of any loan at a rate of 200 basis points in excess of the rate otherwise applicable to such loan and (ii) on any other overdue amount at a rate of 200 basis points in excess of the non-default rate of interest then applicable to Base Rate loans.

Revolving Credit Facility Commitment Fees: The Borrower shall pay 0.25% per annum on the average daily undrawn portion of the Revolving Credit Commitments, payable quarterly in arrears after the Closing Date and on the Revolving Credit Termination Date and calculated on the actual number of days elapsed over a 360-day period.
year; provided that following delivery of financial statements for the first full fiscal quarter after the Closing Date, such commitment fee shall be determined by reference to the Secured Leverage Ratios in the table below:

<table>
<thead>
<tr>
<th>Level</th>
<th>Secured Leverage Ratio</th>
<th>Revolving Commitment Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>≥ 3.50x</td>
<td>0.30%</td>
</tr>
<tr>
<td>II</td>
<td>&lt; 3.50 ≥ 2.50x</td>
<td>0.25%</td>
</tr>
<tr>
<td>III</td>
<td>&lt; 2.50 ≥ 2.00x</td>
<td>0.25%</td>
</tr>
<tr>
<td>IV</td>
<td>&lt; 2.00x ≥ 1.50x</td>
<td>0.20%</td>
</tr>
<tr>
<td>V</td>
<td>&lt; 1.50x</td>
<td>0.175%</td>
</tr>
</tbody>
</table>

**Letter of Credit Fees:** The Borrower shall pay a fee on all outstanding Letters of Credit at a per annum rate equal to the Applicable Margin then in effect with respect to Adjusted Term SOFR advances under the Revolving Credit Facility on the face amount of each such Letter of Credit. Such fee shall be shared ratably among the Lenders participating in the Revolving Credit Facility and shall be payable quarterly in arrears.

A fronting fee of 0.125% per annum on the face amount of each Letter of Credit shall be payable quarterly in arrears to the Issuing Lender for its own account.

**Calculation of Interest:** Other than calculations in respect of interest at the Base Rate (which shall be made on the basis of actual number of days elapsed in a 365/366 day year), all calculations of interest shall be made on the basis of actual number of days elapsed in a 360-day year.

**Cost and Yield Protection:** Subject to the Bank Documentation Standard (as defined below), substantially the same as the Borrower’s Existing Credit Agreement.

**Maturity:**  
**Term B Loan Facility:** The Term B Loan Facility will mature on the date that is 7 years after the Closing Date.  
**Term A Loan Facility:** The Term A Loan Facility will mature on the date that is 5 years after the Closing Date.  

**Revolving Credit Facility:** The Revolving Credit Facility will mature on the date that is 5 years after the Closing Date (the “Revolving Credit Termination Date”).

The Bank Credit Documentation shall contain customary “amend and extend” provisions consistent with the Bank Documentation Standard pursuant to which individual Lenders may agree to extend the maturity date of their outstanding Loans under any Senior Secured Credit Facility or any Incremental Facility (as hereinafter defined) (which may include, among other things, an increase in the interest rate payable in respect of such extended loans, with such extensions not subject to any “default stoppers”, financial tests or “most favored nation” pricing provisions) upon the request of the Borrower and without the consent of any other Lender (it is understood that (i) no existing Lender will have any

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obligation to commit to any such extension and (ii) each Lender under the class being extended shall have the opportunity to participate in such extension on the same terms and conditions as each other Lender under such class).

**Incremental Facilities:** The Bank Credit Documentation will permit the Borrower to (a) add one or more incremental term loan facilities to the Term B Loan Facility or to increase the existing Term B Loan Facility (each, an “Incremental Term B Facility”), (b) add one or more incremental term loan facilities to the Term A Loan Facility or to increase the existing Term A Loan Facility (an “Incremental Term A Facility”) and/or (c) increase commitments under the Revolving Credit Facility (any such increase, an “Incremental Revolving Facility” and, together with the Incremental Term B Facility and the Incremental Term A Facility, the “Incremental Facilities” and each, an “Incremental Facility”) in an aggregate principal amount of up to (x) the greater of (i) $670 million and (ii) 100.0% of LTM EBITDA, plus (y) all voluntary prepayments of Loans under the Senior Secured Credit Facilities (or Incremental Facilities or Incremental Equivalent Debt that is secured on a pari passu basis with the Senior Secured Credit Facilities) made prior to the date of, or contemporaneously with, any such Incremental Facility, provided that with respect to voluntary prepayments of revolving loans, only to the extent accompanied by a permanent reduction of the revolving commitments made prior to such date of incurrence, and in each case not funded with proceeds of long-term debt, plus (z) an unlimited amount so long as, in the case of clause (z) only, on a pro forma basis the First Lien Leverage Ratio would not exceed either (I) the First Lien Leverage Ratio as of the Closing Date or (II) at the Borrower’s option, the First Lien Leverage Ratio in effect immediately prior to such incurrence, in each case, after giving effect to any acquisition consummated in connection therewith and all other appropriate pro forma adjustments (calculated assuming the entire amount of such Incremental Facility was fully drawn on such date) (it being understood that (a) the Borrower shall be deemed to have used amounts under clause (z) to the extent compliant therewith) prior to utilization of amounts under clause (x) or (y) and the Borrower shall be deemed to have used amounts under clause (y) prior to utilization of amounts under clause (x) and (b) the foregoing clauses (x) through (z) shall be subject in all respects to the Stacking and Reclassification Provisions (as hereinafter defined); provided that (i) no Lender will be required to participate in any such Incremental Facility, (ii) subject to customary limited conditionality provisions in connection with any Incremental Term Facility incurred to finance a permitted acquisition, investment, irrevocable restricted payment or similar transaction, no event of default or default exists or would exist after giving effect thereto, (iii) subject to customary limited conditionality provisions in connection with any Incremental Term Facility incurred to finance a permitted acquisition, investment, irrevocable restricted payment or similar transaction, the representations and warranties in the Bank Credit Documentation shall be true and correct in all material respects, (iv) the maturity date of any such Incremental Term Facility (other than an Incremental Term A Facility) shall be no earlier than the maturity date...
for the Term B Loan Facility; provided that the Borrower may incur Incremental Term Facilities with a final maturity date prior to the final maturity date for the Term B Loan Facility and/or with a weighted average lift to maturity shorter than the weighted average life to maturity of the Term B Loan Facility in an aggregate principal amount (together with any other Permitted Inside Maturity Debt) not to exceed the greater of (x) $340 million and (y) 50.0% of LTM EBITDA ("Permitted Inside Maturity Debt"), (v) the weighted average life to maturity of any Incremental Term Facility (other than an Incremental Term A Facility and any Permitted Inside Maturity Debt) shall be no shorter than the weighted average life to maturity of the Term B Loan Facility and each Incremental Term Facility will share ratably (or less than ratably if agreed by the lenders in respect of such Incremental Term Facility) in any mandatory prepayments in the manner described below; (vi) the interest margins for any Incremental Term Facility shall be determined by the Borrower and the lenders of the Incremental Facility; provided that in the event that the All-in-Yield (subject to the Bank Documentation Standard, as defined in the Borrower’s Existing Credit Agreement) for any Incremental Term Facility (other than (x) any Incremental Term A Facility, (y) any Incremental Term Facility that matures more than 2 years after the maturity date with respect to the Term B Loan Facility or (z) any Incremental Term Facility or Incremental Term Facilities in an aggregate principal amount of up to the greater of (1) $340 million and (2) 50.0% of LTM EBITDA) incurred within twelve months after the Closing Date are greater than the All-in-Yield for the Term B Loan Facility by more than 50 basis points, then the Applicable Margin for the Term B Loan Facility shall be increased to the extent necessary so that the All-in-Yield for the Incremental Term Facility are not more than 50 basis points higher than the All-in-Yield for the Term B Loan Facility (such adjustment, the “MFN Adjustment”); provided, further, that in determining the interest margins applicable to the Term B Loan Facility and the Applicable Margins for any Incremental Term Facility, (x) original issue discount (“OID”) or upfront fees (which shall be deemed to constitute like amounts of OID) payable by the Borrower for the account of the Lenders of the Term B Loan Facility in the primary syndication thereof shall be included (with OID being equated to interest based on an assumed four-year life to maturity), (y) customary arrangement, structuring, underwriting, amendment or commitment fees payable to one or more arrangers shall be excluded, and (z) if the Adjusted Term SOFR or Base Rate floor for any Incremental Term Facility is greater than the Adjusted Term SOFR or Base Rate floor, respectively, for the existing Term B Loan Facility, such difference shall be equated to interest margin for purposes of determining whether an increase to the applicable interest margin under the Initial Term Loan Facility shall be required, solely to the extent an increase in the interest rate floor in the Initial Term Loan Facility would cause an increase in the interest rate then in effect thereunder, and in such case the interest rate floor (but not the interest rate margin) applicable to the Initial Term Loan Facility shall be increased by such increased amount, (vii) each Incremental Facility shall be secured by pari passu liens on the Collateral (as hereinafter defined) securing the Senior Secured Credit Facilities and no other assets and shall be guaranteed by the Guarantors
and no other persons and (viii) any Incremental Term Facility shall be on terms and pursuant to documentation to be determined, provided that, to the extent such terms and documentation are not consistent with the Term B Loan Facility (except to the extent permitted by clause (i), (ii), (iii), (iv), (v) or (vi) above, as applicable), they shall (A) at the option of Borrower, (1) reflect market terms and conditions (taken as a whole) at the time of incurrence or issuance (as determined by the Borrower in good faith), or (2) not be materially more restrictive to the Borrower (as determined by the Borrower in good faith), when taken as a whole, than the terms applicable to then outstanding Loans under the Term B Loan Facility (except for covenants or other provisions applicable only to periods after the latest final scheduled maturity date of the initial Term B Loan Facility), or (B) if neither of the requirements in clause (A) are satisfied, otherwise be reasonably satisfactory to the Administrative Agent; provided further that any Incremental Term A Facility may include covenants, events of default and other terms and conditions that are more restrictive to the Borrower and its restricted subsidiaries than the terms applicable to the Term B Loan Facility, solely for the benefit of the Lenders under such Incremental Term A Facility and (ix) any Incremental Revolving Facility shall be on same terms (other than upfront fees and any arrangement or similar fees payable in connection with such Incremental Revolving Facility) and pursuant to the same documentation applicable to the Revolving Credit Facility; provided that, if required to consummate an Incremental Revolving Facility, the pricing, interest rate margins, rate floors and fees (other than any upfront fees and any arrangement or similar fees payable in connection with such Incremental Revolving Facility) on the Existing Revolving Credit Facility may be increased. The Borrower may seek commitments in respect of any Incremental Facility from existing Lenders or from additional banks, financial institutions and other institutional lenders and to the extent the Administrative Agent would have a consent right on an assignment to such new lender, such new lender shall be consented to by the Administrative Agent (such consent not to be unreasonable withheld, conditioned or delayed).

**Refinancing Facilities:** The Bank Credit Documentation shall include customary provisions permitting the Borrower to refinance loans under the Term B Loan Facility, Term A Loan Facility, Revolving Commitments or loans under any Incremental Facility, in each case, consistent with the Borrower’s Existing Credit Agreement.

**Documentation Standard:** The Credit Documentation for the Senior Secured Credit Facilities (the “Bank Credit Documentation”) (i) shall be based upon the Credit Agreement, dated June 3, 2021, by and between the Borrower, the lenders party thereto, and Wells Fargo Bank, National Association as administrative agent and collateral agent (as amended, restated, amended and restated, supplemented or otherwise modified prior to the Original Signing Date, the “Borrower’s Existing Credit Agreement”), with appropriate modifications to (A) baskets and materiality thresholds to reflect the size, industry, leverage, Consolidated EBITDA and ratings of the Borrower after giving effect to the Acquisition, to reflect changes in law or accounting standards since the date of such precedent and to give

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due effect to the Borrower’s model most recently received by WF Securities on or prior to the Original Signing Date (the “Borrower’s Model”), (B) adjust incurrence levels and other ratio baskets commensurate with the First Lien Leverage Ratio, Secured Leverage Ratio (as defined below) and Total Leverage Ratio (as defined below), in each case, of the Borrower and its subsidiaries as of the Closing Date, (ii) shall contain the terms and conditions set forth in this Summary of Terms, including customary updates for term loan B facilities, (iii) shall contain customary benchmark replacement provisions, (iv) shall reflect the operational and strategic requirements of the Borrower, the Target and their respective subsidiaries (after giving effect to the Acquisition) in light of their size, industries and practices and (v) shall reflect the customary agency and operational requirements of the Administrative Agent (collectively, the “Bank Documentation Standard”), in each case, subject to the Limited Conditionality Provisions. The Bank Credit Documentation shall, subject to the “market flex” provisions contained in the Fee Letter, contain only those conditions to borrowing, mandatory prepayments, representations and warranties, covenants (affirmative, negative and financial) and events of default expressly set forth in this Summary of Terms, in each case, applicable to the Borrower and its restricted subsidiaries and, subject to the Bank Documentation Standard and limitations as set forth herein, with materiality thresholds, standards, qualifications, exceptions, “baskets”, and grace and cure periods to be mutually agreed and consistent with the Bank Documentation Standard.

Limited Condition Acquisitions: Subject in all respects to the Bank Documentation Standard, the provisions applicable to Limited Condition Acquisitions (as defined in the Borrower’s Existing Agreement) in the Bank Credit Documentation shall be substantially the same as those set forth in the Borrower’s Existing Credit Agreement; provided that Limited Condition Acquisitions shall be revised to include permitted investments and irrevocable restricted payments.

Financial Definitions: The “First Lien Leverage Ratio” means the ratio of (i) Consolidated Funded Indebtedness (as hereinafter defined) of the Borrower and its restricted subsidiaries that is secured by a lien on any assets or property of the Borrower or any restricted subsidiary ("Secured Debt") on a senior or pari passu basis with the Senior Secured Credit Facilities to (ii) trailing four-quarter Consolidated EBITDA (as hereinafter defined) of the Borrower and its restricted subsidiaries as of the most recently ended Test Period (as hereinafter defined) ("LTM EBITDA").

“Secured Leverage Ratio” means the ratio of (i) Secured Debt to (ii) LTM EBITDA.

“Total Leverage Ratio” means the ratio of (i) Consolidated Funded Indebtedness of the Borrower and its restricted subsidiaries to (ii) LTM EBITDA.

“Consolidated Funded Indebtedness” means (i) the outstanding principal amount of all third party debt for borrowed money,
unreimbursed drawings under letters of credit, capital lease obligations, purchase money indebtedness and debt obligations
to third parties evidenced by notes or similar instruments, determined in accordance with GAAP (but, for the avoidance of
doubt, specifically excluding (x) earn-outs and similar obligations which are due and payable unless not paid within three
(3) Business Days of the applicable due date, (y) hedging obligations, and (z) undrawn letters of credit) minus (ii) all
unrestricted cash and cash equivalents of the Borrower and the Guarantors, in each case, as of any date of determination.

“Consolidated EBITDA” shall be defined in the Bank Credit Documentation and shall include, add-backs consistent with those included in Borrower’s Existing Credit Agreement (giving effect to the Bank Documentation Standard) and other agreed add-backs, including without limitation and without duplication, the following add-backs:

(i) expected cost savings, operating expense reductions, restructuring charges and expenses and synergies related to
(A) the Transactions and (B) mergers and other business combinations, acquisitions, divestitures, restructuring,
cost savings initiatives which are factually supportable and other similar initiatives and projected by the Borrower
in good faith to result from actions with respect to which substantial steps have been, will be, or are expected to
be, taken (in the good faith determination of the Borrower) within 24 months after such transaction or initiative is
consummated; provided that the aggregate amount added back to Consolidated EBITDA pursuant to clause (B) of
this clause (i) in any test period shall not exceed 30% of Consolidated EBITDA for such test period (calculated
after giving effect to such add backs);
(ii) non-cash losses, charges and expenses (including non-cash compensation charges);
(iii) extraordinary, unusual or non-recurring losses, charges and expenses;
(iv) cash restructuring and related charges and business optimization expenses (including costs, charges and expenses
relating to any new initiative, internal processes, cost savings initiatives, cost rationalization programs or operating
expense reductions, other operating improvements and synergies and similar initiatives, integration, transition,
reconstruction, decommissioning, recommissioning or reconfiguration of fixed assets, business optimization,
expansion expenses and other restructuring costs);
(v) unrealized gains and losses due to foreign exchange adjustments (including, without limitation, losses and
expenses in connection with currency and exchange rate fluctuations);
(vi) costs and expenses in connection with the Transactions;

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expenses or charges related to any equity offering, permitted investment, acquisition, disposition, recapitalization or incurrence, prepayment, amendment, modification, restructuring or refinancing of permitted indebtedness (whether or not consummated), including non-operating or non-recurring professional fees, costs and expenses related thereto;

S-X adjustments, subject in the case of any run-rate adjustments to the cap set forth in clause (i);

interest, letter of credit fees, taxes, amortization and depreciation;

losses from discontinued operations; and

charitable contributions, customary public company costs to be agreed, fees, expenses and indemnities paid to directors, proceeds of business interruption insurance, and other customary add-backs to be agreed.

“Test Period” shall mean each period of four consecutive fiscal quarters of the Borrower then last ended (in each case, taken as one accounting period); provided that (a) for purposes of the Financial Covenant (as hereinafter defined) and determining interest margins and fees, the Test Period will be based on the most recent four fiscal quarter period for which financial statements have been delivered or are required to have been delivered under the Bank Credit Documentation and (b) for any other purpose, the Test Period shall be based on the most recent four fiscal quarter period for which financial statements are internally available) prior to such date of determination.

Scheduled Amortization: Term B Loan Facility: The Term B Loan Facility shall be subject to quarterly amortization of principal equal to 0.25% of the original aggregate principal amount of the Term B Loan Facility (commencing with the first full fiscal quarter following the Closing Date), with the balance payable on the final maturity date.

Term A Loan Facility: The Term A Loan Facility shall be subject to quarterly amortization (beginning with the first full fiscal quarter after the Closing Date) of principal equal to (i) 0.625% of the original aggregate principal amount of the Term A Loan Facility during the first four full fiscal quarters following the Closing Date, (ii) 1.250% of the original aggregate principal amount of the Term A Loan Facility during the next eight full fiscal quarters, (iii) 1.875% of the original aggregate principal amount of the Term A Loan Facility during the next four full fiscal quarters and (iv) 2.50% of the original aggregate principal amount of the Term A Loan Facility for each fiscal quarter thereafter, with the balance payable on the final maturity date.

Revolving Credit Facility: None.

Mandatory Prepayments
and Commitment
Reductions: In addition to the amortization set forth above and subject to the next two paragraphs, mandatory prepayments required with respect to the Term B Loan Facility and the Term A Loan Facility shall be limited to: (i) subject to exceptions and thresholds consistent with the Bank Documentation Standard, in an amount equal to 100%, with a step down to 50% at a First Lien Leverage Ratio to be agreed (such step down, the “Asset Sale Step Down”), of the net cash proceeds received by the Borrower or any of its restricted subsidiaries in excess of $25.0 million for any individual transaction (or series of related transactions) or $50.0 million in the aggregate for any fiscal year from any disposition outside the ordinary course and described in clause (a) or (b) of the definition of Prepayment Event in Borrower’s Existing Credit Agreement (subject to the Bank Documentation Standard, in each case, to the extent such proceeds are not reinvested (or committed to be reinvested) in the business of the Borrower or any of its subsidiaries within 540 days after the date of receipt of such proceeds from such disposition or casualty event and, if so committed to be reinvested, reinvested no later than 180 days after the end of such 540-day period; (ii) following the receipt of net cash proceeds from the issuance or incurrence after the Closing Date of additional debt of the Borrower or any of its restricted subsidiaries (other than debt permitted under the Bank Credit Documentation other than Refinancing Indebtedness); and (iii) in an amount equal to 50% of annual Excess Cash Flow (subject to the Bank Documentation Standard, as defined in the Borrower’s Existing Credit Agreement but subject to additional deductions to be agreed, including, without limitation, customary deductions for planned expenditures and a deduction for all cash expenses, charges, or losses excluded in arriving at Consolidated Net Income (to the extent not financed with long-term indebtedness)) of the Borrower and its restricted subsidiaries beginning with the first full Borrower’s fiscal year commencing after the Closing Date, with step downs to 25% and 0% at First Lien Leverage Ratios equal to 3.50:1.00 and 3.00:1.00, respectively (with a dollar-for-dollar credit for optional prepayments of the Senior Secured Credit Facility, any Incremental Facility and any Incremental Equivalent Debt that is secured on a pari passu basis with the Senior Secured Credit Facilities as well as certain other events to be agreed (in the case of the Revolving Credit Facility and any other revolving facility, to the extent accompanied by a permanent reduction of the corresponding commitment) subsequent to the first day of the relevant year, in each case other than to the extent financed with long-term debt), in each case of clauses (i) - (iii), subject to the limitations set forth in the paragraph immediately following, such amounts shall be applied, without premium or penalty, on a pro rata basis to the remaining amortization payments under the Term B Loan Facility and Term A Loan Facility in direct order of maturity.

Any Lender under the Term B Loan Facility or Term A Loan Facility may elect not to accept its pro rata portion of any mandatory prepayment other than a prepayment pursuant to clause (ii) above (each a “Declining Lender”). Any prepayment amount declined by a Declining Lender may be retained by the Borrower and included in the Available Amount Basket (such amount, a “Declined Amount”).

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Mandatory prepayments in clauses (i) and (iii) above shall be limited to the extent the upstreaming or transfer of such amounts from a foreign subsidiary to the Borrower or any other applicable subsidiary would result in material adverse tax consequences until such time as the Borrower or its applicable subsidiary may upstream or transfer such amounts without material adverse tax consequences and shall be subject to permissibility under local law of upstreaming proceeds (including financial assistance and corporate benefit restrictions and fiduciary and statutory duties of the relevant directors) and any applicable limitations set forth in such foreign subsidiary’s organizational documents and/or binding agreements. The non-application of any mandatory prepayment amounts as a consequence of the foregoing provisions will not, for the avoidance of doubt, constitute a default or an event of default, and such amounts shall be available for working capital purposes of the Borrower and its subsidiaries.

Revolving Credit Loans shall be required to be prepaid, and Letters of Credit shall be required to be cash collateralized, if at any time the aggregate amount of outstandings under the Revolving Credit Facility exceeds the aggregate amount of commitments under the Revolving Credit Facility at such time.

Optional Prepayments: Term B Loans and Term A Loans may be prepaid and Revolving Commitments may be reduced at any time in whole or in part without premium or penalty, upon written notice, at the option of the Borrower, except (x) that any prepayment of Adjusted Term SOFR advances other than at the end of the applicable interest periods therefor shall be made with customary reimbursement for any funding losses and redeployment costs (but not loss of margin) of the Lenders resulting therefrom and (y) with respect to the Term B Loan Facility, as set forth in “Soft-Call Premium” section below. Each optional prepayment of the Term B Loan Facility or Term A Loan Facility shall be applied as directed by the Borrower (and absent such direction, in direct order of maturity thereof).

Soft-Call Premium: In the event that all or any portion of the Term B Loan Facility is (i) repaid, prepaid, refinanced or replaced with term loan indebtedness with a lower effective yield than the effective yield of such Term B Loan Facility or (ii) repriced through any waiver, consent or amendment, in each case in connection with a Repricing Event (subject to the Bank Documentation Standard, as defined in the Borrower’s Existing Credit Agreement) and prior to the six-month anniversary of the Closing Date and other than in connection with a change of control, such repayment, prepayment, refinancing, replacement or repricing will be accompanied by a premium of 1% of the principal amount so repaid, prepaid, refinanced, replaced or repriced. If all or any portion of the Term B Loan Facility held by any Lender is required to be assigned pursuant to a “yank-a-bank” provision in the Bank Credit Documentation as a result of, or in connection with a Repricing Event prior to the six-month anniversary of the Closing Date, such Lender not agreeing or otherwise consenting to any waiver, consent or amendment referred to in clause (i) above (or otherwise in connection with a Repricing Event) will be
entitled to a premium equal to 1% of the principal amount so required to be assigned.

**Security:** Subject to the limitations set forth below in this section and subject to certain other exceptions consistent with the Bank Documentation Standard, the Borrower Obligations, the Guarantees and any interest rate protection or other swap or hedging arrangements, or cash management arrangements, in each case, entered into with a Lender or agent or any affiliate of a Lender or agent (collectively, the “Secured Obligations”) will be secured, on a first priority basis, by: (a) a perfected pledge of 100% of each direct subsidiary of the Borrower and of each Guarantor (which pledge, in the case of capital stock of any foreign subsidiary of the Borrower that is a CFC or any CFC Holdco (each, as defined in the Borrower’s Existing Credit Agreement) shall be limited to 65% of the voting capital stock and 100% of any non-voting capital stock of such subsidiary) and (b) perfected security interests in substantially all of the Borrower’s and each Guarantor’s assets, including tangible and intangible personal property of the Borrower and each Guarantor (including but not limited to accounts receivable, inventory, equipment, general intangibles, deposit and securities accounts, investment property, intellectual property, intercompany notes, instruments, chattel paper and documents and proceeds of the foregoing) (the items described in clauses (a) and (b) above, but excluding the Excluded Property (as defined below), collectively, the “Collateral”).

Notwithstanding anything to the contrary, the Collateral shall exclude Excluded Property (subject to the Bank Documentation Standard, as defined in the Borrower’s Existing Credit Agreement but subject to an additional exclusion for any property subject to any permitted lease, license or other agreement binding on such property at the time of the acquisition thereof and not incurred in contemplation of such acquisition, in each case, to the extent the grant of a security interest in such property would invalidate such lease, license or other agreement or create a right of termination in favor of any unaffiliated party thereto, in each case after giving effect to the applicable anti-assignment provisions of the Uniform Commercial Code and other applicable law). In addition, (a) landlord, bailee or warehouseman waivers or collateral access agreements shall not be required, control agreements shall not be required with respect to any deposit accounts, securities accounts or commodities accounts and no perfection actions other than the filing of UCC financing statements shall be required with respect to motor vehicles and other assets subject to certificates of title, letter of credit rights, except as to which perfection may be accomplished solely by the filing of a UCC financing statement (it being understood that no actions shall be required to perfect a security interest in letter of credit rights, other than the filing of a UCC financing statement), commercial tort claims with a value of less than an amount to be agreed and promissory notes evidencing debt in a principal amount of less than an amount to be agreed and (b) no actions in any jurisdiction other than the United States (or any State or other political subdivision thereof) or required by the laws of any jurisdiction other than the United States shall be required to be taken to create or perfect any security interests in assets located or titled outside of the U.S. (it being understood that there shall be no security agreements or pledge

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agreements governed under the laws of any jurisdiction other than the United States).

All the above-described pledges, security interests and mortgages shall be set forth in the Bank Credit Documentation.

Conditions Precedent to Initial Borrowing on the Closing Date: The availability of the Senior Secured Credit Facilities on the Closing Date will be limited to those applicable conditions specified in paragraph 5 of the Commitment Letter.

Post-Closing Conditions: The making of each Revolving Credit Loan and the issuance, amendment, modification, renewal or extension of a Letter of Credit (other than any amendment, modification, renewal or extension of a Letter of Credit which does not increase the face amount or extend the maturity of such Letter of Credit) after the Closing Date, in each case, shall be conditioned upon (a) the accuracy in all material respects of all representations and warranties in the Bank Credit Documentation as of the date of such extension of credit (or, in the case of representations or warranties qualified by materiality or Material Adverse Effect, the accuracy thereof in all respects) except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall be true and correct in all material respects as of such earlier date, (b) there being no default or event of default in existence at the time of, or after giving effect to the making of, such extension of credit, (c) the Borrower certifying as to pro forma compliance with the Financial Covenant (whether or not then in effect) as of the most recently ended Test Period and (d) delivery of a customary borrowing notice or request for issuance of a Letter of Credit, as applicable.

Representations and Warranties: Subject in all respects to the Limited Conditionality Provisions and the Bank Documentation Standard, substantially the same as (including, for the avoidance of doubt, with respect to materiality qualifiers, exceptions and limitations) the representations and warranties set forth in the Borrower’s Existing Credit Agreement.

Affirmative Covenants: Subject in all respects to the Bank Documentation Standard, substantially the same as (including, for the avoidance of doubt, with respect to materiality qualifiers, baskets, thresholds, exceptions and limitations) the affirmative covenants set forth in the Borrower’s Existing Credit Agreement; provided that the Borrower shall be required to provide to the Administrative Agent and the Lenders, promptly upon obtaining knowledge thereof, changes to the beneficial ownership information provided pursuant to the Beneficial Ownership Regulation.

Negative Covenants: Subject in all respects to the Bank Documentation Standard, substantially the same as (including, for the avoidance of doubt, with respect to materiality qualifiers, baskets, thresholds, incurrence ratios, exceptions and limitations) the negative covenants set forth in the Borrower’s Existing Credit Agreement; provided that the Bank Credit
Documentation shall include, among other limitations and exceptions consistent with the Bank Documentation Standard:

(a) limitations on the incurrence of debt (which shall permit, among other exceptions consistent with the Bank Documentation Standard, (i) on terms and conditions substantially the same as the Borrower’s Existing Credit Agreement, Incremental Equivalent Debt (as defined in the Borrower’s Existing Credit Agreement in lieu of the Incremental Facilities (provided that, with respect to junior lien debt and unsecured debt, in lieu of complying with the First Lien Leverage Ratio requirement set forth in the section entitled “Incremental Facilities”, in the case of junior lien debt, the Secured Leverage Ratio would not exceed either (x) 0.50x greater than the Secured Leverage Ratio as of the Closing Date or (y) at the Borrower’s option, if such secured debt is incurred to finance a Permitted Acquisition, the Secured Leverage Ratio in effect immediately prior to the consummation of such Permitted Acquisition, or in the case of unsecured debt, the Total Leverage Ratio would not exceed (x) 1.50x greater than the Total Leverage Ratio as of the Closing Date or (y) at the Borrower’s option, if such unsecured debt is incurred to finance a Permitted Acquisition, the Total Leverage Ratio in effect immediately prior to the consummation of such Permitted Acquisition, in each case (calculated on a pro forma basis); provided further that (I) the incurrence of such indebtedness shall reduce dollar for dollar the amount of indebtedness that the Borrower may incur in respect of the Incremental Facilities, (II) other than Permitted Inside Maturity Debt or any Incremental Term A Facility, such indebtedness matures at least 91 days after the latest date of maturity of the Term B Loan Facility and of any Incremental Term Facility, (III) any subsidiaries of the Borrower that do not guarantee the Senior Secured Credit Facilities shall not guarantee such indebtedness, (IV) any secured debt shall be secured solely by Collateral on a pari passu or junior lien basis and shall be subject to a customary intercreditor agreement reasonably acceptable to the Administrative Agent and the Borrower, (V) any debt incurred in the form of term loans secured on a pari passu basis with the Term B Loans that would have triggered the MFN Adjustment if such Indebtedness were incurred in the form of Incremental Term Facilities, then the incurrence of such debt shall trigger the MFN Adjustment and (VI) such debt shall be on other terms to be set forth in the Bank Credit Documentation, (ii) indebtedness incurred and/or assumed on the terms set forth in the second succeeding paragraph, (iii) purchase money indebtedness and capital leases in an amount equal to the greater of (x) $170 million and (y) 25.0% of LTM EBITDA, (iv) indebtedness arising from agreements providing for adjustments of purchase price or “earn outs” entered into in connection with acquisitions or investments, (v) other indebtedness of the Borrower and its restricted subsidiaries, which requires no mandatory repayment or redemption (subject to exceptions consistent with those set forth in Borrower’s Existing Credit Agreement) prior to the date which is 91 days later than the latest maturity date of the Term B Loan Facility and any Incremental Term Facility, in each case, other than Permitted Inside Maturity Debt, subject to no event of default having occurred under the Senior Secured Credit Facilities or any Incremental Facility (before or after giving effect to such incurrence) and

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the Borrower’s Total Leverage Ratio (calculated on a pro forma basis) not exceeding (x) 1.50x greater than the Total Leverage Ratio as of the Closing Date or (y) at the Borrower’s option, if such debt is unsecured and incurred to finance a Permitted Acquisition, the Total Leverage Ratio in effect immediately prior to the consummation of such Permitted Acquisition; provided that the aggregate amount of such indebtedness that may be incurred under this clause (v) by restricted subsidiaries that are not or do not become Guarantors, together with debt incurred under the second succeeding paragraph, shall be limited to an aggregate principal amount equal to the greater of (x) $170 million and (y) 25.0% of LTM EBITDA, (vi) a general debt basket equal to the greater of (x) $340 million and (y) 50.0% of LTM EBITDA, (vii) a non-guarantor debt basket equal to the greater of (x) $170 million and (y) 25.0% of LTM EBITDA and (viii) certain ordinary course performance guarantees);

(b) limitations on liens (which shall permit, among other things to be set forth in the Bank Credit Documentation, (i) junior liens securing any secured debt issued pursuant to clause (a)(v) above, (ii) liens on the Collateral securing Refinancing Indebtedness, (iii) liens securing debt assumed in connection with a Permitted Acquisition (as hereinafter defined); provided that such liens extend to the same assets (and any improvements, accessions, proceeds, dividends or distributions in respect thereof and assets fixed or appurtenant thereto) that such liens extended to, and secure the same indebtedness, that such liens secured, immediately prior to such assumption (and any Permitted Refinancing Indebtedness (as defined in Borrower’s Existing Credit Agreement) in respect thereof) and were not created in contemplation thereof, (iv) a general lien basket in an amount equal to the greater of (x) $340 million and (y) 50.0% of LTM EBITDA and (v) liens securing indebtedness of non-guarantor subsidiaries, provided such liens only extend to assets of non-guarantor subsidiaries);

(c) limitations on asset sales (including sales of subsidiaries) consistent with the Bank Documentation Standard;

(d) limitations on investments, including acquisitions (which, among other exceptions consistent with the Bank Documentation Standard, shall permit (i) acquisitions on the terms set forth in the fourth succeeding paragraph, (ii) a general investment basket in an amount equal to the greater of (x) $340 million and (y) 50.0% of LTM EBITDA plus, subject to compliance on a pro forma basis with a Total Leverage Ratio of 4.50:1.00, the Available Amount Basket (as defined below) and (iii) unlimited investments subject to no event of default existing or resulting therefrom and compliance on a pro forma basis with a Total Leverage Ratio of 3.50:1.00 (the “Leverage Based Investment Basket”));

(e) limitations on dividends or distributions on, or redemptions of, the Borrower’s or any restricted subsidiary’s equity (“Restricted Payments”) (which shall permit, among other exceptions consistent with the Bank Documentation Standard, (i) a general Restricted Payment basket, subject to no event of default existing or resulting therefrom, in an amount equal to the greater of (x) $200 million and (y) 30% of LTM

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EBITDA plus, subject to no event of default existing or resulting therefrom and compliance on a pro forma basis with a Total Leverage Ratio of 4.50:1.00, the Available Amount Basket and (ii) unlimited Restricted Payments subject to no event of default existing or resulting therefrom and compliance on a pro forma basis with a Total Leverage Ratio of 3.50:1.00 (the “Leverage Based RP Basket”);

(f) limitations on prepayments or redemptions of subordinated or junior lien indebtedness for borrowed money (collectively, “Junior Debt”) or amendments of the documents governing such Junior Debt (subject to the Bank Documentation Standard) in a manner materially adverse to the Lenders (which shall permit, among other exceptions consistent with the Bank Documentation Standard (i) a general prepayment basket in an amount equal to the greater of (x) $200. million and (y) 30.0% of LTM EBITDA plus, subject to compliance on a pro forma basis with a Total Leverage Ratio of 4.50:1.00, the Available Amount Basket, (ii) unlimited prepayments subject to no event of default existing or resulting therefrom and compliance on a pro forma basis with a Total Leverage Ratio of 3.50:1.00, to be agreed (the “Leverage Based Prepayments Basket”), (iii) refinancing or exchanges of Junior Debt for like or junior debt subject to terms and conditions to be set forth in the Bank Credit Documentation and (iv) conversion of Junior Debt to common or “qualified preferred” equity);

(g) limitations on agreements restricting distributions, dividends and other specified transfers from restricted subsidiaries to the Borrower or any Guarantor, fundamental changes and negative pledge clauses, in each case consistent with the Bank Documentation Standard;

(h) limitations on transactions with affiliates consistent with the Bank Documentation Standard;

(i) limitations on changes in fiscal year and in lines of business consistent with the Bank Documentation Standard; and

(j) modifying organizational documents in a manner materially adverse to Lenders consistent with the Bank Documentation Standard.

The negative covenants will be subject, in the case of each of the foregoing covenants to exceptions, qualifications and “baskets” to be set forth in the Bank Credit Documentation. In addition, the negative covenants described in clauses (d), (e) and (f) above shall include an “Available Amount Basket”, which shall mean a cumulative amount equal to (a) the greater of (x) $200 million and (y) 30.0% of LTM EBITDA, plus (b) the retained portion of Excess Cash Flow (provided that the calculation of Excess Cash Flow shall exclude Excess Cash Flow generated by non-U.S. subsidiaries that would be prohibited under any applicable laws from being repatriated to the United States or that the Borrower determines in good faith would result in a tax liability that is material to the amount of funds otherwise required to be repatriated (including any withholding tax) if repatriated to the United States) for each fiscal year (commencing with the first full fiscal year following the
Closing Date), plus (c) retained asset sale proceeds, plus (d) any declined proceeds in respect of any Prepayment Event, plus (e) the cash proceeds of new public or private qualified equity issuances or an equity capital contribution to the Borrower (other than disqualified stock) after the Closing Date, plus (f) the aggregate cash proceeds from debt and disqualified stock incurred after the Closing Date exchanged or converted into qualified equity, plus (g) the net cash proceeds received by the Borrower and its restricted subsidiaries after the Closing Date from sales of investments made using the Available Amount Basket (up to the amount, when combined with any amount set forth in clause (h) below, of the original investment) plus (h) returns, profits, distributions and similar amounts received in cash or cash equivalents by the Borrower and its restricted subsidiaries after the Closing Date on investments made using the Available Amount Basket (up to the amount, when combined with any amount set forth in clause (g) above, of the original investment), plus (i) the investments of the Borrower and its restricted subsidiaries in any unrestricted subsidiary out of the Available Amount Basket that has been re-designated as a restricted subsidiary or that has been merged or consolidated with or into the Borrower or any of its restricted subsidiaries after the Closing Date (up to the fair market value (as determined in good faith by the Borrower) of the investments of the Borrower and its restricted subsidiaries at the time of such re-designation or merger or consolidation); provided that in no event shall the Available Amount Basket at any time be less than $0.

The Borrower or any restricted subsidiary will be permitted to incur and/or assume indebtedness in connection with a Permitted Acquisition so long as (i) with respect to any newly incurred indebtedness, (x) other than Permitted Inside Maturity Debt, the maturity date of such indebtedness is no earlier than 91 days later than the final maturity date of the Term B Loan Facility, and any Incremental Term Facility, (y) other than Permitted Inside Maturity Debt, such indebtedness requires no mandatory repayment or redemption (other than customary change of control or asset sale offers or upon any event of default) prior to the date which is 91 days later than the latest maturity date of the Term B Loan Facility, and any Incremental Term Facility, and (z) such indebtedness is unsecured or is only secured to the extent permitted pursuant to clause (b) under the heading “Negative Covenants” above, (ii) with respect to assumed indebtedness, such indebtedness is only the obligation of the person and/or person’s subsidiaries that are acquired or that acquired the relevant assets and such indebtedness was not incurred in contemplation of such acquisitions, (iii) the Total Leverage Ratio (calculated on a pro forma basis) would not exceed (x) 1.75x greater than the Total Leverage Ratio as of the Closing Date (without giving effect to clause (ii) of the definition of Consolidated Funded Indebtedness) or (y) at the Borrower’s option, if such debt incurred and/or assumed in connection with such Permitted Acquisition is unsecured, the Total Leverage Ratio in effect immediately prior to the consummation of such Permitted Acquisition and (iv) before and after giving effect thereto, no event of default has occurred and is continuing; provided that the aggregate amount of indebtedness that may be incurred under clause (i) of this paragraph by
restricted subsidiaries that are not Guarantors shall not exceed an aggregate principal amount equal to the greater of (x) $170 million and (y) 25.0% of LTM EBITDA.

The Borrower or any restricted subsidiary will be permitted to make non-ordinary course of business asset sales or dispositions so long as (a) such sales or dispositions are for fair market value, (b) at least 75% of the consideration for asset sales and dispositions shall consist of cash or cash equivalents (subject to exceptions to be set forth in the Bank Credit Documentation, which shall include a basket for non-cash consideration that may be designated as cash consideration in an aggregate amount to be set forth in the Bank Credit Documentation) and (c) before and after giving effect to such asset sale, no event of default has occurred and is continuing.

The Borrower or any restricted subsidiary will be permitted to make acquisitions of the equity interests in a person that becomes a restricted subsidiary, or all or substantially all of the assets (or all or substantially all the assets constituting a business unit, division, product line or line of business) of any person (each, a “Permitted Acquisition”) so long as (a) there is no event of default existing at the time of or after giving pro forma effect to such acquisition, (b) the acquired company or assets are in a similar, ancillary, complementary or related line of business as the Borrower and its subsidiaries and (c) subject to the limitations set forth in “Guarantors” and “Security” above, the acquired company and its subsidiaries (other than any subsidiaries of the acquired company designated as an unrestricted subsidiary as provided in “Unrestricted Subsidiaries” below) will become Guarantors and pledge their Collateral to the Administrative Agent. Cash consideration paid in respect of acquisitions made pursuant to this paragraph (and, for the avoidance of doubt, not any other applicable investment carveouts, baskets or thresholds) of entities that do not become Guarantors and of assets by entities that are not Guarantors shall not exceed an amount equal to the greater of (x) $200 million and (y) 30.0% of LTM EBITDA.

Each covenant shall also provide that if the exceptions and baskets set forth therein includes a combination of fixed dollar (including any related builder or grower component) baskets, exceptions and thresholds (“Fixed Baskets”), and amounts permitted under non-fixed dollar baskets, exceptions and thresholds (“Non-Fixed Baskets”) or amounts otherwise subject to a financial ratio or test (“Financial Incurrence Tests”) in concurrent transactions, a single transaction or a series of related transactions, any Financial Incurrence Tests and Non-Fixed Baskets shall be calculated without giving effect to the utilization of such Fixed Baskets (and the Borrower shall be permitted to, at its option, divide and classify such actions or transactions (or portions thereof) within any applicable covenant and later (on one or more occasions) re-divide and/or reclassify under one or more of such baskets, exceptions and thresholds within such covenant, including to reclassify utilization of any Fixed Basket or other Non-Fixed Basket, provided, that if any Financial Incurrence Tests would be satisfied in any subsequent fiscal quarter following the utilization of any Fixed Basket or other Non-Fixed Basket,
such reclassification shall be deemed to have automatically occurred if not elected by the Borrower) In calculating any Non-Fixed Baskets (including any Financial Incurrence Tests), any amounts incurred under any Fixed Basket and/or any other Non-Fixed Basket contemporaneously therewith, shall not be given effect in calculating the applicable Non-Fixed Basket (but giving full pro forma effect to all applicable and related transactions (including the use of proceeds of all indebtedness to be incurred and any repayments, repurchases and redemptions of indebtedness) and all other permitted pro forma adjustments) (this paragraph, the “Stacking and Reclassification Provisions”).

Financial Covenant:  Term B Loan Facility: None.

Term A Loan Facility and Revolving Credit Facility: A maximum Secured Leverage Ratio financial covenant set at a level to be based on a 30% cushion to the Secured Leverage Ratio of the Borrower and its subsidiaries as of the Closing Date, which shall be subject to stepdowns to be mutually agreed (the “Financial Covenant”). The Financial Covenant shall be tested on the last day of each fiscal quarter of the Borrower.

Unrestricted Subsidiaries: Subject in all respects to the Bank Documentation Standard, the Bank Credit Documentation will contain provisions pursuant to which the Borrower will be permitted to designate (or re-designate) any existing or subsequently acquired or organized Restricted Subsidiary as an “unrestricted subsidiary” (each, an “Unrestricted Subsidiary”) and designate (or re-designate) any such Unrestricted Subsidiary as a Restricted Subsidiary on terms and conditions substantially the same as those set forth in the Borrower’s Existing Credit Agreement.

Events of Default: Limited to the following (to be applicable to the Borrower and its restricted subsidiaries only): nonpayment of principal when due; nonpayment of interest or other amounts after a customary five (5) business day grace period; violation of covenants (subject, in the case of affirmative covenants (other than notices of default and maintenance of the Borrower’s existence), to a thirty (30) day grace period); provided that a breach of the Financial Covenant shall not constitute an Event of Default with respect to the Term B Loan Facility or trigger a cross-default under the Term B Loan Facility until the date on which the Revolving Credit Loans (if any) and Term A Loans have been accelerated and the Revolving Commitments have been terminated as a result of such breach by the Lenders holding Revolving Commitments and Term A Loans (collectively, the “Pro Rata Lenders”) in accordance with the terms of the Revolving Credit Facility and the Term A Loan Facility (together, the “Pro Rata Facilities”); any representation or warranty proving to have been materially incorrect when made; cross default to indebtedness of an amount in excess of an amount to be set forth in the Bank Credit Documentation; bankruptcy or other insolvency events of the Borrower or its material restricted subsidiaries (with a 60 day grace period for involuntary events); unpaid or unstayed monetary judgments of an amount in excess of an amount to be set forth in the Bank Credit Documentation; customary ERISA events; actual or asserted

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invalidity of a material portion of the Guarantees, the security documents or any security interest in Collateral and change of control with respect to the Borrower.

**Assignments and Participations:** Each Lender will be permitted to make assignments in minimum amounts to be agreed to other entities approved by (x) the Administrative Agent, (y) in the case of loans and commitments under the Revolving Credit Facility, the Issuing Lenders and (z) so long as no payment or bankruptcy default has occurred and is continuing, the Borrower, each such approval not to be unreasonably withheld or delayed; **provided, however,** that (i) no approval of the Borrower shall be required in connection with assignments to other Lenders (limited in the case of the Revolving Credit Facility and the Term A Loan Facility to another Lender under the Revolving Credit Facility or the Term A Loan Facility, as applicable) or any of their affiliates or approved funds, (ii) the Borrower shall be deemed to have given consent to an assignment if it shall have failed to respond to a written request within 10 business days of Borrower’s receipt of such written request and (iii) no approval of the Administrative Agent shall be required in connection with assignments to other Lenders (limited in the case of the Revolving Credit Facility and the Term A Loan Facility to another Lender under the Revolving Credit Facility or the Term A Loan Facility, as applicable) or any of their affiliates or approved funds. Each Lender will also have the right, without consent of the Borrower or the Administrative Agent, to assign as security all or part of its rights under the Bank Credit Documentation to any Federal Reserve Bank. Lenders will be permitted to sell participations with voting rights limited to customary significant matters. An assignment fee in the amount of $3,500 will be charged with respect to each assignment unless waived by the Administrative Agent in its sole discretion. Notwithstanding the foregoing, no loans or commitments shall be assigned or participated to (x) the Borrower or any of its subsidiaries (except as permitted below) or (y) any natural person.

In addition, loans under the Term B Loan Facility and Term A Loan Facility may be purchased by and assigned to the Borrower or any of its subsidiaries on a non-pro rata basis on terms and conditions (subject to the Bank Documentation Standard) substantially the same as those set forth in the Borrower’s Existing Credit Agreement.

**Waivers and Amendments:** Amendments and waivers of the provisions of the Bank Credit Documentation will require the approval of Lenders holding more than 50% of the aggregate amount of the extensions of credit and unused commitments under the Senior Secured Credit Facilities (the “**Required Lenders**”), except that (a) the consent of each Lender directly and adversely affected thereby will also be required with respect to (i) increases to the commitment amount of such Lender, (ii) reductions of principal, interest, or fees payable to such Lender (other than waivers of default interest, a default or event of default or mandatory prepayment); (iii) extensions of scheduled maturities or times for payment of amounts payable to such Lender (it being understood and agreed that the amendment or waiver of any mandatory prepayment, waiver of default interest, default or event of default shall only require the consent of the

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Required Lenders), (iv) amendments that have the effect of subordinating the payment obligations or the lien securing the Collateral, in respect of obligations of the Borrower and the Guarantors under the Senior Secured Credit Facilities and (v) changes in certain pro rata provisions and the waterfall from enforcement and (b) the consent of each Lender shall be required with respect to (i) releases of all or substantially all of the Collateral or the release of all or substantially all of the value of any guarantees (other than in connection with permitted asset sales, dispositions, mergers, liquidations or dissolutions or as otherwise permitted under the Bank Credit Documentation) and (ii) the percentage contained in the definition of Required Lenders or other voting percentages.

Notwithstanding the foregoing, (x) only Pro Rata Lenders holding at least a majority of the sum of the amount of the outstanding Revolving Commitments, plus the aggregate outstanding principal amount of Term A Loans, shall have the ability to (and be required in order to) amend the Financial Covenant and waive a breach of the Financial Covenant and (y) only Lenders holding at least a majority of the outstanding credit under the Revolving Credit Facility shall have the ability to (and be required in order to) amend or waive any condition to the extension of credit under the Revolving Facility.

In connection with any proposed amendment, modification, waiver or termination (a “Proposed Change”) requiring the consent of all Lenders or all directly and adversely affected Lenders, if the consent to such Proposed Change of other Lenders whose consent is required is not obtained (but the consent of the Required Lenders or Lenders holding more than 50% of the directly and adversely affected facility, as applicable, is obtained) (any such Lender whose consent is not obtained being referred to as a “Non-Consenting Lender”), then the Borrower may, at its option and at its sole expense and effort, upon notice to such Non-Consenting Lender and the Administrative Agent, require such Non-Consenting Lender to assign and delegate, without recourse (in accordance with and subject to customary restrictions on assignment), all its interests, rights and obligations under the Bank Credit Documentation to an assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment); provided that, such Non-Consenting Lender shall have received payment of an amount equal to the outstanding principal of its loans, accrued interest thereon, accrued fees and all other amounts then due and owing to it under the Bank Credit Documentation (at the option of the Borrower, with respect to the class or classes of loans or commitments subject to such Proposed Change) from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts). The Bank Credit Documentation shall contain other customary “yank-a-bank” provisions.

**Indemnification:** Subject in all respects to the Bank Documentation Standard, substantially the same as the Borrower’s Existing Credit Agreement.

**Governing Law:** New York.

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Expenses: Subject in all respects to the Bank Documentation Standard, substantially the same as the Borrower’s Existing Credit Agreement.

Counsel to the
Commitment Parties: Cahill Gordon & Reindel LLP.

Miscellaneous: Each of the parties shall (i) waive its right to a trial by jury and (ii) submit to New York jurisdiction. The Bank Credit Documentation shall contain provisions for replacing the commitments of a (i) “defaulting lender” and (ii) a Lender seeking indemnity for increased costs or grossed-up tax payments in each case consistent with the Bank Documentation Standard

Annex I-25
CONDITIONS PRECEDENT TO CLOSING

Capitalized terms not otherwise defined herein have the same meanings as specified therefor in the Commitment Letter to which this Annex II is attached.

The initial extensions of credit under the Senior Secured Credit Facilities will, subject in all respects to the Limited Conditionality Provisions, be subject to satisfaction (or waiver by the Lead Arrangers) of the following conditions precedent:

(i) The Acquisition shall have been, or shall be, substantially concurrently with execution of the Credit Documentation, consummated in all material respects in accordance with the terms of the Agreement and Plan of Merger, dated May 4, 2022 among the Borrower, Merger Sub and the Target (together with all Schedules and Exhibits thereto, the “Acquisition Agreement”), without giving effect to any consent or amendment, change or supplement or waiver of any provision thereof in any manner that is materially adverse to the interests of the Lead Arrangers (in their capacities as such) without the prior written consent of the Lead Arrangers (not to be unreasonably withheld, delayed or conditioned); provided that the Lead Arrangers shall be deemed to have consented to such amendment, change, supplement or waiver unless they shall object thereto in writing within three business days after receipt of written notice of such amendment, change, supplement or waiver; provided further that (i) any reduction in the purchase price for the Acquisition set forth in the Acquisition Agreement shall not be deemed to be materially adverse to the interests of the Lead Arrangers (in their capacities as such) so long as such reduction is applied pro rata to reduce the Term B Loan Facility and Term A Loan Facility on a dollar for dollar basis; (ii) any increase in the purchase price set forth in the Acquisition Agreement shall be deemed to be not materially adverse to the interests of the Lead Arrangers (in their capacities as such) so long as such purchase price increase is funded with cash on hand, proceeds of capital stock of Borrower, or an increase in common equity comprising the Equity Consideration of the Borrower; and (iii) any amendment or modification of the definition of “Company Material Adverse Effect” in the Acquisition Agreement will be deemed to be materially adverse to the interests of the Lead Arrangers.

(ii) No Company Material Adverse Effect (as defined in the Acquisition Agreement) shall have occurred since the date of the Acquisition Agreement and be continuing.

(iii) The Administrative Agent shall have received the Solvency Certificate from the Borrower’s chief financial officer or other person with similar responsibilities in substantially the form attached hereto on Annex III.

(iv) The Administrative Agent shall have received (A) customary opinions of counsel to the Borrower and the Guarantors, (B) customary corporate (or other organizational) resolutions from the Borrower and the Guarantors, customary secretary’s certificates from the Borrower and the Guarantors appending such resolutions, charter documents and an incumbency certificate and (C) a customary borrowing notice (provided that such notice shall not include any representation or statement as to the absence (or existence) of any default or event of default or any bring-down of representations or warranties).

(v) The Administrative Agent shall have received: (A) the audited consolidated balance sheets and related consolidated statements of operations or income, cash flows and shareholders’ equity of each of the Borrower and the Target for the three most recently completed fiscal years of the Borrower and the Target, respectively, ended at least 120 days before the Closing Date (the “Annual Financial Statements”); (B) the unaudited consolidated balance sheets and related statements of operations or income and cash flows of each of the Borrower and
the Target for each subsequent fiscal quarter (other than any fiscal fourth quarter) of the Borrower and the Target, respectively, ended at least 60 days before the Closing Date (the “Quarterly Financial Statements”) and, in the case of clauses (A) and (B) of this paragraph (v), it being understood and agreed that such financial statements of the Borrower and the Target may be in the same form and scope as the financial statements previously delivered to the Lead Arrangers or publicly filed with or furnished to the SEC prior to the Original Signing Date; and (C) a pro forma balance sheet and related statement of operations of the Borrower and its subsidiaries (including the Acquired Business) as of and for the twelve-month period ending with the latest quarterly period of the Borrower covered by the Annual Financial Statements or the Quarterly Financial Statements, as applicable, in each case after giving effect to the Transactions (the “Pro Forma Financial Statements”), which need not comply with the requirements of Regulation S-X under the Securities Act, as amended, or include adjustments for purchase accounting or any reconciliation to generally accepted accounting principles in the United States. The Administrative Agent hereby acknowledges receipt of each of the above Annual Financial Statements and Quarterly Financial Statements of the Borrower and the Target that have been publicly filed with or furnished to the SEC (such Annual Financial Statements and Quarterly Financial Statements, collectively, the “Delivered Financial Information”).

(vi) The Lead Arrangers shall have received the financial statements described in clauses (A) and (B) of paragraph (v) above (it being understood that only the Delivered Financial Information shall be required to be delivered under this clause (vi)) (the “Required Information”) for the Senior Secured Credit Facilities not later than 15 consecutive calendar days prior to the Closing Date; provided that once such 15 consecutive calendar day period begins, it shall not restart or cease to continue as a result of the requirement to deliver any subsequent Annual Financial Statements or Quarterly Financial Statements pursuant to clauses (A) or (B), respectively, of paragraph (v) above after such 15 consecutive calendar day period begins or after such Required Information has otherwise been provided; provided further that none of July 5, 2022, July 3, 2023 or July 5, 2023 shall constitute a calendar day for purposes of such calculation (provided however that such exclusion shall not restart such period) and if such 15 consecutive calendar day period has not ended on or prior to (x) August 22, 2022, then it will be deemed to not commence earlier than September 6, 2022 or (y) December 16, 2022, then it will be deemed to not commence earlier than January 2, 2023; provided, further, that such 15 consecutive calendar day period in any event shall end on any earlier date prior to the expiration of such 15 consecutive calendar day period if the initial funding under the Senior Secured Credit Facilities is consummated on such earlier date (including closing into escrow). If the Borrower in good faith reasonably believes it has delivered the Required Information, it may deliver to the Lead Arrangers a written notice to that effect stating the date upon which it believes such Required Information was first provided, in which case the Borrower shall be deemed to have complied with such obligation to furnish the Required Information on the date set forth in such notice, and the 15 consecutive calendar day period referred to above will be deemed to have commenced on the date set forth in such notice, in each case, unless the Lead Arrangers in good faith at the time such notice is given reasonably believe that the Borrower has not completed delivery of such Required Information and, within two business days after the receipt of such notice from the Borrower, the Lead Arrangers deliver a written notice to the Borrower to that effect (stating with reasonable specificity which such Required Information has not been delivered, in which case such Required Information shall be deemed to have been delivered when such specific items have been delivered by the Borrower); provided, that notwithstanding the foregoing, the delivery of the Required Information shall be satisfied at any time at which (and so long as) the Lead Arrangers shall have actually received the Required Information, regardless of whether or when any such notice is delivered to the Borrower.

(vii) All fees due to the Administrative Agent, the Lead Arrangers and the Lenders under the Fee Letter and the Commitment Letter to be paid on or prior to the Closing Date, and

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all reasonable and documented out-of-pocket expenses to be paid or reimbursed under the Commitment Letter to the Administrative Agent and the Lead Arrangers on or prior to the Closing Date that have been invoiced at least three business days prior to the Closing Date, shall have been paid, in each case, from the proceeds of the initial funding under the Senior Secured Credit Facilities (which amounts may be offset against the proceeds of the Term B Loan Facility).

(viii) Substantially concurrently with the initial funding of the Senior Secured Credit Facilities, all existing third-party indebtedness of the Borrower and its subsidiaries under the Borrower’s Existing Credit Agreement, in each case, will be repaid, redeemed, repurchased, defeased, discharged, refinanced or terminated, and all related guarantees and security interests will be terminated and released (or arrangements for such termination and release shall have been made) (the “Refinancing”).

(ix) The Borrower and each of the Guarantors shall have provided the documentation and other information to the Administrative Agent and each Lead Arranger that are required by regulatory authorities under applicable “know-your-customer” rules and regulations, including the Patriot Act and information relating to beneficial ownership of the Borrower required by the Beneficial Ownership Regulation, in each case, at least 3 business days prior to the Closing Date to the extent such information has been reasonably requested in writing by the Administrative Agent or any Lead Arranger at least 10 business days prior to the Closing Date.

(x) Subject in all respects to the Limited Conditionality Provisions, all documents and instruments required to create and perfect the Administrative Agent’s security interests in the Collateral shall have been executed and delivered by the Borrower and the Guarantors (or, where applicable, the Borrower and the Guarantors shall have authorized the filing of financing statements under the Uniform Commercial Code) and, if applicable, be in proper form for filing.
This SOLVENCY CERTIFICATE (this “Certificate”) is delivered in connection with that certain Credit Agreement dated as of [____], 2022 (as amended, supplemented, amended and restated, replaced, or otherwise modified from time to time, the “Credit Agreement”) among MaxLinear, Inc., a Delaware corporation (the “Borrower”), Wells Fargo Bank, National Association, as administrative agent [and collateral agent], the financial institutions from time to time party thereto as lenders and the other parties thereto. Capitalized terms used herein without definition have the same meanings as in the Credit Agreement.

As of the date hereof, in my capacity as a Financial Officer of the Company (as defined below), and not in any individual or personal capacity, I believe that:

1. Company (as used herein “Company” means the Borrower and its subsidiaries, taken as a whole on a consolidated basis) is not now, nor will the incurrence of the obligations under the Credit Agreement and the consummation of the Acquisition on the Closing Date (and after giving effect to the application of the proceeds of the Loans), on a pro forma basis, render the Company “insolvent” as defined in this paragraph; in this context, “insolvent” means that (i) the fair value of assets (on a going concern basis) of the Company at a fair valuation is less than the amount that will be required to pay the total liability on existing liabilities as they become absolute and matured, (ii) the present fair salable value of assets (on a going concern basis) of the Company is less than the amount that will be required to pay the probable liability on existing liabilities as they become absolute and matured in the ordinary course of business, or (iii) the Company is unable to pay its current obligations in the ordinary course of business as they generally become due. The term “liabilities” as used in this Certificate refers to the recorded liabilities of the Company as of the date hereof after giving effect to the consummation of the Transactions, determined in accordance with GAAP consistently applied and “values of assets” shall mean the amount that would be obtained by a willing seller if the assets (both tangible and intangible) in their entirety were to be purchased by a willing buyer, with a commercially reasonable period of time, each having reasonable knowledge of the relevant facts, with neither being under compulsion to act.

2. The incurrence of the obligations under the Credit Agreement and the consummation of the other Transactions on the Closing Date (and after giving effect to the application of the proceeds of the Loans), on a pro forma basis, will not leave the Company with unreasonably small capital with which to conduct their businesses. I understand that “unreasonably small capital” depends upon the nature of the particular business or businesses conducted or to be conducted, and I have reached my conclusion based on my current assumptions regarding the needs and anticipated needs for capital of the businesses conducted or anticipated to be conducted by the Company in light of projected financial statements and available credit capacity, which current assumption I do not believe to be unreasonable in light of the circumstances applicable thereto.

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1 Defined terms to be aligned with those in the definitive Credit Agreement, but consistent with this form of solvency certificate.
IN WITNESS WHEREOF, the undersigned has executed this Solvency Certificate in such undersigned’s capacity as an officer of the Borrower, on behalf of the Borrower, and not individually, as of the date first above written.

MAXLINEAR, INC.

By: ___
Name: ___
Title: ___

Annex III-2
## SIGNIFICANT SUBSIDIARIES OF MAXLINEAR, INC.

<table>
<thead>
<tr>
<th>Name</th>
<th>Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MaxLinear Asia Singapore Pte. Ltd.</td>
<td>Singapore</td>
</tr>
</tbody>
</table>
We have issued our reports dated February 1, 2023, with respect to the consolidated financial statements, financial statement schedule, and internal control over financial reporting included in the Annual Report of MaxLinear, Inc. on Form 10-K for the year ended December 31, 2022. We consent to the incorporation by reference of said reports in the Registration Statements of MaxLinear, Inc. on Form S-3 (File No. 333-248697), Form S-4 (File No. 333-202679) and on Forms S-8 (File No. 333-217021, File No. 333-218022, File No. 333-223847, File No. 333-230606, File No. 333-237274, File No. 333-254961, and File No. 333-263824).

/s/ Grant Thornton LLP

Newport Beach, California
February 1, 2023
Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Kishore Seendripu, Ph.D., certify that:

1. I have reviewed this Form 10-Q of MaxLinear, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 1, 2023

/s/ Kishore Seendripu, Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)
Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Steven G. Litchfield, certify that:

1. I have reviewed this Form 10-Q of MaxLinear, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 1, 2023

/s/ Steven G. Litchfield

Steven G. Litchfield
Chief Financial Officer and Chief Corporate Strategy Officer
(Principal Financial Officer)
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF
THE SARBANES-OXLEY ACT OF 2002

I, Kishore Seendripu, Ph.D., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of MaxLinear, Inc. on Form 10-Q for the fiscal quarter ended December 31, 2022 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of MaxLinear, Inc.

Date: February 1, 2023

By: /s/ Kishore Seendripu, Ph.D.
Name: Kishore Seendripu, Ph.D.
Title: President and Chief Executive Officer

I, Steven G. Litchfield, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of MaxLinear, Inc. on Form 10-Q for the fiscal quarter ended December 31, 2022 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of MaxLinear, Inc.

Date: February 1, 2023

By: /s/ Steven G. Litchfield
Name: Steven G. Litchfield
Title: Chief Financial Officer and Chief Corporate Strategy Officer