



2023 ANNUAL REPORT

April 4, 2024

Dear Fellow MaxLinear Stockholders:

I am pleased to note that, in 2023, we made tremendous progress towards establishing MaxLinear as a broad-based leader in radio frequency (RF)/analog and high-performance mixed-signal semiconductor system-on-chip solutions for networking products. Our products and technology address the significant growth in the long-term in demand for fatter and faster data pipes across various end markets. In 2023, we realized revenue of \$693 million, gross profit of approximately \$386 million and we generated approximately \$43 million in operating cash flows. Our Broadband Access, Infrastructure, Industrial and Multi-Market, and Connectivity revenues represented 29%, 26%, 25%, and 20% respectively, of overall sales. Looking forward, I anticipate that our multi-year investments and initiatives in Infrastructure will be the highlight of our growth story, and my increased optimism is borne by the initial revenues and design-win momentum of our new product initiatives.

With regards to our new infrastructure product initiatives, high-speed optical interconnects for datacenter applications are of strategic importance. We are steadily gaining product traction with new design wins driving our initial revenue growth. Early-stage revenue contributions from our high-speed optical interconnect 5nm CMOS 800G PAM4 Digital Signal Processors (DSP) family, Keystone, have already begun. Additionally, there are new production ramps slated for the second half of 2024, which are expected to drive more meaningful run-rate growth in 2025. The accelerating deployment of AI or Artificial Intelligence in the Cloud Datacenter and Enterprise Compute markets is driving unprecedented growth of and the demand for high-speed optical interconnects. It is also providing a strong catalyst for the transition to 800Gbps and beyond speeds. Our investment and innovation over several years has enabled us to differentiate with a highly competitive and broad portfolio of PAM4 DSPs addressing optical transceiver, Active Optical Cable (AOC) and Active Electrical Cable (AEC) high-speed interconnect applications.

We continue to execute well on our growth plans for our wireless infrastructure business, with the launch of our new industry-leading product, Sierra, which is our flagship 5G Open Radio Access Network (RAN) system-on-chip device addressing Macro and Massive Multiple-Input Multiple-Output (MIMO) radio remote units (RRUs) and small cell applications. Sierra is a complete silicon and software solution that provides radio unit (RU) designers with a flexible system building block to deliver Macro, Massive MIMO, and Small Cell radios for Open RAN applications with high performance, low power consumption, and short time-to-market advantages. Entering 2025, along with the increasing demand for 5G RUs, we expect the demand for our wireless backhaul microwave and millimeter wave transport radio and modem products to grow as part of a multi-year upgrade cycle. In 2023 alone, our 5G Wireless backhaul product sales were up 131% compared with 2022 and underpinned the strong growth of our overall Infrastructure revenues. We believe that our early success in this very large, high-growth 5G wireless market has the potential to drive strong overall Infrastructure revenue growth.

We continue to execute well on our growth plans for Enterprise product revenues, with new industry-leading product introductions addressing both Ethernet and Storage Accelerator enterprise market opportunities. In 2023, we taped out and have started to sample our new Ethernet product Swan Creek, which integrates eight 2.5Gbps speed capable Ethernet physical layer (EPHY) ports and a switch in a single chip. Swan Creek can operate both as a smart switch and as a multi-port PHY for enterprise applications. We have secured design wins at a major Tier-1 enterprise original equipment manufacturer (OEM) customer and multiple design wins in the small and medium business (SMB) market, and we anticipate initial revenues in 2024 and strong revenue growth momentum to continue into 2025. Additionally, our latest storage accelerator product, Panther-3, has entered mass production with strong design-win momentum and revenue traction at major enterprise storage and server OEMs. We believe that our initial Panther-3 revenues in 2023 have the potential to grow significantly to approximately \$50M to \$75M over the next 3 years.

While the Infrastructure market remains our most important area of new product initiatives and strategic focus, in 2023, within broadband access and connectivity, we began ramping our single-chip integrated fiber Passive Optical Network (PON) and 10Gbit processor gateway and Wi-Fi-6E connectivity solutions with a major Tier-1 North American service provider. We also expect to begin ramping a new opportunity with a second major provider in 2024. This further establishes MaxLinear's competitive positioning in the fiber PON market and builds on our PON revenue of approximately \$50M in 2023.

We expect to be able to more than double our PON revenues over the next two years. We also announced the successful development of our next-generation Wi-Fi Connectivity product, Wav700, which is the world's first single-chip tri-band, quad-MIMO, Wi-Fi7 standard compliant product. Our Wav700 device has been selected by the Wi-Fi Alliance (WFA) as one of only four devices for the WFA interoperability compliance certification test bed. We expect industrywide Wi-Fi7 rollout and Telco fiber PON broadband upgrades to be major drivers of our revenue growth in broadband access and connectivity for years to come.

Overall, we are increasingly optimistic and believe that our disciplined strategic investments can deliver on our long-term growth aspirations.

In closing, I would like to take this opportunity to express my sincere gratitude to the entire MaxLinear family – our customers, our suppliers, our employees and their families, and our stockholders. Together, we have set MaxLinear on an exciting path of innovation, growth and transformative scale. I want to wish you and your families health, cheer and prosperity.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kishore Seendripu', with a stylized flourish at the end.

Kishore Seendripu, Ph.D., Chairman of the Board of Directors and President and Chief Executive Officer

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended December 31, 2023

OR

- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Transition Period From _____ to _____

Commission file number: 001-34666

MaxLinear, Inc.

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

14-1896129

(I.R.S. Employer
Identification No.)

5966 La Place Court, Suite 100, Carlsbad California

92008

(Address of principal executive offices)

(Zip Code)

(760) 692-0711

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock	MXL	The Nasdaq Stock Market LLC

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 Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant 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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Emerging growth company

Non-accelerated filer Smaller reporting company

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.

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, 2023, the last business day of the registrant's most recently completed second fiscal quarter, was \$2.3 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 24, 2024, the registrant had 81,926,337 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 2024 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.
TABLE OF CONTENTS

		<u>Page</u>
Part I		
Item 1.	Business	5
Item 1A.	Risk Factors	18
Item 1B.	Unresolved Staff Comments	53
Item 1C.	Cybersecurity	53
Item 2.	Properties	54
Item 3.	Legal Proceedings	55
Item 4.	Mine Safety Disclosures	56
Part II		
Item 5.	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	57
Item 6.	[Reserved]	58
Item 7.	Management’s Discussion and Analysis of Financial Condition and Results of Operations	58
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	72
Item 8.	Financial Statements and Supplementary Data	73
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	73
Item 9A.	Controls and Procedures	73
Item 9B.	Other Information	75
Item 9C.	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	76
Part III		
Item 10.	Directors, Executive Officers and Corporate Governance	77
Item 11.	Executive Compensation	77
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	77
Item 13.	Certain Relationships and Related Transactions, and Director Independence	77
Item 14.	Principal Accountant Fees and Services	77
Part IV		
Item 15.	Exhibits and Financial Statement Schedules	78

MAXLINEAR, INC.

PART I

Forward-Looking Statements

The information in this Annual Report on Form 10-K for the fiscal year ended December 31, 2023, 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 terminated Merger Agreement with Silicon Motion and related legal proceedings or if we are required to or agree to pay any damages in connection with legal proceedings related to the termination of the Merger Agreement, including for any alleged breaches of the Merger Agreement, will have on our business, operating results, and financial condition;
- the effects of intense and increasing competition in our market and our ability to compete effectively;
- the effect global economic conditions including factors such as high inflation or a potential recession, may have on our business and industry;
- the effects of the cyclical nature of the semiconductor industry on our results of operations;
- our ability to sustain our current level of revenue, which has declined, and/or manage future revenue growth effectively, and our future financial performance, including our expectations regarding our revenue, gross profit or gross margin, operating expenses, excess inventory and customer demand;
- the effects of military, geopolitical and economic conflicts and tensions among countries in which we conduct business, including between the United States and China;
- the impacts from export control and technology export restrictions;
- the effects of increased tariffs imposed by the U.S. on goods from other countries and tariffs imposed by other countries on U.S. goods, export controls, or the imposition of additional trade barriers on customer demand, our revenues and operating results;
- our potential ability to retain and increase sales to existing customers and attract new customers, including potential effects of a loss or reduction in orders from customers;
- 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”;
- the potential information technology failures and offensives, including security breaches and vulnerabilities, cyber-attacks and system failures and our ability to respond to such incidents;
- the effects of any erosion of our average selling prices on our revenues and gross margins;
- our ability to grow our business, including to expand globally and into other markets, including potential effects of the failure to penetrate new markets;
- the effects of potential delays in the development of the broadband markets including international macroeconomic headwinds and consolidation trends among Pay-TV and broadband operators;
- our ability to make the substantial and productive research and development investments required to remain competitive;
- the effects of the complexity of our products, including unforeseen delays or expenses and undetected defects or bugs;
- the factors that could contribute to fluctuation of our operating results;

- the effects our inability to attract and retain customers, including reduced operating results and impaired competitive position;
- the development of our target end markets and demand for our solutions, products and services we offer;
- our future performance;
- statements regarding our business plans;
- 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;
- our ability to predict our future revenue and appropriately budget our expenses;
- the capabilities of our technology;
- expectations relating to market share and market opportunity;
- the financial and legal impact of certain laws and regulations;
- our ability to attract, train and retain qualified personnel and senior management, including the effects of our inability to do so;
- our ability to service our interest and debt obligations
- the ability of our customers and distributors to obtain financing and the impact on customer demand for our products;
- our ability to comply with governmental laws, regulations and other legal obligations related to privacy, data protection, and cybersecurity;
- our ability to conform to, and comply with, continually evolving industry standards and achieve crucial design wins;
- our ability to identify, complete and realize the benefits of future acquisitions or investments;
- 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, including with respect to our use of open source software;
- the effects of disruptions in our supply of products or materials;
- our ability to manage our relationships with, or negative impacts from, third parties that market, sell, distribute, or supply our products, or provide services and technology;
- estimates and estimate methodologies used in preparing our financial statements;
- the factors that could affect our stock price and trading volume;
- the effects of changes in tax rates, provisions, liabilities or other related obligations;
- our belief that we have adequately reserved for loss contingencies that are probable; and
- the effect certain factors may have on our tax liability, including but not limited to global and domestic tax reform;

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 SoCs, 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, manufacturing processes and conventional packaging technologies. 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, we believe our solutions have exceptional levels of functional integration and performance, low manufacturing cost, and reduced power consumption versus competition. These solutions also enable shorter design cycles, significant design flexibility and low system-level cost across a range of markets.

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 radio transceivers and modems for 4G/5G base-station and backhaul infrastructure; optical transceivers targeting hyperscale data centers; Wi-Fi and wireline routers for home networking; broadband modems compliant with Data Over Cable Service Interface Specifications, or DOCSIS, passive optical fiber standards, or PON, and digital subscriber line, or DSL; as well as power management and interface products used in these and many other markets.

Industry Background

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

- Accelerated expansion of advanced data center technologies and cloud-based services including, Amazon Web Service, or AWS, Google Cloud Platform, and software as service, or SAAS, in general;
- The explosive emergence of artificial intelligence, or AI, platforms and services such as OpenAI/Bing and Google Bard, which broadly amplify human ability to harness high-performance computing within the data center;
- Continued proliferation of on-demand Over-The-Top, or OTT, video services such as Netflix, Amazon Prime and Disney+;
- The “remote economy” accelerated by the COVID-19 pandemic, the shift to work-from-home, and increasing reliance on services such as Zoom, Microsoft Teams, and Google Meet;
- The proliferation of “Internet of Things”, or IoT, including internet-connected devices and systems within the home, manufacturing industries, and enterprises; and
- Large-scale proliferation and advancement of wireless broadband services, whether through 5G+ or WiFi, which act as an accelerant for all these technologies.

These factors, individually and combined, have created economic pressure to continuously upgrade network bandwidth and latency (i.e. the delay between sender and receiver) in order to exploit the exponential growth of 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. These cloud services may leverage generative AI, which requires racks of high-performance servers and storage connected by the fastest-available networks. They may also rely on real-time communication with systems of IoT devices including sensors, lighting, and actuators; smart speakers, smart lighting and other

smart appliances in the connected home; commercial air-conditioning and refrigeration; video surveillance equipment; manufacturing machinery; and point-of-sale and asset tracking systems. All these usage scenarios depend on reliable, fast, low-latency networks, enabled by advances in semiconductor devices which integrate wide spectrum/broadband, high-frequency circuits together with digital signal processing algorithms. Such devices not only expand the available network bandwidth, but also utilize that bandwidth more efficiently.

Markets

The above trends propel demand across many of our target end markets, such as:

- *Data Center Infrastructure:* Inside hyperscale data centers operated by Meta, Amazon, Microsoft, 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 the 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 speeds, router and switch connections are moving from 100G to 400 and 800Gbps interconnections, with the next generation of switch connections (under development) targeting 1600Gbps. These transitions are possible, in large part, owing to the innovations in semiconductor design, incorporating high-speed digital signal processing together with broadband analog and mixed signal circuits in advanced CMOS process nodes. The physical limits and challenges of removing the heat dissipated by these optical transceivers and switches are the primary barriers to even higher interconnect speeds. For all these reasons, improving the bandwidth and power efficiency of data center networking technology within and between data centers remains a critical challenge for the evolution of next-generation data centers.
- *5G Wireless Infrastructure:* Expensive, finite, fractured and discontinuous 5G wireless spectrum is being utilized more efficiently by aggregating or bonding multiple non-contiguous channels of spectrum with highly complex radio transceivers in a wireless base-station radio unit. These complex radio transceivers can also be configured in large antenna arrays to direct wireless signals more efficiently to specific users, also known as Massive Multiple-Input Multiple Output beamforming, or MMIMO. Beamforming vastly improves the efficiency with which spectrum is used (thereby increasing network capacity), as well as cell tower coverage (range), allowing an operator to do more with less. Densification, the process of increasing the number of wireless base-stations per unit area, also improves network capacity and coverage. In turn, the wireless and optical backhaul transport networks required to connect the higher number of base-station cells must have greater data capacity. As a result, microwave wireless backhaul and fronthaul transport links are migrating to millimeter wave operating frequencies where the availability of spectrum improves data capacity by more than tenfold. Implementing 5G access and transport functionality within base-stations requires radio transceivers that can process larger radio spectrum bandwidths; have expanded RF range; compensate for signal distortion from high-power amplifiers; support beamforming in large antenna arrays; and have the ability to transport high speed data to and from the network, all in a low-cost, power-efficient design.
- *Broadband Access:* Several drivers of broadband services have grown in significance in the last few years, including hybrid work-from-home, and the number and diversity of streaming service offerings. The focal point of network performance to and within the location is a gateway. These gateways not only determine the internet speeds coming into the location, but also the speed at which content is distributed throughout the location. Broadband modems – whether coaxial, fiber, or DSL, are needed to process increasingly wider portions of the spectrum carried by these media. Advances in these modems, powered by advanced SoCs, are enabling operators to aggregate the bandwidth of more channels and to widen the channels themselves, thereby increasing the download and upload speeds available to the consumer.
- *Connectivity:* Connectivity is ubiquitous in our modern and transforming economy, where increasingly every device, including those inside our smart homes, enterprises, manufacturing robots, automobiles, commercial infrastructure, personal computers, personal health wear and gadgets, etc. are connected to the internet and each other. For example, each broadband access gateway, which is the entry point for internet connection into a home, typically implements several different communication standards for distributing content and internet connectivity throughout, including Wi-Fi, Ethernet, Multimedia over Coax (MoCA), and power line communications. Each of these standards relies on dedicated transceivers and signal processing powered by custom semiconductor products. For example, newer generations of Wi-Fi utilize increasing multiplicity of transceivers to enhance throughput. Advanced implementations of Wi-Fi deploy as many as eight transceivers inside a single gateway box, combined with Wi-Fi extenders to improve coverage in a large area.

Consequently, the number of transceivers required, whether for wireless or broadband wireline access and distribution, increases proportionally to the increase in the number of broadband access connections. All connectivity standards rely on multiple wireless or wireline transceivers or single large bandwidth transceivers to improve the data handling capacity and ability to talk to multiple devices simultaneously.

- *Industrial & Multi-Market:* Manufacturing systems are increasingly being connected to each other and to the cloud. Such connectivity enables a range of operational improvements, such as better plant utilization and scheduling, reduction in power consumption, and the detection of precursors to equipment failure, enabling proactive maintenance and management. Connectivity is also at the heart of powerful new approaches to plant management such as digital twinning and industrial AI. To make connectivity economical, legacy equipment and new installations need to communicate with each other via newer and older connectivity protocol standards. Our product portfolio, featuring serial interfaces, Universal Serial Bus, or USB, Universal Asynchronous Receiver-Transmitters, or UARTS, Peripheral Component Interconnect Express, or PCIe, devices, data converters, and Power Management Integrated Circuits, or PMICs, is strategically positioned to capitalize on such growth opportunities in this expanding market. Such a diverse range of interface and bridge products effectively serves a broad spectrum of end markets, including industrial automation, process control and manufacturing IT, among others.

To summarize, the innovation in broadband, low power, integrated communication SoCs is the engine 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. This has led to a long term and continuing secular trend of compounded growth in demand for systems that feature multiplier RF, mixed signal, and high-performance analog and digital signal processing transceiver SoCs.

Challenges Faced by Providers of Systems and RF Transceivers and Optical Interconnects

Designing and implementing state-of-the-art RF and optical transceiver systems is difficult owing to the high operating frequency ranges and wide frequency bands employed by communication signals, and the low power budgets of applications. As an example of difficulty, 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. Wider bandwidths require faster devices, but demand has outstripped the rate at which semiconductor processes improve, particularly so for the mainstream CMOS process roadmap.

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

- *Receiving 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 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 high-definition video streams, video conferencing, 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 FSCTM, receiver SoCs, which can process 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.
- *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 compensate for impairments introduced as the signal propagates through wire, fiber or wireless mediums, as well as 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 MMIMO 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 access gateways, wireless base-stations and data center infrastructure applications. For example, Wi-Fi capacity and bandwidth improvement require increasing the number of transceivers per access point with greater channel bandwidths. As a result, Wi-Fi gateway faces significant heat dissipation challenges within the system as more performance and functionality are squeezed into smaller enclosures. 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 since these transceivers must fit into the same standardized module form factors as prior generations. 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 and weight capacity 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 fiber cables and connectors 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, reflections from connectors, 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. Photonic modulators often require relatively high voltage drive levels, while photodetectors are sensitive to speed degradation when connected to electrical circuits. 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 integrated circuit 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 efficient and cost-effective platform level power management integrated circuit 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 these 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 resume expansion of our sales, design and technical support organization both in the United States and overseas in future years as we develop products to drive future growth. 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. Providing an attractive work environment for all of our employees is important to us. 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, 2023, 2022 and 2021, ten customers accounted for approximately 54%, 65% and 69% of our net revenue, respectively. In the year ended December 31, 2023, one of our direct customers represented 10% of our net revenue, and in the years ended December 31, 2022 and 2021, two of our direct customers represented 31% and 26%, respectively, of our net revenue.

Products shipped to Asia accounted for 75%, 82% and 83% of our net revenue in the years ended December 31, 2023, 2022 and 2021, respectively. Products shipped to Hong Kong accounted for 37%, 43%, and 40% of our net revenue in the years ended December 31, 2023, 2022 and 2021, respectively. Products shipped to China accounted for 11%, 16% and 12% of our net revenue in the years ended December 31, 2023, 2022 and 2021, 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, 2023, 2022 and 2021 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 50%, 46%, and 47% of our net revenue in the years ended December 31, 2023, 2022 and 2021, 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 0.25 μ down to 5 nanometer. We depend on independent silicon foundry manufacturers to support our wafer fabrication requirements. Our key foundry partners include 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 products are supplied to us under the terms of a supply agreement with Intel.

Outsourced Semiconductor Assembly and Test. Upon completion of the silicon processing at the foundry, we forward the finished silicon wafers to independent semiconductor assembly 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, Greatek Electronics, Inc., JCET Group Co., Ltd, Signetics Corporation, SIGURD Microelectronics Corp., and Silicon Precision Industries.

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 third-party contractors and logistics agents 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 reduce our carbon footprint, maintain a socially responsible supply chain, and advance equity, diversity and inclusion. Our board of directors and Nominating and Corporate Governance Committee oversees our environmental, social and governance directives.

Reduce our carbon footprint. MaxLinear takes our common stewardship of the environment seriously. We believe human activities are contributing to climate change, and that we, and global society, must do our part to reduce our greenhouse gas emissions and to limit the global temperature increase to 1.5°C as called for in the Paris Agreement. Among other things, we monitor our global environmental footprint, both directly and indirectly, and in our development efforts, our engineers are consistently focused on improving the power efficiency and thermal performance of our chips, minimizing water consumption and waste, promoting recycling of reusable materials, and providing customer satisfaction through compliance with global environmental regulations as they relate to our products and operations. We are committed to contributing to the reduction of greenhouse gas emissions, and we are currently taking measures to reduce our greenhouse gas emissions and environmental impact such as purchasing 100% renewable energy for our facilities in California and elsewhere where available, using key suppliers that focus on sustainability as described below, enhancing our offices with energy saving improvements, and transitioning away from one-time use plastics used in the office to sustainable reusable products. We are currently assessing additional measures to further reduce our emissions, which are reported annually on our website, and we plan to set formal targets for reducing emissions in the future.

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 consider and monitor the practices of our current and prospective foundry partners and suppliers in assessing environmental risks in our supply chain and in selecting key vendors. We believe that our key suppliers have made a public commitment to integrate sustainability and sensitivity to environmental impact into their manufacturing processes. For example, according to their company websites, four of our largest manufacturing partners, Advanced Semiconductor Engineering, Intel Corporation, Taiwan Semiconductor Manufacturing, 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 and have either set targets to reach net zero greenhouse gas emissions, or otherwise reduce such emissions,

including in their manufacturing plans and processes. We aim to have all manufacturing partners that are certified with ISO 14001 international standards for environmental management systems and plan to launch manufacturing partner audits in the future. 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.

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. We are committed to respecting internationally recognized human rights under the UN Universal Declaration of Human Rights and UN Guiding Principles on Business and Human Rights. Our efforts include maintaining an anti-slavery policy, and a business partner labor standards 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. We file an annual conflict minerals report. Further, we remove any suppliers that continue to fail to meet our business partner labor standards and conflict minerals policies after being provided the opportunity to remedy non-compliance via implementation of a corrective action plan.

Equity, diversity, and inclusion. We acknowledge that we, along with the semiconductor and broader technology industry, 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. We aim to increase our hiring and retention of female and diverse talent including direct hires or interns from universities, including other applicable affirmative action programs requested by our customers. In November 2023, we formed a Women in Engineering group in the United States to promote leadership skills and opportunities for female engineers and seek opportunities to recruit more female engineering graduates. We report employee gender and race statistics under the below heading “Human Capital” elsewhere in this document and in our annual proxy statement.

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, 2023, we had approximately 1,328 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 semi-conductor 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., Skyworks Solutions, Inc., Credo Semiconductor Inc., MediaTek, Inc., Marvell Technology Group Ltd., MACOM Technology Solutions Holdings, Inc., Texas Instruments Incorporated, Analog Devices, Inc., Renesas Electronics Corporation, Microchip Technology Inc. and Semtech Corporation. 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;
- 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 5 pending U.S. trademark applications. 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, South Korea, Singapore, and Taiwan. 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 in the marketplace on commercially reasonable terms or we developed 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. Third parties 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 have initiated and could in the future 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, 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*” and in “Item 3 – Legal Proceedings.” 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 infringing. In addition, in the future, we may be subject to lawsuits by third parties seeking to enforce their own intellectual property rights, as described in “Risk Factors — Risks Related to Intellectual Property — *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 international, national, state, provincial, and local level. These regulations various aspects of our business and include regulations regarding environmental, health, and safety matters, such as laws and regulations adopted by the U.S. Occupational Safety and Health Administration or similar authorities in other jurisdictions. 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.

Certain of our products and technology are subject to the U.S. 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 are required to obtain an export license before we can export certain controlled products or technology to specified countries or customers. In addition, BIS imposes broad restrictions on certain identified entities and individuals, including those identified on the BIS “Denied Persons” list and BIS Entity List.

Since October 2022, the United States government has taken steps to restrict the export of certain advanced semiconductor products and technology to the People’s Republic of China and/or certain companies located in China due to national security and human rights concerns. In October 2022, BIS announced additional restrictions on products and/or technology destined for use in the People’s Republic of China, including additional export controls and/or requirements on (1)

certain advanced computing integrated circuits, computer commodities that contain such integrated circuits and certain semiconductor manufacturing items; (2) products and/or technologies that may be destined for facilities capable of producing certain advanced node integrated circuits; and (3) transactions involving items for supercomputer and semiconductor manufacturing end uses. In October 2023, BIS announced additional restrictions on the export of certain advanced semiconductors and semiconductor manufacturing technology to China, primarily focused on integrated circuits with military, data center, or artificial intelligence applications. Pursuant to those October 2023 export control amendments, various categories of integrated circuits are now subject to export licensing and export control restrictions for export or reexport to China and certain other countries. Since October 2022, we have restricted or curtailed business with certain customers and partners in China as a result of BIS restrictions.

We have experienced and could continue to 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 has resulted and could in the future 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.

Our business is also subject to various rules and regulations applicable to multinational public companies in the semiconductor industry, including: federal securities laws; competition laws and regulations, such as those promulgated by the U.S. Federal Trade Commission or authorities in the European Union; anti-corruption and anti-bribery laws, including the U.S. Foreign Corrupt Practices Act of 1977; and, additional global trade regulation, such as export controls and trade sanctions, among others. We are also subject to the rules and regulations of industry standards bodies such as the International Organization for Standardization, among others. These laws and regulations are complex, may change frequently and with limited notice, and may continue to become more stringent over time. We may incur significant expenditures in a future period as a result.

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.

As of December 31, 2023, we had 1,759 full-time employees, including 1,328 in R&D, 265 in sales and marketing, 37 in operations and semiconductor technology and 129 in administration. We have employees across 18 countries: 49% are in Asia, 25% in the Americas, 14% in Europe and 12% in the Middle East. Our workforce is represented by the following race/ethnicities: 62% Asian, 30% White or Middle Eastern, 8% Latinx or Hispanic origin, with 44% Asian and 56% White or Middle Eastern in senior management. Females represented 29% of our outside directors, 11% of senior management, 15% of our technical roles, and 19% of our total workforce. Of our total employee workforce, 9% 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 2023, our employee voluntary turnover rate was 7%.

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 stockholder 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 hybrid work schedules with one flexible day allowing all employees globally to work from home; paid time off; 401(k), pension or other retirement plans; employee leave or part-time arrangements to support well-being of employees and their dependents; sabbaticals; bereavement leave; 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 includes internal on-the-job training and we have launched a pilot training program which includes seminars, podcasts and recommended learnings under which we have received significant employee participation. Our corporate training program, which is mandatory, covers training on discrimination-free workplace, as well as our code of ethics and employee conduct, insider trading policy, global export controls and economic sanctions policy, global anti-bribery and anti-corruption policy, and anti-trust and competition law.

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 2024 Proxy Statement.

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. For example, we often experience flat-to-declining revenue in the first quarter of each fiscal year and increasing revenue in the second quarter of each fiscal year. Our historical growth may have reduced the impact of seasonal or cyclical factors that might have influenced our business to date. If our growth rate continues to slow, seasonal or cyclical variations in our operations may become more pronounced over time and may materially affect our business, financial condition, results of operations and prospects.

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 terminated merger with Silicon Motion, please refer to the section of these risk factors captioned “Risks Relating to the Terminated Merger with Silicon Motion.”

Risk Factor Summary

Risks Relating to the Terminated Merger with Silicon Motion

- The termination of the Merger Agreement and the related legal proceedings have caused us to incur substantial costs, may divert management’s attention from our business and could otherwise adversely affect our business, financial results and operations.
- If we are required to pay any damages in connection with legal proceedings related to the termination of the Merger Agreement with Silicon Motion, including for any alleged breaches of the Merger Agreement, or if we agree to make any payments in any settlement of legal proceedings related to the termination of the Merger Agreement, the amount of such damages or payments could be significant and require us to draw down on all our existing lines of credit and use our cash resources, which may not be sufficient to satisfy any damages or payments and could have a material adverse effect on our business, operating results, and financial condition. We expect that we may not be able to obtain financing on favorable terms if at all or raise additional capital for any such payments.

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.
- Global economic conditions, including factors such as high inflation or a potential recession, could continue to adversely affect our business, financial condition, and results of operations.
- We are subject to the cyclical nature of the semiconductor industry.
- A significant variance in our operating results or rates of growth, if any, could continue to lead to substantial volatility in our stock price. Our revenue has declined, and we may not sustain our current level of revenue, which has declined, and/or manage future growth effectively. The impact of excess inventory in the channel has continued to influence our customers’ expected demand for certain of our products.
- Our business, financial condition and results of operations could continue to be adversely affected by military conflicts, geopolitical and economic tensions among countries in which we conduct business, including between the United States and China, among other countries. For example, as more entities are added to restricted export control lists, or as semiconductor technology exports to other countries are further controlled, our need to seek authorization from the U.S. government may impact our ability to do business.
- 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 decrease demand and have a material adverse effect on our revenues and operating results.
- We will lose sales if we are unable to obtain or retain government authorization to export certain of our products or technology or if such authorizations are revoked, and we will be subject to legal and regulatory consequences if we do not comply with applicable export control laws and regulations.
- We also are subject to risks associated with international geopolitical and military conflicts.
- 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 major customers has had and could continue to have a material adverse effect on our revenue and operating results.
- Any legal proceedings or claims against us could be costly and time-consuming to defend and could harm our reputation regardless of the outcome.

- 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.
- Average selling prices of our products have and could decrease in the future, which could have a material adverse effect on our revenue and gross margins.
- 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.
- 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.
- We may be unable to make the substantial productive research and development investments that are required to remain competitive in our business.
- 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.
- Our operating results are subject to substantial quarterly and annual fluctuations and have fluctuated in the past and may fluctuate significantly due to a number of factors that could adversely affect our business and our stock price.
- 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 are subject to order and shipment uncertainties, and differences between our estimates of customer demand and product mix and our actual results could continue to 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.
- Our customers require our products and our third-party contractors 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.
- A failure to maintain compliance with governmental regulations could have a material adverse effect on our business.
- 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.
- We are subject to a variable amount of interest on the principal balance of our credit agreements and could continue to be adversely impacted by rising interest rates in the future. 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. In addition, rising interest rates may make it more difficult for us, our customers, and our distributors to obtain financing and service our respective interest and debt obligations, which in turn has an impact on customer demand for our products and our distributors' business.
- We are subject to governmental laws, regulations and other legal obligations related to privacy, data protection, and cybersecurity.
- Our products must conform to industry standards in order to be accepted by end users in our markets.
- We may, from time to time, make additional business acquisitions or investments, which involve significant risks.

Risks Relating to Intellectual Property

- We have settled in the past intellectual property litigation 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.
- If we are unable to protect our intellectual property, our business could be adversely affected.
- We face risks related to security vulnerabilities in our products.
- The use of open source software in our products, processes and technology may expose us to additional risks and harm our intellectual property.

Risks Relating to Reliance on Third Parties

- 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.
- 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 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 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.
- Our share price may be volatile as a result of various factors.
- Any future decisions to reduce or discontinue purchasing our common stock, after we resume such purchasing, pursuant to our stock repurchase programs could cause the market price for our common stock to decline.

Risks Relating to our Terminated Merger with Silicon Motion

The termination of the Merger Agreement and the related legal proceedings have caused us to incur substantial costs, may divert management's attention from our business and could otherwise adversely affect our business, financial results and operations.

We terminated the Merger Agreement on July 26, 2023 and notified Silicon Motion that we are relieved of our obligation to close the merger. Silicon Motion has challenged the validity of that termination. On August 16, 2023, Silicon Motion delivered to us a notice, which Silicon Motion publicly disclosed, that it was purporting to terminate the Merger Agreement and that Silicon Motion would be commencing an arbitration before the Singapore International Arbitration Centre to seek damages from us arising from our alleged breaches of the Merger Agreement. On October 5, 2023, Silicon Motion filed a Notice of Arbitration with the Singapore International Arbitration Centre alleging that we breached the Merger Agreement. Additionally, on August 31, 2023, a Silicon Motion stockholder filed a class action complaint against us and certain of our current officers alleging that we materially misrepresented the likelihood the merger would close. Other potential plaintiffs may file additional lawsuits related to the previously contemplated merger. See Part I, Item 3 (Legal Proceedings) of this report for more information on the Silicon Motion arbitration and the class action lawsuit. We intend to vigorously defend against these legal proceedings and any alleged breaches of the Merger Agreement, but due to the uncertainties inherent in any legal proceedings, we cannot predict the outcome of any legal proceedings. Legal proceedings are time-consuming, and may divert management's attention from our business. Legal proceedings are also expensive and could result in substantial costs to us, including any damages we are required to pay and costs associated with the indemnification of directors and officers. Please refer to the Risk Factor entitled *"If we are required to pay any damages in connection with legal proceedings related to the termination of the Merger Agreement with Silicon Motion, including for any alleged breaches of the Merger Agreement, or if we agree to make any payments in any settlement of legal proceedings related to the termination of the Merger Agreement, the amount of such damages or payments could be significant and require us to draw down on all our existing lines of credit and use our cash resources, which may not be sufficient to satisfy any damages or payments and could have a material adverse effect on our business, operating results, and financial condition. We expect that we may not be able to obtain financing on favorable terms if at all or raise additional capital for any such payments. Even if we are able to finance such payments through the incurrence of additional indebtedness, any material increase in our indebtedness would adversely affect our operating results and cash-flows as we satisfy our underlying interest and principal payment obligations. Issuing additional shares of our common stock, if material, will result in dilution of existing shares outstanding. Any 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."*

We have already incurred, and expect to continue to incur, substantial costs in connection with the previously pending merger, the termination of the Merger Agreement, and the related legal proceedings. Aside from any damages or settlement amounts we may be required to pay, these costs are primarily associated with the fees of our financial advisors, accountants, lenders, and legal counsel. Since the merger has been terminated, we will have received little or no benefit in respect of such costs incurred. We may also experience negative reactions from the financial markets and our suppliers, customers, customer

prospects, and employees with regard to legal proceedings related to the termination of the Merger Agreement. 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.

If we are required to pay any damages in connection with legal proceedings related to the termination of the Merger Agreement with Silicon Motion, including for any alleged breaches of the Merger Agreement, or if we agree to make any payments in any settlement of legal proceedings related to the termination of the Merger Agreement, the amount of such damages or payments could be significant and require us to draw down on all our existing lines of credit and use our cash resources, which may not be sufficient to satisfy any damages or payments and could have a material adverse effect on our business, operating results, and financial condition. We expect that we may not be able to obtain financing on favorable terms if at all or raise additional capital for any such payments. Even if we are able to finance such payments through the incurrence of additional indebtedness, any material increase in our indebtedness would adversely affect our operating results and cash-flows as we satisfy our underlying interest and principal payment obligations. Issuing additional shares of our common stock, if material, will result in dilution of existing shares outstanding. Any 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.

If we are required to pay any damages in connection with legal proceedings related to the termination of the Merger Agreement, including for any alleged breaches of the Merger Agreement, or if we agree to make any payments in any settlement of legal proceedings related to the termination of the Merger Agreement, the amount of such damages or payments could be significant and require us to draw down on all our existing lines of credit and use our cash resources, which may not be sufficient to satisfy any damages or payments and could have a material adverse effect on our business, operating results, and financial condition. We expect that we may not be able to obtain financing on favorable terms if at all or raise additional capital for any such payments. However, if we finance all or a portion of the payment of damages or settlement amounts through the incurrence of additional indebtedness, any material payment and increase in our indebtedness would 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. Issuing additional shares of common stock, if material, would result in dilution of existing shares outstanding. In addition, our current credit agreement, and any new loan agreements, contain and would likely 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 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, if we are required to pay damages in connection with legal proceedings related to the termination of the Merger Agreement, including for alleged breaches of the Merger Agreement, or if we agree to make any payments in any settlement of legal proceedings related to the termination of the Merger Agreement, and we finance all or a portion of the payment of damages through the incurrence of additional indebtedness, any materially increased indebtedness could have important consequences to investors in our common stock, including the following:

- 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;
- rising interest rates may make it more difficult for us, our customers, and our distributors to obtain financing and service our respective interest and debt obligations, which in turn has an impact on customer demand for our products as well as the business of our distributors;
- we could be subject to substantial variable interest rate risk because our interest rate under term loans typically varies based on a fixed margin over an indexed rate (such as for the Initial Term Loan under the June 23, 2021 Credit Agreement) or an adjusted base rate. If interest rates were to continue to increase substantially, and we incur additional indebtedness, it would adversely affect our operating results and could affect our ability to service the 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, combined with rising interest rates, 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 obtain financing for such transactions; 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 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.

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 OEMs may continue to enter our markets. Increased competition has resulted in price pressure, decreased demand, reduced revenue and profitability, and loss of market share, any of which could in the future 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., Skyworks Solutions, Inc., Credo Semiconductor Inc., MediaTek, Inc., Marvell Technology Group Ltd., MACOM Technology Solutions Holdings, Inc., Texas Instruments Incorporated, Analog Devices, Inc., Renesas Electronics Corporation, Microchip Technology Inc. and Semtech Corporation. 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, other 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 potential recession, could continue to adversely affect our business, financial condition, and results of operations.

Inflation and uncertainty in customer demand and the worldwide economy has continued, and we expect to experience continued decline in our sales and revenues in the first quarter of 2024. In particular, we believe an economic slowdown and inventory oversupply will continue to add to volatility in managing the business. In addition, inventory oversupply could potentially lead to more inventory write-downs, including charges for any excess or obsolete inventory which could negatively impact our gross margins. Our products are incorporated in numerous consumer devices, and demand for such products is ultimately driven by consumer demand for products such as televisions, personal computers, automobiles, and cable modems. 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 a potential recession, can cause extreme difficulties for our customers and third-party vendors in accurately forecasting and planning future business activities. If banks and financial institutions with whom we have banking relationships enter receivership or become insolvent in the future, we may be unable to access, and we may lose, some or all of our existing cash, cash equivalents and investments to the extent those funds are not insured or otherwise protected by the FDIC. This unpredictability has and could continue to 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 continue to 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.

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. The current downturn, which was aggravated by certain factors such as high interest rates and excess channel inventory, has resulted in, or any future downturns may result in, diminished product demand, production overcapacity, high inventory levels and accelerated erosion of our average selling prices. Furthermore, any future 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.

A significant variance in our operating results or rates of growth, if any, could continue to lead to substantial volatility in our stock price. Our revenue has declined, and we may not sustain our current level of revenue, which has declined, and/or manage future growth effectively. The impact of excess inventory in the channel has continued to influence our customers' expected demand for certain of our products.

Our net revenue decreased from \$1.1 billion in the year ended December 31, 2022 to \$693.3 million in the year ended December 31, 2023 and the decline in net revenue could continue in future periods. Among other factors, the decrease is as a result of macroeconomic conditions impacting customer demand. Prior to 2023, our net revenues grew to \$1.1 billion for the year ended December 31, 2022. We currently expect that revenue will fluctuate in the future, from period-to-period, consistent with the cyclical nature of our industry, and we expect to experience further decline in revenue in the first quarter of 2024 due to current macroeconomic conditions impacting customer demand for various products. Further, the impact of excess inventory in the channel has continued to influence our customers' expected demand for some of our products.

In addition, in October 2023, we initiated a reduction of our workforce to align our operational needs with the changes in macroeconomic conditions and the demand environment. We may not realize, in full or in part, the anticipated benefits, savings and improvements from our reduction of our workforce due to unforeseen difficulties, delays or unexpected costs. If we are unable to realize the expected operational efficiencies and cost savings from our reduction of our workforce, our operating results and financial condition would be adversely affected.

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 have fluctuated in the past 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 any. If we are unable to resume adequate revenue growth and manage our operating expenses, our financial results could suffer and our stock price could decline.

To 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;
- 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 resume 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.

Our business, financial condition and results of operations could continue to be adversely affected by military conflicts, geopolitical and economic tensions among countries in which we conduct business, including between the United States and China, among other countries. For example, as more entities are added to restricted export control lists, or as semiconductor technology exports to other countries are further controlled, our need to seek authorization from the U.S. government may impact our ability to do business.

We sell our products throughout the world. Products shipped to Asia accounted for 75% of our net revenue in the year ended December 31, 2023. In addition, as of December 31, 2023, approximately 78% 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;
- geopolitical conflicts and tensions, especially as between the United States and China, that could destabilize trading relationships and economic activity;

- 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 and/or export control restrictions and regulations by governments, such as changes to licensing requirements or other anti-diversion enforcement measures, as a result of ongoing armed conflict and geopolitical tensions among the United States, China, Russia, Ukraine and other countries;
- transportation delays;
- civil disturbances or political instability;
- other unpredictable geopolitical turmoil, including terrorism, war or political or military coups, including the current conflict in Israel (and any broadening of the conflict);
- 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;
- public health emergencies, such as another outbreak of COVID-19 or other communicable disease;
- 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, China and South Korea, substantially all of our products undergo packaging and final testing in Taiwan, Singapore, China, South Korea, Malaysia, and Thailand. Any conflict or uncertainty in these countries, including due to geopolitical conditions, natural disasters, 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 decrease demand and 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. We have experienced weakening demand in China, and continuing changes in government trade policies create a heightened risk of further increased tariffs that impose barriers to international trade and could further decrease international demand. 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 further decrease demand and have a material adverse effect on our business and operating results.

Furthermore, compliance with export controls and implementation of additional tariffs may increase compliance costs and further affect our business and operating results.

We will lose sales if we are unable to obtain or retain government authorization to export certain of our products or technology related to the development or production of our products or if such authorizations are revoked, 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, including the United States Export Administration Regulations, or EAR, administered by the U.S. Department of Commerce's Bureau of Industry and Security, or BIS. Certain of our products and technologies are subject to the EAR, which may require a license authorization from BIS prior to the shipment or sharing of certain products and technologies with certain end users or destinations. Such approval may be delayed, denied, or even revoked after initially being granted by BIS, 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, among others. We are subject to similar export controls regulations in other jurisdictions where we operate, including the European Union, Singapore, and Taiwan, among others.

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. Since October 2022, the United States has announced export control restrictions on a number of entities based in China due to national security and human rights concerns and additional more severe restrictions may be possible. The addition of new entities to restricted party lists can further increase the scope of export restrictions applicable to our business. The United States has also announced measures intended to further restrict the export of certain advanced semiconductor products and technology, as well as products that incorporate those advanced semiconductor products, to the People's Republic of China, or China, and/or certain companies located in China due to national security and human rights concerns, including the imposition of new license requirements for certain semiconductor technologies. 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.

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. In addition, it is possible that BIS can revoke licenses that have been granted or decline to re-issue such licenses upon their expiration. Although our policies, procedures, and controls are designed to detect and prevent potential violations and 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. For example, our products could be diverted to bad actors. In addition, if our customers or business partners fail to comply with applicable regulations and laws, we may be subject to liability and may be required to suspend sales or take other action which could damage our reputation and negatively impact our results of operations. 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 absence of comparable restrictions imposed on competitors based in other countries may adversely affect our competitive position.

To the extent that we do business with parties on the Entity List under approved export licenses, our business could be affected if the government delays, denies, or otherwise does not grant or renew required licenses. We currently have licenses from BIS that permit certain of our transactions with two restricted parties, but those licenses may be revoked at any time or denied for renewal when the license expires. One of our third party foundry partners, Semiconductor Manufacturing International Corporation, or SMIC, was added to the BIS Entity list in December 2020. As a result of that Entity List listing, we must obtain export licenses from BIS for the export or reexport to SMIC of any technology for the development or production (fabrication) of our products. Although we have obtained export licenses in order to have SMIC manufacture certain products for us, those export licenses could be revoked at any time. Revocation of any of those export licenses could significantly disrupt our ability to obtain the products in question and fulfill customer requirements. Moreover, the issuance of export licenses for other technology transfers to SMIC is a matter of discretion with the U.S. government, and it is uncertain whether we will be able to obtain export licenses, in a timely manner, for the transfer of technology required by SMIC to produce semiconductor wafers for us. If we are unable to obtain those export licenses, it may be necessary to have the products fabricated by other semiconductor foundries, which may be more costly alternatives to SMIC, and which may have limited capacity to fabricate sufficient products to meet our requirements.

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 or renewed. 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 September 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 in which limited technology was furnished to our Specific Foundry Partner without authorization under the EAR. Upon discovery, we took immediate action to remediate, including by implementing additional measures to prevent recurrence. Our Audit Committee engaged outside counsel to conduct a privileged investigation. On March 3, 2023, we submitted a comprehensive voluntary self-disclosure to BIS regarding the potential EAR violation described above and other potential export control violations. On June 8, 2023, BIS closed out its review of our voluntary self-disclosure without monetary or other penalties and with the issuance of a “warning letter.”

We also are subject to risks associated with international geopolitical and military conflicts.

Our business has been impacted and may continue to be impacted by geopolitical conditions such as international trade wars (including between the United States and China), the military conflict in Israel, the Russia-Ukraine conflict, and increased political tensions in Russia, Europe, the Middle East and Asia. Currently, significant uncertainty surrounds the future trade relationships among the United States, China, and Russia. The U.S. government continues to make significant changes in U.S. trade policies that could negatively affect our business. Additionally, policies made by other countries, such as China and Russia or their allies, could also negatively impact our business. In a number of cases, compliance with these policies has required us to take actions adverse to our business.

Beginning in May 2019, we ceased normal business operations with entities affiliated with Huawei Technologies Co., Ltd., and certain other entities following an amendment to the EAR which added these entities to the Entity List for acting contrary to the national security or foreign policy of the United States. We obtained export licenses for certain transactions with these entities. As noted above, export licenses can be revoked or BIS could choose not to renew such licenses, which would halt the currently-approved licensed activities.

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.

Since October 2022, the United States government has taken steps to restrict the export of certain advanced semiconductor products and technology to the People’s Republic of China and/or certain companies located in China due to national security and human rights concerns. In October 2022, BIS announced additional restrictions on products and/or technology destined for use in the People’s Republic of China, including additional export controls and/or requirements on (1) certain advanced computing integrated circuits, computer commodities that contain such integrated circuits and certain semiconductor manufacturing items; (2) products and/or technologies that may be destined for facilities capable of producing certain advanced node integrated circuits; and (3) transactions involving items for supercomputer and semiconductor manufacturing end uses. In October 2023, BIS announced additional restrictions on the export of certain advanced semiconductors and semiconductor manufacturing technology to China, primarily focused on integrated circuits with military, data center, or artificial intelligence applications. Pursuant to those October 2023 export control amendments, various categories of integrated circuits are now subject to export licensing and export control restrictions for export or reexport to China and certain other countries. We have confirmed that some of our products are subject to these new controls. BIS also announced restrictions on exports to (1) companies headquartered in China or Macau, and (2) end users in certain countries of concern, in order to prevent diversion of controlled products or technology to China. The United States government has also continued to add Chinese entities to the Entity List. We regularly monitor changes to applicable export control regulations to assess the impact to our business, if any. To date, none of our material customers located in China has been added to the Entity List or other restricted party list.

The BIS continues to add many new entities to the Entity List and Unverified List. As noted above, our ability to sell 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.

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 cannot predict what actions may ultimately be taken with respect to trade relations between the United States and China or other countries, which products may be subject to such actions or what actions may be taken by other countries in retaliation. In response to the United States tightening export controls on China, China has instituted restrictions of its own that affect U.S. companies and may impact us and related entities. We have experienced weakening demand in China, and such future developments related to U.S.-China relations may also have an impact on our supply chain. Additionally, the geopolitical developments in relations between Taiwan and China could affect the supply of our products from Taiwan, including from Taiwan Semiconductor Manufacturing Company, Limited, or TSMC.

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 currently do not sell product in Russia, or sell product to distributors for resale in Russia.

The ongoing military conflict in Israel has resulted in our employees located in Israel having to perform military service and/or being negatively impacted by violence or political instability, which could interrupt business and increase costs associated with relocating employees, engaging with alternative third-party contractors or hiring additional employees outside of Israel. As the conflict continues, we cannot provide assurances that our business will not be impacted in the future.

We cannot provide assurances that we will not face disruptions of distribution arrangements in the future, including through 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 that will 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 has had and could continue to have a material adverse effect on our revenue and operating results.

In the year ended December 31, 2023, one customer accounted for 10% of our net revenue, and our ten largest customers collectively accounted for 54% of our net revenue, of which distributor customers accounted for 16% of our net revenue. In the year ended December 31, 2023, we have experienced a decrease in customer demand, and consequently a reduction in orders, primarily due to macroeconomic factors and excess inventory in the channel following the industry-wide supply shortage in 2021 and 2022. 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, as they have at times before, 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:

- macroeconomic and business factors influencing such customers' demand for our products, including excess inventory in the channel;
- substantially all of our sales to date have been made on a purchase order basis, and we do not have long-term product purchase commitments with our customers;
- 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. When this occurs, our sales have previously and could in the future decline and/or our market share has previously and may in the future be reduced or smaller than anticipated and our business, financial condition and results of operations could be materially and adversely affected.

Our relationship with customers has been and could continue to be impaired by our sale of patents. For example, our customers are and could be subject to patent infringement based on patents we divested to the extent that our customers also source components from our competitors, such as those referenced in Part I, Item 3 (Legal Proceedings) of this report.

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 sometimes offer customers favorable prices on our products which results in a decline in our average selling prices and, if material, a decline in our gross margins. 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. Products shipped to mainland China accounted for 11% of our net revenue during the year ended December 31, 2023 compared to 16% during the year ended December 31, 2022. 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.

Any legal proceedings or claims against us could be costly and time-consuming to defend and could harm our reputation regardless of the outcome.

In addition to the legal proceedings referenced in Part I, Item 3 - Legal Proceedings of this report, we are subject to legal proceedings and claims that arise in the ordinary course of business, including intellectual property, product liability, employment, class action, customer claims, whistleblower and other litigation claims, and governmental and other regulatory investigations and proceedings and we may not be successful in such proceedings. In addition, we have implemented a reduction in force and the attendant layoffs has resulted and could result in the risk of claims being made by or on behalf of affected employees. Such matters can be time-consuming, divert management's attention and resources, cause us to incur significant expenses or liability, or require us to change our business practices. In addition, the expense of litigation and the timing of this expense from period to period are difficult to estimate, subject to change, and could adversely affect our financial condition and results of operations. Because of the potential risks, expenses, and uncertainties of litigation, we may, from time to time, settle disputes, even where we have meritorious claims or defenses, by agreeing to settlement agreements. Any of the foregoing could adversely affect our business, financial condition, and results of operations.

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, state actors, or others may be able to penetrate our security controls through attacks such as phishing, impersonating authorized users, ransomware, viruses, worms and other malicious software programs, software supply chain attacks, 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 and attackers have used artificial intelligence and machine learning to launch more automated, targeted and coordinated attacks against targets. Businesses we acquire may increase the scope and complexity of our information technology systems, and this may increase our risk exposure to cyber-attack when there are difficulties integrating diverse legacy systems that support operations for the acquired businesses. 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 loss 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, payments to fraudulent bank accounts, 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.

Average selling prices of our products have and could decrease in the future, which could have a material adverse effect on our revenue and gross margins.

We have and may in the future experience substantial period-to-period fluctuations in our operating results due to 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. 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. Our inability to do so would cause our revenue and gross margins to decline. In addition, under certain of our agreements with key distributors, we provide protection for reductions in selling prices of the distributors' inventory, which could have a material adverse effect on our operating results if the selling prices for those products fell dramatically.

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, 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 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 video gateways continue to represent a significant North American and European revenue generator. The North American and European Pay-TV market is dominated by a few OEMs, including Vantiva 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 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 year ended December 31, 2023 and 2022, revenue directly attributable to broadband applications accounted for approximately 29% and 44% of our net revenue, respectively. We have experienced a decrease in broadband net revenue of \$289.7 million for the year ended December 31, 2023, as compared to the year ended December 31, 2022, and the decline in revenue could continue in future periods. Delays in the development of, or unexpected developments in, the broadband markets, including international macroeconomic headwinds, could have an adverse effect on order activity by OEMs 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 year ended December 31, 2023, 2022, and 2021, our research and development expense was \$269.5 million, \$296.4 million, and \$278.4 million, respectively. While we are closely monitoring our current research and development expenses, we expect our research and development expenses to increase in future years when we return to expanding our product portfolio and enhancing 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, as well as to address challenges of capturing and processing high quality broadband communications and high-speed optical interconnect signals. 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. Furthermore, we currently receive grants from certain non-U.S. governments, but those grants and any future grants may not be available to us in the future.

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 modem 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.

Our operating results are subject to substantial quarterly and annual fluctuations and have fluctuated in the past 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. For example, our revenue declined from \$1.1 billion for the year ended December 31, 2022 to \$693.3 million for the year ended December 31, 2023 and revenue could continue to decline. 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:

- seasonality or cyclical fluctuations in our markets;

- overall demand volatility for semiconductor solutions across a diverse range of communications, industrial and multimarket applications;
- 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 availability and cost of products from our suppliers;
- the timing and extent of operating expenses, including costs related to product development and personnel compensation and benefits;
- new product announcements and introductions by us or our competitors;
- incurrence of research and development and related new product expenditures;
- 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 manufacturing yields of integrated circuits;
- 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;
- timing and extent of product development costs;
- loss of key personnel or inability to attract, retain and motivate qualified skilled workers;
- impairment of long-lived assets, including masks and production equipment; and
- the effects of competitive pricing pressures, including decreases in average selling prices of our products.

For example, we often experience flat-to declining revenue in the first quarter of each fiscal year and increasing revenue in the second quarter of each fiscal year. Our historical growth may have reduced the impact of seasonal or cyclical factors that might have influenced our business to date. If our growth rate continues to slow, seasonal or cyclical variations in our operations may become more pronounced over time and may materially affect our business, financial condition, results of operations and prospects. 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.

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 has resulted, and could in the future, 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 or are slow to introduce new or enhanced products that meet the needs of our customers or penetrate new markets in a timely fashion, as has happened previously or in the future, 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, advances in artificial intelligence, 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 continue to 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 and have requested to 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. Also, as customer lead times continue to improve, we have seen and expect to continue to see a more normalized demand-planning horizon. While we expect inventory to remain elevated in the near term, we expect that channel inventory will continue to decline thereafter. 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 which has led to and could continue to lead 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 not successful in 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 broadband and communications market, 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 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; import and customs; 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. Complying with these laws and regulations can be costly and we may be required to incur significant costs to remedy any potential gaps or violations that are identified. 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, procedures, and controls are designed to detect and prevent potential violations and 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, remediation, 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. Since October 2022, the United States has taken steps to restrict the export of certain advanced semiconductor products and technology to the People's Republic of China as well as a number of specific Chinese companies, due to national security and human rights concerns. There has also been a substantial focus by regulators in the United States and Europe on the business practices of certain major Chinese technology companies. Complying with changing export control laws may require us to develop additional policies, procedures, and controls, or incur additional costs, including in connection with the development or performance of additional due diligence in order to prevent diversion of restricted products or technology to China, Russia, or other destinations. Compliance with these laws and regulations may also result in the loss of revenue. Since October 2022, we have 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. At times, we may discover issues that we bring to the attention of the relevant government agencies, as we did on March 3, 2023, when we submitted a comprehensive voluntary self-disclosure to BIS regarding the potential EAR violation described above and other potential export control violations. Although the March 2023 voluntary self-disclosure to BIS resulted in a warning letter, we could incur increased administrative and legal costs in order to remediate any potential compliance gaps or violations, to respond to any inquiries, or in connection with the preparation and submission of any voluntary self-disclosures to the government agencies, as appropriate. 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.

In addition, climate change and new or revised rules and regulations related thereto, including regulations with respect to greenhouse gas emissions and regulations enacted by the SEC and recent legislation enacted in California, which may impact our business in numerous ways. Climate change and its effects could lead to further increases in raw material prices or their reduced availability due to, for example, increased frequency and severity of extreme weather events and any supply chain disruptions resulting therefrom, and could cause increased incidence of disruption to the production and distribution of our products and an adverse impact on consumer demand and spending. In recent months, there have been substantial legislative and regulatory developments on climate-related issues, including proposed, issued and implemented legislation and rulemakings that would require companies to assess and/or disclose climate metrics, risks, opportunities, policies and practices. For example, in 2022, the SEC proposed climate-related disclosure requirements that would require increased climate change-related disclosure in our periodic reports and other filings with the SEC. The potential impact to us of these legislative and regulatory developments is uncertain at this time, although we expect that the emerging legal and regulatory requirements on climate-related issues will result in additional compliance and may require us to spend significant resources and divert

management attention. We cannot be sure that we will be able to successfully adapt our operations in response to any climate-related changes or comply with any increased reporting obligations in a cost-effective manner, and our business, financial condition and results of operations could be materially and adversely affected.

We must also 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.

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. In March and October 2023, we initiated reductions of our workforce to align our operational needs with the changes in macroeconomic conditions and the demand environment. These workforce reductions may yield unintended consequences, such as attrition beyond our intended reduction in workforce and reduced employee morale, which may cause our employees who were not affected by the reduction in workforce to seek alternate employment. Employees whose positions were eliminated or those who determine to seek alternate employment may seek employment with our competitors. In addition, our reduction in workforce may adversely impact our ability to implement our business strategy and respond rapidly to any new product, growth or revenue opportunities. Additionally, reductions in workforce may make it more difficult to recruit and retain new employees. If we need to increase the size of our workforce in the future, we may encounter a competitive hiring market due to labor shortages, increased employee turnover, changes in the availability of workers and increased wage costs. Employee litigation related to the reduction of our workforce could be costly and time-consuming.

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 technological and product innovations, our design and technical personnel represent a significant asset. In addition, in making employment decisions, particularly in the high-technology industry, job candidates often consider the value of the stock-based compensation they are to receive in connection with their employment. We have experienced fluctuations, including declines, in the market price of our stock and reductions in force which could adversely affect our ability to attract, motivate or retain key employees. In addition, our future performance also depends on the continued services and continuing contributions of our senior management to execute our business plan and to identify and pursue new opportunities and product innovations. Our employment arrangements with our employees do not generally require that they continue to work for us for any specified period, and therefore, they could terminate their employment with us at any time. The loss of the services of one or more of our key employees, especially our management and key design and technical personnel, or our inability to retain, attract and motivate qualified design and technical and other personnel, could have a material adverse effect on our business, financial condition and results of operations.

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.

As of December 31, 2023, our aggregate indebtedness was \$125.0 million, and we are subject to a variable amount of interest on the principal balance of our credit agreements and could continue to be adversely impacted by rising interest rates in the future. 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. In addition, rising interest rates may make it more difficult for us, our customers, and our distributors to obtain financing and service our respective interest and debt obligations, which in turn has an impact on customer demand for our products and our distributors' business.

As of December 31, 2023, 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, 2023. 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 June 23, 2021 Credit Agreement was amended on June 29, 2023 to implement a benchmark replacement.

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 Term SOFR 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 amortizes 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 Term SOFR 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 at a variable rate, which has been increasing, 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 leverage 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 and rising interest rates have important consequences to investors in our common stock, including the following:

- rising interest rates may make it more difficult for us, our customers, and our distributors to obtain financing and service our respective interest and debt obligations, which in turn has an impact on customer demand for our products as well as the business of our distributors;
- 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 Term SOFR 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 Term SOFR 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 continue 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, combined with rising interest rates, 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 obtain financing for such transactions; 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 and our subsidiaries may, subject to any limitations in the terms of our existing loan 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. Please refer to the Risk Factor entitled *“If we are required to pay any damages in connection with legal proceedings related to the termination of the Merger Agreement with Silicon Motion, including for any alleged breaches of the Merger Agreement, or if we agree to make any payments in any settlement of legal proceedings related to the termination of the Merger Agreement, the amount of such damages or payments could be significant and require us to draw down on all our existing lines of credit and use our cash resources, which may not be sufficient to satisfy any damages or payments and could have a material adverse effect on our business, operating results, and financial condition. We expect that we may not be able to obtain financing on favorable terms if at all or raise additional capital for any such payments. Even if we are able to finance such payments through the incurrence of additional indebtedness, any material increase in our indebtedness would adversely affect our operating results and cash-flows as we satisfy our underlying interest and principal payment obligations. Issuing additional shares of our common stock, if material, will result in dilution of existing shares outstanding. Any 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”*.

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 data, including personal data and other regulated or sensitive 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 was effective as of January 1, 2023. Additionally, other U.S. states continue to propose privacy-focused legislation, and such legislation has been passed in over ten states to date. 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.

We may, from time to time, make additional business acquisitions or investments, which involve significant risks.

We have completed multiple acquisitions in the past eight 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 has resulted and 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 antitrust 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 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. For example, we were recently involved in a litigation with Bell Semiconductor, which has since been settled pursuant to a Settlement and Patent License Agreement. In addition, 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. For example, as described in Part I, Item 3 — Legal Proceedings – Comcast Litigation, Comcast shared our proprietary designs with our direct competitor. Comcast then worked with our competitor to develop the FDX-amplifier technology. We have brought claims for trade secret misappropriation, unfair competition, and breach of the parties’ non-disclosure agreement, and sought an unspecified amount of compensatory damages, punitive damages, pre-judgment and post-judgment interest, costs, expenses, and attorney fees as well as an injunction against Comcast’s use or disclosure of our trade secrets. However, our claims may not be successful.

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 originally settled a trademark dispute with Analog Devices International Unlimited Company (ADIUC) and its predecessor, Linear Technology Corporation, we agreed not to register the “MAXLINEAR” mark or any other marks containing the term “LINEAR”. Pursuant to the original settlement agreement, we agreed not to use the “MAXLINEAR” mark on our products. We have since entered into another settlement agreement with ADIUC that now allows us to use and register the “MAXLINEAR” mark on our products, in addition to continuing to use “MAXLINEAR” as a corporate identifier, including to advertise our products and services. We have filed trademark applications to register the “MAXLINEAR” mark, but prior to approval of the applications and registration of the mark in the relevant jurisdictions, our ability to effectively prevent third parties from using the “MAXLINEAR” mark in connection with similar products or technology will be based on our common law rights in the mark, which may make enforcement challenging. If we are unable to protect our trademarks in certain jurisdictions, we may experience difficulties in achieving and maintaining brand recognition and customer loyalty in such jurisdictions.

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. Vulnerabilities are not always mitigated before they become known. 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, a large portion of our products are manufactured by Advanced Semiconductor Engineering, or ASE, 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 have experienced and could continue to experience inventory oversupply in certain of our products due to changes in customer demand which has added to volatility in managing the business. Inventory oversupply has also led and could continue to 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;
- potential increases in prices; and
- our use of foundry partners who are currently subject to BIS restrictions, to manufacture certain of our products may be impaired if one or more of the following were to occur: (1) we are unable to obtain U.S. export licenses authorizing its interactions and technology exchanges with these foundry partners, or (2) if BIS increases export control restrictions to Chinese foundries without the ability for us to obtain a U.S. export license, or (3) U.S. providers of semiconductor manufacturer equipment are unable to export such equipment or related spare or replacement parts used in the manufacture of our products, or obtain a license to export such equipment and parts, to current or future Chinese foundry partners.

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 fails 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. 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. If such disruption were to recur over a prolonged period, it could have a material impact on our revenue and business. 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 50%, 46% and 47% of our net revenue in the year ended December 31, 2023, 2022, and 2021, 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 has in the past and could in the future 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 ASE, 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, compliance, internal audit, human resources, information technology, network development, network monitoring, 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 and legal obligations. 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, 2023, the trading price of our common stock ranged from a low of \$13.43 to a high of \$43.66. These factors include those discussed in this “Risk Factors” section of this report and others such as:

- any developments related to our terminated 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;
- actions by institutional or activist stockholders;
- 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 and Israel, 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 are attractive to momentum, hedge, day-trading, or activist investors who often shift funds into and out of stocks rapidly, exacerbating price fluctuations in either direction, and have also been subject to securities class action litigation. We may be the target of momentum, hedge, day-trading, or activist investors, and have been and may continue to be the target of securities class action litigation in the future. Stockholder activism or 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. A proxy contest or other activist behaviors could have an adverse effect on us.

Even if a proxy contest or other activist efforts are not successful, the increased costs that we would bear and the distraction of our Board of Directors and senior management could negatively impact our business, although we cannot predict with certainty the extent of such negative impacts.

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, after we resume such purchasing, 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 previously pending (now terminated) 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 stockholders 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, after we resume such repurchases, 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, 2023, we had approximately 81.8 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 2022 performance periods, and we intend to continue this practice in the foreseeable future. We issued 0.9 million shares of our common stock for the 2022 performance period in February 2023. 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, South Korea, Malaysia, Singapore and Thailand. 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, 2023, our balance sheet reflected goodwill of \$318.6 million and other intangible assets of \$73.6 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 since 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. 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. In addition, many countries are implementing legislation and other guidance to align their international tax rules with the Organisation for Economic Co-operation and Development's, or OECD, Base Erosion and Profit Shifting recommendations and action plan that aim to standardize and modernize global corporate tax policy, including changes to cross-border tax, transfer pricing documentation rules, and nexus-based tax incentive practices. The OECD is also continuing discussions surrounding fundamental changes in allocation of profits among tax jurisdictions in which companies do business, as well as the implementation of a global minimum tax (namely the "Pillar One" and "Pillar Two" proposals). Some countries have implemented or intend to implement laws based on Pillar Two proposals, which may adversely impact our provision for income taxes, existing tax incentives, net income and cash flows. As a result of this heightened scrutiny, prior decisions by tax authorities regarding treatments and positions of corporate income taxes could be subject to enforcement activities, and legislative investigation and inquiry, which could also result in changes in tax policies or prior tax rulings. Any such changes may also result in the taxes we previously paid being subject to change.

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 dependent 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, 2023, 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. Additionally, the amount of the deferred tax asset considered realizable, however, could be adjusted in the subsequent periods if estimates of future taxable income are reduced or if objective negative evidence in the form of cumulative losses is present. Any future changes in the deferred tax asset realizability assertion may require a valuation allowance to reduce our deferred tax assets, which would increase our tax expense in the period the allowance is recognized and affect our results of operations.

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, complied with 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 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 1C. CYBERSECURITY

Risk Management and Strategy

We have established policies and processes for assessing, identifying, and managing material risk from cybersecurity threats, and have integrated these processes into our overall risk management systems and processes. We routinely assess material risks from cybersecurity threats, including any potential unauthorized occurrence on or conducted through our information systems that may result in adverse effects on the confidentiality, integrity, or availability of our information systems or any information residing therein.

We conduct quarterly risk assessments to identify cybersecurity threats. These risk assessments include identifying reasonably foreseeable potential internal and external risks, the likelihood of occurrence and any potential damage that could result from such risks, and the sufficiency of existing policies, procedures, systems, controls, and other safeguards in place to manage such risks. As part of our risk management process, we may engage third party experts to help identify and assess risks from cybersecurity threats. Our risk management process also encompasses cybersecurity risks associated with our use of third-party service providers.

Following these risk assessments, we design, implement, and maintain reasonable safeguards to minimize the identified risks; reasonably address any identified gaps in existing safeguards; update existing safeguards as necessary; and monitor the effectiveness of our safeguards. We have allocated adequate resources and have designated high-level personnel, including our Chief Information Security Officer, to manage the cybersecurity risk assessment and mitigation process.

As part of our overall risk management program, we regularly provide required training to employees at all levels and in all departments on cybersecurity.

The Company also participates in a cybersecurity risk insurance policy.

For additional information regarding whether any risks from cybersecurity threats, including as a result of any previous cybersecurity incidents, have materially affected or are reasonably likely to materially affect our company, including our business strategy, results of operations, or financial condition, please refer to Item 1A, "Risk Factors," in this annual report on Form 10-K, including the risk factors entitled "*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 are subject to governmental laws, regulations and other legal obligations related to privacy, data protection, and cybersecurity,*" and "*We face risks related to security vulnerabilities in our products.*"

Governance

One of the key functions of our Board of Directors is informed oversight of our risk management process, including risks from cybersecurity threats. Our Board of Directors is responsible for monitoring and assessing strategic risk exposure, and our executive officers are responsible for the day-to-day management of the material risks we face. Our Board of Directors administers its cybersecurity risk oversight function directly as a whole, as well as through the Cybersecurity Committee of the Board of Directors (the "Cybersecurity Committee"). Members of the Cybersecurity Committee are appointed by, and serve at the discretion of, the Board. The Cybersecurity Committee consists of at least three members of the Board, all of whom are independent. Each member has a working familiarity and/or experience with cybersecurity, IT strategy, IT development and deployment, or IT risk assessment and management, including information security management.

Our Chief Information Security Officer and the Cybersecurity Committee are primarily responsible to assess and manage material risks from cybersecurity threats. Our Chief Information Security Officer has twenty-five years of cybersecurity experience, has completed a Masters in Information Security Engineering, and holds several cybersecurity certifications.

Our Chief Information Security Officer and the Cybersecurity Committee oversee key cybersecurity policies and processes, including those described in “Risk Management and Strategy” above. Our Chief Information Security Officer and the Cybersecurity Committee are informed about policies and processes to monitor the prevention, detection, mitigation, and remediation of cybersecurity incidents.

Our Chief Information Security Officer and representatives from the Cybersecurity Committee provide quarterly briefings to the Audit Committee of the Board regarding our company’s cybersecurity risks and activities, including but not limited to any recent cybersecurity incidents and related responses, and any cybersecurity systems testing. The Audit Committee provides regular updates to the Board on relevant information regarding cybersecurity. In addition, our Chief Information Security Officer and representatives from the Cybersecurity Committee provide annual briefings to the Board on cybersecurity risks, related mitigation, and other related responses and activities.

Breaches

The last known cybersecurity breach occurred in 2020. The Company has not experienced any material cybersecurity breach in the years ended December 31, 2023, 2022 and 2021. The Company also has not incurred any net expenses from penalties and/or settlements from any material cybersecurity breaches during the years ended December 31, 2023, 2022, and 2021.

ITEM 2. PROPERTIES

Our corporate headquarters occupy approximately 68,000 square feet in Carlsbad, California under a lease that expires in December 2029. 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.

ITEM 3. LEGAL PROCEEDINGS

Dispute with Silicon Motion

As previously disclosed, on July 26, 2023, MaxLinear terminated the Merger Agreement on multiple grounds. On August 16, 2023, Silicon Motion delivered to MaxLinear a notice, which Silicon Motion publicly disclosed, that it was purporting to terminate the Merger Agreement and that Silicon Motion would be commencing an arbitration before the Singapore International Arbitration Centre to seek damages from MaxLinear arising from MaxLinear's alleged breaches of the Merger Agreement. Silicon Motion's position is that MaxLinear's Willful and Material Breaches (as such term is defined in the Merger Agreement) of the Merger Agreement prevented the Merger from being completed by August 7, 2023, and that MaxLinear is consequently liable for substantial monetary damages in excess of the termination fee as provided in the Merger Agreement.

On October 5, 2023, Silicon Motion filed a Notice of Arbitration with the Singapore International Arbitration Centre alleging that MaxLinear breached the Merger Agreement. Silicon Motion seeks payment of the termination fee, additional damages, fees, and costs. The arbitration will be confidential.

MaxLinear believes that it properly terminated the Merger Agreement. MaxLinear remains confident in its decision and will vigorously defend its right to terminate the Silicon Motion transaction without penalty.

Class Action Complaint

On August 31, 2023, a Silicon Motion stockholder filed a putative class action complaint in the United States District Court for the Southern District of California captioned *Water Island Event-Driven Fund v. MaxLinear, Inc.*, No. 23-cv-01607 (S.D. Cal.), against MaxLinear and certain of its current officers. The complaint includes two claims: (1) an alleged violation of Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder; and (2) an alleged violation of Section 20(a) of the Exchange Act. The complaint alleges that the defendants made false and misleading statements and/or omitted material facts that MaxLinear had a duty to disclose, concerning the Company's ability and intention to timely close the merger with Silicon Motion, including that: (i) MaxLinear had allegedly decided it would not consummate the merger because the economic circumstances surrounding the merger had materially changed, including a material downturn in the semiconductor industry and rising interest rates; (ii) MaxLinear had allegedly determined to unilaterally terminate the merger in the event the merger was approved by SAMR; (iii) MaxLinear had allegedly intended to argue that certain conditions in Article 6 of the Merger Agreement had not been satisfied as required by May 5, 2023 as a basis to terminate the merger; and (iv) as a result, MaxLinear had allegedly materially misrepresented the viability of the merger, the purported benefits of the merger, and the likelihood that the merger would be consummated. The complaint seeks compensatory damages, including interest, costs and expenses and such other equitable or injunctive relief that the court deems appropriate. MaxLinear will vigorously defend its position. On December 20, 2023, the Court appointed the lead plaintiffs, who are expected to file an amended complaint by February 15, 2024. Defendants expect to answer or move to dismiss by March 29, 2024.

Comcast Litigation

On December 1, 2023, MaxLinear filed claims against Comcast Management, LLC and Comcast Cable Communications, LLC (together, "Comcast") in the United States District Court for the Southern District of New York. MaxLinear alleges that in 2020, MaxLinear shared its proprietary design and know-how for a full-duplex, or FDX, amplifier with Comcast in the hope of securing future business with Comcast. MaxLinear shared its design and know-how on several occasions, all pursuant to a non-disclosure agreement between MaxLinear and Comcast, with the expectation that Comcast would keep the information confidential. Comcast needed this technology in order to effectively compete with fiber-optic internet providers. Instead of engaging MaxLinear to develop the FDX amplifier, Comcast shared MaxLinear's proprietary designs with MaxLinear's direct competitor. Comcast then worked with MaxLinear's competitor to develop the FDX-amplifier technology. MaxLinear brought claims for trade secret misappropriation, unfair competition, and breach of the parties' non-disclosure agreement, and it sought an unspecified amount of compensatory damages, punitive damages, pre-judgment and post-judgment interest, costs, expenses, and attorney fees as well as an injunction against Comcast's use or disclosure of MaxLinear's trade secrets.

Dish Litigation

On February 10, 2023, Entropic Communications, LLC, or Entropic filed claims for patent infringement against Dish Network Corporation, Dish Network LLC, Dish Network Service, LLC, and Dish Network California Service Corporation (together, “Dish”). At that time, MaxLinear was not a party to the action. On September 21, 2023, Dish Network California Service Corporation (“Dish California”) filed four counterclaims against MaxLinear in the United States District Court for the Central District of California. The four claims are declaratory judgment, breach of contract, fraud and negligent misrepresentation, and civil conspiracy. Dish California alleges that when MaxLinear assigned certain patents to Entropic, MaxLinear violated its obligations owed to the Multimedia over Coax Alliance, or MoCA under MoCA’s Intellectual Property Rights (“IPR”) Policy. Dish California alleges that MaxLinear also allegedly violated the MoCA IPR Policy by failing to offer Dish California a fair, reasonable, and nondiscriminatory, or FRAND, license for these patents. Dish California seeks an unspecified amount of compensatory damages, disgorgement, attorneys’ fees, experts’ fees, and costs.

Cox Litigations

On October 6, 2023, Cox Communications, Inc., CoxCom, LLC, and Cox Communications California, LLC (together, “Cox”) filed claims in two separate actions against MaxLinear in the United States District Court for the Central District of California.

In the first action, in response to Entropic suing Cox for patent infringement, Cox filed counterclaims alleging that when MaxLinear assigned certain patents to Entropic, MaxLinear violated its obligations under MoCA’s IPR Policy by assigning these patents and by failing to offer Cox a FRAND license for these patents. Cox amended its counterclaims on January 9, 2024 and is asserting claims of breach of contract, unjust enrichment, and declaratory judgment against MaxLinear. Cox seeks an unspecified amount of compensatory damages, equitable relief, attorneys’ fees, expenses, and costs.

In the second action, in response to Entropic suing Cox for patent infringement, Cox filed counterclaims against MaxLinear. Cox alleges that MaxLinear granted CableLabs a non-exclusive, royalty-free license to all patents essential for compliance with DOCSIS specifications. It further alleges that MaxLinear breached this agreement when MaxLinear assigned certain patents to Entropic. Cox amended its counterclaims on January 9, 2024 and is asserting claims for breach of contract, unjust enrichment, and declaratory judgment. Cox seeks an unspecified amount of compensatory damages, equitable relief, attorneys’ fees, expenses, and costs.

The Company records 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. As of December 31, 2023, no material loss contingencies have been accrued for litigation and other legal claims in our consolidated financial statements, since our management currently does not believe that the ultimate outcome of any of the matters described above is probable. An unfavorable outcome of these matters may be reasonably possible in excess of recorded amounts; however, a reasonable estimate of the amount or range of such loss cannot be made at this time.

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. Results of litigation and claims are inherently unpredictable. Regardless of the outcome, litigation and claims can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources, and other factors.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II — FINANCIAL INFORMATION

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 24, 2024, there were 54 record holders of our common stock. We believe we have approximately 46,000 beneficial holders of our common stock.

Dividend Policy

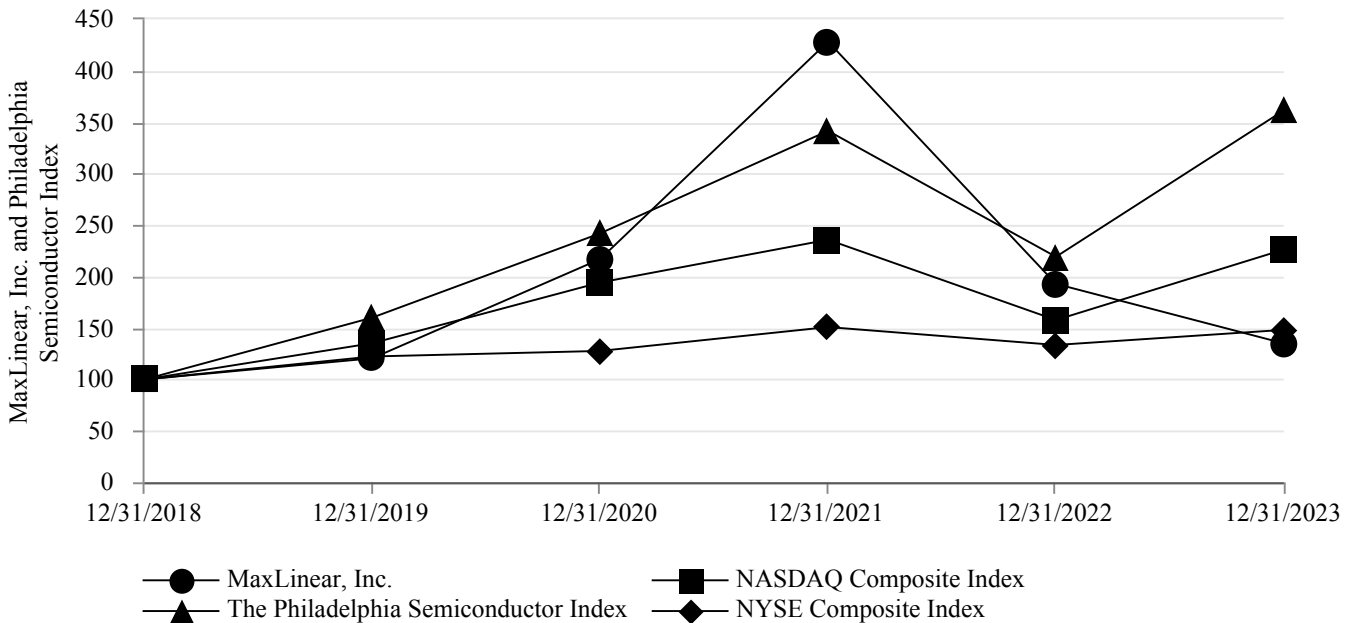
We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our common stock in the foreseeable future. Any future determination to declare 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, 2018 and ends on December 31, 2023, the end of our last fiscal year. The graph assumes an investment of \$100 on December 31, 2018, 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

None.

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 SoCs 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 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 CMOS manufacturing processes and conventional packaging technologies. 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, we believe our solutions have exceptional levels of functional integration and performance, low manufacturing cost, and reduced power consumption versus competition. These solutions also enable shorter design cycles, significant design flexibility and low system-level cost across a range of markets.

Our customers include electronics distributors, module makers, OEMs and ODMs, which incorporate our products in a wide range of electronic devices. Examples of such devices include radio transceivers and modems for 4G/5G base-station and backhaul infrastructure; optical transceivers targeting hyperscale data centers; Wi-Fi and wireline routers for home networking; broadband modems compliant with DOCSIS, PON, and DSL; as well as power management and interface products used in these and many other markets.

In the year ended December 31, 2023, net revenue was \$693.3 million, 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 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 75%, 82% and 83% of net revenue during the years ended 2023, 2022 and 2021, respectively, including 37%, 43% and 40%, respectively, from products shipped to Hong Kong and 11%, 16% and 12%, 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, 2023, 2022 and 2021 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, 2023, one customer accounted for 10% of our net revenue, and our ten largest customers collectively accounted for 54% of our net revenue, of which distributor customers accounted for 16% of our net revenue. In the year ended December 31, 2022, two of our 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 comprised 18% of our net revenue. In the year ended December 31, 2021, two of our direct 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. For certain customers, we sell multiple products into disparate end user applications such as cable modems 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 broadband data modem and gateway sectors, a design-in can have a product life cycle of 24 to 60 months. In the industrial and wired and wireless infrastructure markets, a design-in can have a product life cycle of 24 to 84 months and beyond.

Impact of Global Economic Uncertainty and Inventory Build

Inflation and uncertainty in customer demand and the worldwide economy has continued, and we expect to experience continued decline in our sales and revenues in the first quarter of 2024. In particular, we believe an economic slowdown and inventory oversupply in the channel could continue to add to volatility in managing the business. In addition, inventory oversupply could potentially lead to more 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. As supplier lead times continue to stabilize, we have seen and expect to continue to see a more normalized demand-planning horizon. While we expect inventory to remain elevated in the near term, we expect channel inventory will continue to decline thereafter.

Terminated 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.

On July 26, 2023, we terminated the Merger Agreement and notified Silicon Motion that we were relieved of our obligations to close because, among other reasons, (i) certain conditions to closing set forth in the Merger Agreement were not satisfied and were incapable of being satisfied, (ii) Silicon Motion had suffered a Material Adverse Effect that was continuing, (iii) Silicon Motion was in material breach of representations, warranties, covenants, and agreements in the Merger Agreement that gave rise to the right of the Company to terminate, and (iv) in any event, the First Extended Outside Date had passed and was not automatically extended because certain conditions in Article 6 of the Merger Agreement were not satisfied or waived as of May 5, 2023. Under the terms of the Merger Agreement, MaxLinear was not required to pay a break-up fee or other fee as a result of the termination of the Merger Agreement on these grounds. On August 16, 2023, Silicon Motion delivered a notice to us, which Silicon Motion publicly disclosed, that it was purporting to terminate the Merger Agreement and that Silicon Motion would be commencing an arbitration to seek damages from us arising from our alleged breaches of the Merger Agreement. Undefined capitalized terms in this paragraph have the same meaning as in the Merger Agreement.

On October 5, 2023, Silicon Motion filed a Notice of Arbitration with the Singapore International Arbitration Centre alleging that we breached the Merger Agreement. See Part I, Item 3 (Legal Proceedings) of this report for more information on legal proceedings related to the termination of the Merger Agreement.

The second amended and restated commitment letter dated October 24, 2022 with Wells Fargo Bank, N.A., or Wells Fargo Bank, and other lenders, and related financing commitments for the previously pending (now terminated) merger were also terminated upon termination of the Merger Agreement. As a result of the termination of the financing, the Company was required to pay to Wells Fargo Bank a ticking fee of \$18.3 million, which is included in other income (expense), net in the year ended December 31, 2023.

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 transaction consideration included \$9.8 million in cash. In addition, Company Y 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, 2024.

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

Workforce Reductions

During the year ended December 31, 2023, we entered into two plans of restructuring to reduce our workforce, or the Workforce Reductions. The Workforce Reductions are intended to align our operational needs with the changes in macroeconomic conditions and the demand environment while continuing to support the long-term business strategy by reducing our operating expenses.

As a result of the Workforce Reductions, in the year ended December 31, 2023, we incurred \$19.8 million in restructuring costs primarily related to severance costs and related expenses, and estimate that we will incur approximately \$30 million to \$40 million in restructuring costs in 2024 upon notice to the remaining affected employees of the Workforce Reductions. Approximately two-thirds of the cost is estimated to be statutory severance benefits in the jurisdictions in which the terminated employees were employed and a significant amount of the remaining one-third of the cost represents non-cash charges related to exiting facilities and writing off of related assets. The estimate of costs that we expect to incur, and the timing thereof, are subject to a number of assumptions and actual results may differ. We may also incur other charges or cash expenditures not currently contemplated due to events that may occur as a result of, or associated with, the Workforce Reductions. We expect to complete informing affected employees of the Workforce Reductions by the end of the first quarter of 2024.

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. When reported amounts are material, they may be sensitive to changes to certain assumptions used in the valuation. If the discount rate used in our valuations increased by 1%, it would result in a decrease to the valuation of intangible assets of an immaterial amount for our 2023 and 2021 acquisitions. 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 year ended December 31, 2023 and 2022, we recorded impairment of intangible assets of \$2.4 million and \$2.8 million, respectively, associated with certain acquired licensed technology. During the year ended December 31, 2021, 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 historical return rates. Any changes to such estimates, for example differences in actual sell-through activity versus our estimate of sell-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 sell-through activity and customer return rates, there are no assumptions inherent in our estimates in the valuation of price adjustments and returns that would result in sensitivity of reported amounts to such assumptions. During the years ended December 31, 2023, 2022 and 2021 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, 2023, 2022 and 2021, 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, if any, 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, if any, may result in immediate impairment of such assets in the quarter such decision is made. As of the October 31 assessment date, we did not have any remaining 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, 2023 and 2022, we recorded impairment of intangible assets of \$2.4 million and \$2.8 million, respectively, associated with certain acquired licensed technology. During the year ended December 31, 2021, 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 Adopted Accounting Pronouncements

See Note 1 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for recently adopted accounting pronouncements as of the date of this report, if any.

Recently Issued Accounting Pronouncements

See Note 1 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for recently issued accounting pronouncements not yet adopted as of the date of this report, if any.

Results of Operations

The following describes the line items set forth in our consolidated statements of operations.

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, if any; 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 a ticking fee paid to lenders following the termination of the Silicon Motion merger, net gains (losses) from 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 operations data as a percentage of net revenue for the periods indicated:

	Year Ended December 31,		
	2023	2022	2021
Net revenue	100%	100%	100%
Cost of net revenue	44	42	44
Gross profit	56	58	56
Operating expenses:			
Research and development	39	26	31
Selling, general and administrative	19	15	17
Impairment losses	—	—	—
Restructuring charges	3	—	—
Total operating expenses	61	42	48
Income (loss) from operations	(6)	16	7
Interest income	1	—	—
Interest expense	(2)	(1)	(1)
Other income (expense), net	(3)	—	—
Total other income (expense), net	(4)	(1)	(2)
Income (loss) before income taxes	(9)	16	5
Income tax provision	1	4	1
Net income (loss)	(11)%	11 %	5 %

Net Revenue

	Year Ended December 31,						
	2023	2022	2021	\$ Change			
	(dollars in thousands)						
Broadband	\$ 203,519	\$ 493,232	\$ 492,482	\$ (289,713)	\$ 750	(59)%	— %
% of net revenue	29 %	44 %	55 %				
Connectivity	138,228	303,925	149,285	(165,697)	154,640	(55)%	104 %
% of net revenue	20 %	27 %	17 %				
Infrastructure	177,083	136,274	119,421	40,809	16,853	30 %	14 %
% of net revenue	26 %	12 %	13 %				
Industrial and multi-market	174,433	186,821	131,210	(12,388)	55,611	(7)%	42 %
% of net revenue	25 %	17 %	15 %				
Total net revenue	\$ 693,263	\$ 1,120,252	\$ 892,398	\$ (426,989)	\$ 227,854	(38)%	26 %

Net revenue decreased \$427.0 million to \$693.3 million for the year ended December 31, 2023, as compared to \$1.1 billion for the year ended December 31, 2022 primarily as a result of macroeconomic conditions impacting customer demand, including excess inventory in the channel built up following the supply shortages in the prior year. As supply shortages eased, the upward pricing pressure eased and was a modest component of revenue growth in the year. Broadband net revenue decreased by \$289.7 million, driven by decreases in the volume of broadband SOC shipments in this category. Connectivity revenue decreased \$165.7 million due to decreased volume of shipments of certain products primarily associated with residential broadband market decline. The increase in infrastructure revenues of \$40.8 million was primarily driven by an increase in the volume of wireless backhaul shipments. Industrial and multi-market revenue decreased \$12.4 million due to a \$22.3 million decrease driven by decreased volume of shipments of high-performance analog products, partially offset by a \$9.9 million increase driven by increased volume of shipments of component products.

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. Broadband net revenue increased \$0.8 million, substantially driven by price increases on our broadband SOC products within this category, which was partially offset by modest decreases in the volume of shipments in this category. Connectivity revenue increased \$154.6 million due to an increased volume of shipments of products toward the latter part of 2022 as our supply improved opening up new opportunities to address the third party router market and was supplemented by some price increases on connectivity products. More than 50% of the revenue increase was driven by increased revenue from the introduction of our new Wi-Fi 6 product late in 2021. The increase in infrastructure revenues of \$16.9 million was driven by an increase in shipments in the wireless infrastructure market. Industrial and multi-market revenue increased \$55.6 million due to increased demand for our power and interface products and increased prices on products within this category. This end market also had some modest declines from products that entered end-of-life categorization.

We currently expect that revenue will fluctuate in the future, from period-to-period, consistent with the cyclical nature of our industry.

Cost of Net Revenue and Gross Profit

	Year Ended December 31,			\$ Change	% Change		
	2023	2022	2021				
	(dollars in thousands)						
Cost of net revenue	\$ 307,600	\$ 470,483	\$ 396,566	\$ (162,883)	\$ 73,917	(35)%	19 %
% of net revenue	44 %	42 %	44 %				
Gross profit	\$ 385,663	\$ 649,769	\$ 495,832	\$ (264,106)	\$ 153,937	(41)%	31 %
% of net revenue	56 %	58 %	56 %				

Cost of net revenue decreased \$162.9 million to \$307.6 million for the year ended December 31, 2023, as compared to \$470.5 million for the year ended December 31, 2022. The decrease was driven by a decreased volume of shipments of broadband SOC and certain connectivity products as a result of macroeconomic conditions impacting customer demand for such products. Gross profit percentage decreased for the year ended December 31, 2023, as compared to the year ended December 31, 2022, due to reduced absorption of intangible amortization, partially offset by improvement from product mix. Product mix included higher margin backhaul product contributions relative to total revenues in 2023 as compared to 2022.

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 driven by an increased volume of shipments of certain connectivity products toward the latter part of 2022 as our supply improved and increased costs on inventory purchased from suppliers as a result of supply chain constraints, and was partially offset by decreases in the volume of shipments of broadband products. Gross profit percentage improved for the year ended December 31, 2022, as compared to the year ended December 31, 2021, driven by improved mix of higher margin new products, higher margin infrastructure and industrial and multi-market product contributions, and improved margins from price increases that were passed along on certain products within our broadband, connectivity, and industrial and multi-market categories during the year, 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

	Year Ended December 31,			\$ Change	% Change		
	2023	2022	2021				
	(dollars in thousands)						
Research and development	\$ 269,504	\$ 296,442	\$ 278,440	\$ (26,938)	\$ 18,002	(9)%	6 %
% of net revenue	39 %	26 %	31 %				

Research and development, or R&D, expense decreased \$26.9 million to \$269.5 million for the year ended December 31, 2023 from \$296.4 million in the year ended December 31, 2022. The decrease was driven by decreases in bonuses of \$21.9 million, payroll and benefits expense of \$9.4 million, and consulting expense of \$9.2 million, partially offset by the impact of decrease in income from joint R&D projects and governmental R&D grants offsetting our R&D expense of \$11.3 million and an increase stock based compensation expense of \$3.6 million. The decrease in bonuses is attributable to a decrease in financial

performance and decreased headcount from the workforce reductions during 2023. The decrease in payroll and benefits expense is also due to the workforce reductions. The amount of income from joint R&D projects and governmental R&D grants varies from year to year depending on demand for such projects and availability of governmental R&D programs.

R&D 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 driven by increases in payroll and employee benefit expenses of \$21.8 million, stock-based compensation and bonus expenses of \$11.2 million, CAD design tools and other software license expenses of \$5.8 million, consulting expenses of \$3.1 million, and various other expenses of \$6.1 million. This increase was partially offset by an increase in income from joint R&D projects and governmental R&D grants of \$25.6 million and decrease in prototype expenses of \$4.6 million. The increased expenses were due primarily to increased headcount in 2022. The amount of income from joint R&D projects and governmental grants varies from year to year depending on demand for such projects and availability of governmental R&D programs.

We are closely managing our R&D expenses to meet evolving demand and are in the process of completing a workforce reduction which is anticipated to reduce R&D expense in the first quarter of 2024; however, we expect our research and development expenses to increase in future years as we develop products to drive future growth.

Selling, General and Administrative

	Year Ended December 31,			\$ Change	% Change
	2023	2022	2021		
	(dollars in thousands)				
Selling, general and administrative	\$ 132,156	\$ 168,008	\$ 149,943	\$ (35,852)	12 %
% of net revenue	19 %	15 %	17 %		(21)%

Selling, general and administrative expense decreased \$35.9 million to \$132.2 million for the year ended December 31, 2023, as compared to \$168.0 million for the year ended December 31, 2022. The decrease was a result of decreases in stock-based compensation expenses of \$30.1 million, amortization of intangibles of \$9.0 million, bonuses of \$7.8 million, and supplies and small tools of \$1.6 million, partially offset by increases in payroll and other benefits expense of \$7.4 million and legal fees of \$4.9 million. The decrease in stock based compensation expense and bonuses is attributable to the payouts for the 2022 period including additional grants to certain employees and a decrease in financial performance impacting the amounts of stock based compensation recognized for performance-based restricted stock units and amounts of bonuses. The decrease in intangible amortization expense is from acquired assets becoming fully amortized as they reach the end of their useful lives. The increase in payroll and other benefits is from increase in headcount in certain administrative functions. The increase in legal fees is due to various legal proceedings including those following the termination of our merger with Silicon Motion, the Comcast litigation, and in settlement of the Bell Semiconductor litigation earlier in the year.

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 a result of increases in stock-based compensation expenses of \$11.3 million, professional fees of \$7.6 million, other expenses of \$3.5 million, payroll and benefits of \$3.3 million, and various other expenses of \$3.3 million, partially offset by a decrease in intangible amortization expense of \$11.7 million. The increase in professional fees was due to an increase in acquisition and integration costs of \$6.8 million related to our previously pending (now terminated) merger with Silicon Motion. The increase in stock-based compensation expenses and payroll employee benefits expenses and the remaining other expenses were mainly due to increased headcount and spending due to higher product demands from customers. Improved financial performance in 2022 and additional grants to employees of stock-based awards also contributed to the increase in stock-based compensation expense.

We are closely managing our selling, general and administrative expenses; however, we expect selling, general and administrative expenses to increase in future years when we return to growing our sales and marketing organization to expand into existing and new markets.

Impairment Losses

	Year Ended December 31,					\$ Change	% Change
	2023	2022	2021				
	(dollars in thousands)						
Impairment losses	\$ 2,438	\$ 2,811	\$ —	\$ (373)	\$ 2,811	(13)%	N/A
% of net revenue	— %	— %	— %				

Impairment losses in the year ended December 31, 2023 related to abandonment of certain acquired licensing agreements. Impairment losses in the year ended December 31, 2022 also related to abandonment of certain acquired licensing agreements.

Restructuring Charges

	Year Ended December 31,					\$ Change	% Change
	2023	2022	2021				
	(dollars in thousands)						
Restructuring charges	\$ 19,786	\$ 2,265	\$ 2,204	\$ 17,521	\$ 61	774%	3%
% of net revenue	3 %	— %	— %				

Restructuring charges increased \$17.5 million to \$19.8 million for the year ended December 31, 2023, compared to \$2.3 million for the year ended December 31, 2022. 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, 2023 included \$17.9 million in employee severance-related charges related to reductions in our workforce and \$1.8 million in other charges driven by the abandonment of certain computer-assisted design software licenses used by the terminated workforce. Approximately two-thirds of the employee severance-related charges are estimated statutory severance benefits payable in the jurisdictions in which the terminated employees were employed, with the remainder representing standard severance benefits.

Restructuring charges in the year ended December 31, 2022 included \$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 included \$1.3 million in employee severance-related charges and \$0.6 million of lease-related charges, which consisted of impairment of leased right-of-use assets and leasehold improvements.

Interest and Other Income (Expense)

	Year Ended December 31,					\$ Change	% Change
	2023	2022	2021				
	(dollars in thousands)						
Interest and other income (expense), net	\$ (25,589)	\$ (6,045)	\$ (12,154)	\$ (19,544)	\$ 6,109	323 %	(50)%
% of net revenue	(4)%	(1)%	(1)%				

Interest and other income (expense), net changed by \$19.5 million to a net expense of \$25.6 million in the year ended December 31, 2023 from a net expense of \$6.0 million for the year ended December 31, 2022. The change in interest and other income (expense), net was primarily due to a \$24.4 million change in other income (expense), net, from income of \$3.5 million in the 2022 period to expense of \$20.9 million in the 2023 period plus an increase in interest expense of \$0.9 million, partially offset by the impact of a \$5.8 million increase in interest income.

The \$24.4 million change in other income (expense), net primarily related to a loan ticking fee of approximately \$18.3 million paid to lenders following the termination of the Silicon Motion merger, \$4.3 million impact from foreign currency fluctuations, \$2.8 million impact of realized and unrealized holding losses recognized on equity securities that were sold at the end of 2023 that were previously marked to market value in other income (expense), net, and partially offset by a gain of \$1.0 million related to partial curtailment of defined benefit pension obligations. The \$0.9 million increase in interest

expense is due to higher interest rates on our outstanding debt in 2023. The \$5.8 million increase in interest income is due to higher interest rates on our interest-bearing cash equivalents.

Interest and other income (expense), net changed 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 due to the positive impact of a non-recurring gain on sale of privately held investments of \$3.4 million and a decrease in 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 (Benefit)

	Year Ended December 31,					\$ Change	% Change
	2023	2022	2021				
	(dollars in thousands)						
Income tax provision	\$ 9,337	\$ 49,158	\$ 5,901	\$ (39,821)	\$ 43,257	(81)%	733 %
% of pre-tax income (loss)	(15)%	28 %	11 %				

The income tax provision for the year ended December 31, 2023 was \$9.3 million compared to an income tax provision of \$49.2 million for the year ended December 31, 2022, and 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, 2023 resulted primarily from the mix of pre-tax income among jurisdictions, permanent tax items including tax credits and a tax on global intangible low-taxed income, stock based compensation, excess tax benefits related to stock-based compensation, and release of uncertain tax positions under ASC 740-10. 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, 2022 resulted primarily from 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, 2023 and 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.

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, 2023, we had cash and cash equivalents of \$187.3 million, restricted cash of \$1.1 million and net accounts receivable of \$170.6 million. Additionally, as of December 31, 2023, our working capital, which we define as current assets less current liabilities, was \$265.9 million. Financial instruments, which potentially subject us to concentrations of credit risk, consist primarily of cash and cash equivalents and accounts receivable. Collateral is generally not required for customer receivables. We limit our exposure to credit loss by placing our cash with high credit quality financial institutions. At times, such deposits may be in excess of insured limits. We have not experienced any losses on our deposits of cash and cash equivalents.

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. However, on July 26, 2023, we terminated the Merger Agreement and were relieved of our obligations to close.

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, 2023, \$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 in an aggregate principal amount of up to \$100.0 million, which remained undrawn as of December 31, 2023. 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 had been mitigating the impact of rising interest rates with large amounts of prepayments on our outstanding debt, if interest rates were to further increase substantially, it could have a material adverse effect on our operating results and affect our ability to service the indebtedness. Please refer to the Risk Factor entitled “*As of September 30, 2023, our aggregate indebtedness was \$125.0 million, and we are subject to a variable amount of interest on the principal balance of our credit agreements and could continue to be adversely impacted by rising interest rates in the future. 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 interest of stockholders, including obtaining additional indebtedness to finance such transactions. In addition, rising interest rates may make it more difficult for us, our customers, and our distributors to obtain financing and service their interest and debt obligations, which in turn has an impact on customer demand for our products and our distributors’ business*” 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, any damages from legal proceedings related to the termination of the Merger Agreement with Silicon Motion or any alleged breaches of the Merger Agreement that we are required to pay, or any amounts we agree to pay in any settlement 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, 2023, 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:

	Payments due				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
	(in thousands)				
Long term debt obligations	\$ 125,000	\$ —	\$ —	\$ 125,000	\$ —
Operating lease obligations	39,440	10,769	18,830	8,245	1,596
Purchase obligations	38,985	28,754	10,231	—	—
Other obligations	84,208	32,563	47,972	3,673	—
Total	<u>\$ 287,633</u>	<u>\$ 72,086</u>	<u>\$ 77,033</u>	<u>\$ 136,918</u>	<u>\$ 1,596</u>

Our planned capital expenditures as of December 31, 2023 were not material. Our consolidated balance sheet at December 31, 2023 included in other long-term liabilities \$5.4 million for uncertain tax positions, some of which may result in cash payment and \$15.0 million received from other parties for jointly funded research and development projects which will be recognized into income when the contingencies associated with the repayment conditions have been resolved. 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:

	December 31,	
	2023	2022
	(in thousands)	
Working capital	\$ 265,896	\$ 222,038
Cash and cash equivalents	\$ 187,288	\$ 187,353
Short-term restricted cash	1,051	982
Long-term restricted cash	17	22
Total cash, cash equivalents, and restricted cash	\$ 188,356	\$ 188,357

We believe that our \$187.3 million of cash and cash equivalents at December 31, 2023 will be sufficient to fund our projected operating requirements for at least the next twelve months. As of December 31, 2023, our indebtedness totaled \$125.0 million, which consists of outstanding principal under the Initial Term Loan under the June 23, 2021 Credit Agreement. The June 23, 2021 Credit Agreement also provides the Company with the Revolving Facility in an aggregate principal amount of up to \$100.0 million, which remained undrawn as of December 31, 2023. 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 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 daily 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 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 was amended on June 29, 2023 to implement a benchmark replacement.

The following is a summary of our cash flows provided by (used in) operating activities, investing activities and financing activities for the periods indicated:

	Year Ended December 31,		
	2023	2022	2021
	(in thousands)		
Net cash provided by operating activities	\$ 43,372	\$ 388,726	\$ 168,233
Net cash used in investing activities	(15,935)	(91,762)	(91,757)
Net cash used in financing activities	(26,356)	(240,401)	(91,903)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(1,082)	56	(2,869)
Increase (decrease) in cash, cash equivalents and restricted cash	\$ (1)	\$ 56,619	\$ (18,296)

Cash Flows from Operating Activities

In the year ended December 31, 2023, net cash provided by operating activities was \$43.4 million, compared to net cash provided by operating activities of \$388.7 million for the year ended December 31, 2022. The decline in operating cash flows was driven by a decline in revenue from decreased volume of shipments of broadband SOC and certain connectivity products as a result of macroeconomic conditions impacting customer demand for such products (as discussed under the heading, "Results of Operations," above). Operating cash flows were also impacted by changes in our working capital, which decreased \$101.4 million, in particular, in 2023 we made \$104.2 million in payments against our price protection liability and \$11.8 million in severance and related payments from our workforce reductions.

In the year ended December 31, 2022, net cash provided by operating activities was \$388.7 million, compared to net cash flow provided by operating activities of \$168.2 million for the year ended December 31, 2021. The increase in operating cash flows was driven by an increase in revenue from various factors as discussed under the heading, “Results of Operations,” (above). Operating cash flows were also impacted by changes in working capital, which increased \$110.3 million, in particular in 2022, the price protection liability increased by \$113.3 million in 2022, due to a significant increase in revenues from customers with price protection rights and a delay in the timing of payments and certain price protection claims submitted by customers since certain claims are not made until after a customer has utilized a complete bundle of products. Such delay was caused by the supply chain shortages in the industry over an 18-month period beginning in 2021 and extending into 2022.

Cash Flows from Investing Activities

Our use of cash in investing activities declined, as we moved from heavier investing in infrastructure, securities and private companies in 2022 to lighter investment activity in 2023. Net cash used in investing activities was \$15.9 million for the year ended December 31, 2023 and included purchases of property and equipment of \$13.5 million, payments to acquire Company Y of \$9.8 million, purchases of intangible assets of \$6.4 million, and payments of contingent consideration related to our acquisition of Company X of \$3.0 million.

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 to a supplier under notes receivable of \$10.0 million.

Cash Flows from Financing Activities

Our use of cash in financing activities declined, as we moved from early paydown of debt to mitigate rising interest rates in 2022 to cash conservation in 2023 following the general slowdown in the market environment. Net cash used in financing activities was \$26.4 million for the year ended December 31, 2023. Net cash used in financing activities consisted of payment of a ticking fee to lenders of \$18.3 million associated with the termination of our debt commitment associated with the terminated Silicon Motion merger and repayments of minimum tax withholding paid on behalf of employees for restricted stock units of \$12.6 million, partially offset by cash inflows from net proceeds from the issuance of common stock upon exercise of stock options of \$4.6 million.

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, and 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.

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, 2023 would result in a change to translation gain in accumulated other comprehensive income of approximately \$1.0 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 currently believe our operating cash held primarily for working capital purpose is sufficient to cover our interest obligations, but we are monitoring the impact of rising interest rates on our ability to service our interest and debt obligations, obtain financing, and on our business in general.

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, 2023. The effectiveness of our internal control over financial reporting as of December 31, 2023 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, 2023 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, 2023, 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, 2023, 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, 2023, and our report dated January 31, 2024 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
January 31, 2024

ITEM 9B. OTHER INFORMATION

Securities Trading Plans of Directors and Executive Officers

During our last fiscal quarter, no director or officer, as defined in Rule 16a-1(f), adopted or terminated a “Rule 10b5-1 trading arrangement” or a “non-Rule 10b5-1 trading arrangement,” each as defined in Regulation S-K Item 408.

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 2024 Annual Meeting of Stockholders, or the 2024 Proxy Statement. Such amendment in the 2024 Proxy Statement will be filed with the SEC no later than 120 days after December 31, 2023.

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 2024 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 2024 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 2024 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 2024 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 2024 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 2024 Proxy Statement.

PART IV — FINANCIAL INFORMATION

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, 2023, 2022 and 2021

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):

Classification	Balance at beginning of year	Additions (deductions) charged to expenses	Other Additions	(Deductions)	Balance at end of year
Allowance for credit losses (previously, allowance for doubtful accounts)					
2023	\$ —	\$ —	\$ —	\$ —	\$ —
2022	—	—	—	—	—
2021	—	—	—	—	—
Warranty reserves					
2023	\$ 473	\$ 301	\$ —	\$ (490)	\$ 284
2022	774	358	—	(659)	473
2021	700	514	—	(440)	774
Valuation allowance for deferred tax assets					
2023	\$ 66,273	\$ 8,019	\$ —	\$ —	\$ 74,292
2022	68,151	4,169	—	(6,047)	66,273
2021	71,811	(3,660)	—	—	68,151

3. Exhibits

Exhibit Number	Exhibit Title
2.1	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)).
2.2	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).
3.1	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)).
3.2	Registrant's Certificate of Retirement (incorporated by reference to Exhibit 3.1 of Registrant's Form 8-A/A filed on July 30, 2017).
3.3	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)).
3.4	Registrant's Certificate of Amendment to the Fifth Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Quarterly Report on Form 10-Q filed on July 27, 2023 (File No. 001-34666)).
4.1	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)).
+4.2	Description of the registrant's securities registered pursuant to Section 12 of the Securities Exchange Act of 1934.
+10.1	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)).
+10.2	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)).
+10.3	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)).
+10.4	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)).
+10.5	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)).
+10.6	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).
*†10.7	Intellectual Property License Agreement, dated June 18, 2009, between the Registrant and Intel Corporation.
+10.8	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)).
10.9	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)).
10.10	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)).
10.11	Lease Agreement, dated November 11, 2015, between Registrant and The Northwestern Mutual Life Insurance Company (incorporated herein by reference to Exhibit 10.33 of the Registrant's Annual Report on Form 10-K filed on February 17, 2016).
+10.12	Employment Promotion Letter, dated February 11, 2016, between the Registrant and Connie Kwong (incorporated herein by reference to Exhibit 10.2 of the Registrant's Current Report on Form 10-Q filed on May 9, 2016).

Exhibit Number	Exhibit Title
+10.13	Employment Offer Letter, dated June 7, 2018, between the Registrant and Steven Litchfield (incorporated by reference to Exhibit 10.1 to the Registrants Current Report on Form 10-Q filed on August 7, 2018 (File No. 001-34666)).
+10.14	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)).
+10.15	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)).
+10.16	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)).
+*†10.17	Form of Restricted Stock Unit Award Agreement for Performance-Based Awards under the 2010 Equity Incentive Plan.
10.18	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).
10.19	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)
+10.20	Employment Offer Letter, dated April 26, 2022, between the Registrant and Michelle M. Sayer (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 10-Q filed on July 27, 2022).
10.21	Commitment Letter, dated as of May 5, 2022, by and among MaxLinear, Inc., Wells Fargo Bank, N.A., and Wells Fargo Securities, LLC (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on May 5, 2022).
10.22	Amended and Restated Commitment Letter, dated as of June 17, 2022, by and among MaxLinear, Inc., Wells Fargo Bank, N.A., Wells Fargo Securities, LLC, Bank of Montreal, BMO Capital Markets Corp., Citizens Bank, N.A., Truist Bank and Trust Securities, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on June 21, 2022)
10.23	Second Amended and Restated Commitment Letter by and among MaxLinear, Inc., Wells Fargo Bank, N.A., Wells Fargo Securities, LLC, Bank of Montreal, BMO Capital Markets Corp., Citizens Bank, N.A., Truist Bank, and Truist Securities, Inc. dated as of October 24, 2022 (incorporated by reference to Exhibit 10.32 to the Registrant's Annual Report on Form 10-K filed on February 1, 2023).
10.24	Amendment No. 1 to Credit Agreement, date as of June 29, 2023, 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 Quarterly Report on Form 10-Q filed on July 27, 2023 (File No. 001-34666)).
*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.
+*97.1	Compensation Recovery Policy, as adopted on August 9, 2023.
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.
- † Certain portions of this exhibit have been redacted pursuant to Item 601(b)(10)(iv) of Regulation S-K. The Registrant agrees to furnish supplementally an unredacted copy of the exhibit to the Securities and Exchange Commission upon its request.

(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 SEENDRIPU, Ph.D.

Kishore Seendripu, Ph.D.

President and Chief Executive Officer

(Principal Executive Officer)

Date: January 31, 2024

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:

Signature	Title	Date
<u>/s/ KISHORE SEENDRIPU, Ph.D.</u> Kishore Seendripu, Ph.D.	President, Chief Executive Officer, and Director (Principal Executive Officer)	January 31, 2024
<u>/s/ STEVEN G. LITCHFIELD</u> Steven G. Litchfield	Chief Financial Officer and Chief Corporate Strategy Officer (Principal Financial Officer)	January 31, 2024
<u>/s/ CONNIE KWONG</u> Connie Kwong	Corporate Controller (Principal Accounting Officer)	January 31, 2024
<u>/s/ THOMAS E. PARDUN</u> Thomas E. Pardun	Lead Director	January 31, 2024
<u>/s/ DANIEL A. ARTUSI</u> Daniel A. Artusi	Director	January 31, 2024
<u>/s/ CAROLYN D. BEAVER</u> Carolyn D. Beaver	Director	January 31, 2024
<u>/s/ GREGORY P. DOUGHERTY</u> Gregory P. Dougherty	Director	January 31, 2024
<u>/s/ TSU-JAE KING LIU, Ph.D.</u> Tsu-Jae King Liu, Ph.D.	Director	January 31, 2024
<u>/s/ ALBERT J. MOYER</u> Albert J. Moyer	Director	January 31, 2024
<u>/s/ THEODORE TEWKSBURY, Ph.D.</u> Theodore Tewksbury, Ph.D.	Director	January 31, 2024

MaxLinear, Inc.

Index to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm (PCAOB ID Number 248)	85
Consolidated Balance Sheets	87
Consolidated Statements of Operations	88
Consolidated Statements of Comprehensive Income (Loss)	89
Consolidated Statements of Stockholders' Equity	90
Consolidated Statements of Cash Flows	91
Notes to Consolidated Financial Statements	92

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, 2023 and 2022, 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, 2023, 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, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, 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, 2023, 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 January 31, 2024 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 matter

The critical audit matter 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 Global Intangible Low-Taxed Income and the ordering rules 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
January 31, 2024

MAXLINEAR, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except par value amounts)

	December 31, 2023	December 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 187,288	\$ 187,353
Short-term restricted cash	1,051	982
Short-term investments	—	18,529
Accounts receivable, net	170,619	170,971
Inventory	99,908	160,544
Prepaid expenses and other current assets	29,159	24,745
Total current assets	488,025	563,124
Long-term restricted cash	17	22
Property and equipment, net	66,431	79,018
Leased right-of-use assets	31,264	28,515
Intangible assets, net	73,630	109,316
Goodwill	318,588	306,739
Deferred tax assets	69,493	66,491
Other long-term assets	32,809	26,800
Total assets	\$ 1,080,257	\$ 1,180,025
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 21,551	\$ 68,576
Accrued price protection liability	71,684	113,274
Accrued expenses and other current liabilities	98,468	100,155
Accrued compensation	30,426	59,081
Total current liabilities	222,129	341,086
Long-term lease liabilities	26,243	23,353
Long-term debt	122,375	121,757
Other long-term liabilities	23,245	17,444
Total liabilities	393,992	503,640
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.0001 par value; 25,000 shares authorized, no shares issued or outstanding	—	—
Common stock, \$0.0001 par value; 550,000 shares authorized; 81,818 shares issued and outstanding at December 31, 2023 and 78,745 shares issued and outstanding December 31, 2022	8	8
Additional paid-in capital	808,575	722,778
Accumulated other comprehensive loss	(3,791)	(1,021)
Accumulated deficit	(118,527)	(45,380)
Total stockholders' equity	686,265	676,385
Total liabilities and stockholders' equity	\$ 1,080,257	\$ 1,180,025

See accompanying notes.

MAXLINEAR, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Year Ended December 31,		
	2023	2022	2021
Net revenue	\$ 693,263	\$ 1,120,252	\$ 892,398
Cost of net revenue	307,600	470,483	396,566
Gross profit	385,663	649,769	495,832
Operating expenses:			
Research and development	269,504	296,442	278,440
Selling, general and administrative	132,156	168,008	149,943
Impairment losses	2,438	2,811	—
Restructuring charges	19,786	2,265	2,204
Total operating expenses	423,884	469,526	430,587
Income (loss) from operations	(38,221)	180,243	65,245
Interest income	6,053	245	78
Interest expense	(10,702)	(9,768)	(12,996)
Loss on extinguishment of debt	—	—	(5,221)
Other income (expense), net	(20,940)	3,478	764
Total other income (expense), net	(25,589)	(6,045)	(17,375)
Income (loss) before income taxes	(63,810)	174,198	47,870
Income tax provision	9,337	49,158	5,901
Net income (loss)	\$ (73,147)	\$ 125,040	\$ 41,969
Net income (loss) per share:			
Basic	\$ (0.91)	\$ 1.60	\$ 0.55
Diluted	\$ (0.91)	\$ 1.55	\$ 0.53
Shares used to compute net income (loss) per share:			
Basic	80,719	78,039	76,037
Diluted	80,719	80,852	79,679

See accompanying notes.

MAXLINEAR, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands)

	Year Ended December 31,		
	2023	2022	2021
Net income (loss)	\$ (73,147)	\$ 125,040	\$ 41,969
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments, net of tax benefit of \$95 in 2023, expense of \$184 in 2022 and expense of \$0 in 2021	121	(5,201)	(242)
Net actuarial gain (loss) on pension and other defined benefit plans, net of tax benefit of \$85 in 2023, \$0 in 2022 and \$0 in 2021	(206)	2,055	932
Reclassification adjustments of unrealized gain (loss) on pension and other defined benefit plans, net of tax benefit of \$1,107 in 2023, \$0 in 2022 and \$0 in 2021	(2,685)	—	—
Other comprehensive income (loss)	(2,770)	(3,146)	690
Total comprehensive income (loss)	<u>\$ (75,917)</u>	<u>\$ 121,894</u>	<u>\$ 42,659</u>

See accompanying notes.

MAXLINEAR, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2020	74,536	\$ 7	\$ 602,064	\$ 1,435	\$ (212,389)	\$ 391,117
Common stock issued pursuant to equity awards, net	2,501	1	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	—	—	59,358	—	—	59,358
Other comprehensive income	—	—	—	690	—	690
Net income	—	—	—	—	41,969	41,969
Balance at December 31, 2021	76,778	8	657,485	2,125	(170,420)	489,198
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	—	—	81,868	—	—	81,868
Other comprehensive loss	—	—	—	(3,146)	—	(3,146)
Net income	—	—	—	—	125,040	125,040
Balance at December 31, 2022	78,745	8	722,778	(1,021)	(45,380)	676,385
Common stock issued pursuant to equity awards, net	2,841	—	26,237	—	—	26,237
Employee stock purchase plan	232	—	4,379	—	—	4,379
Stock-based compensation	—	—	55,181	—	—	55,181
Other comprehensive loss	—	—	—	(2,770)	—	(2,770)
Net loss	—	—	—	—	(73,147)	(73,147)
Balance at December 31, 2023	81,818	8	\$ 808,575	\$ (3,791)	\$ (118,527)	\$ 686,265

See accompanying notes.

MAXLINEAR, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2023	2022	2021
Operating Activities			
Net income (loss)	\$ (73,147)	\$ 125,040	\$ 41,969
Adjustments to reconcile net income (loss) to cash provided by operating activities:			
Amortization and depreciation	71,516	80,731	91,792
Impairment losses	2,438	2,811	—
Amortization of debt issuance costs and accretion of discounts	2,561	1,975	3,000
Stock-based compensation	55,176	81,704	59,358
Deferred income taxes	(4,452)	23,454	(3,235)
Loss on disposal of property and equipment	2,057	170	533
Gain on sale of investments	(434)	(3,375)	—
Unrealized holding loss on investments	1,765	1,476	—
Impairment of leasehold improvements	—	—	226
Impairment of leased right-of-use assets	—	462	429
(Gain) loss on settlement of pension	(1,008)	—	—
Loss on extinguishment of debt	—	—	5,221
(Gain) loss on foreign currency	2,475	(1,829)	634
Excess tax benefits on stock-based awards	(253)	(9,921)	(7,415)
Changes in operating assets and liabilities, net of effects of acquisitions:			
Accounts receivable, net	1,406	(50,875)	(51,690)
Inventory	60,636	(28,841)	(33,689)
Prepaid expenses and other assets	(9,328)	1,789	24,186
Leased right-of-use assets	—	—	72
Accounts payable, accrued expenses and other current liabilities	(29,431)	65,815	12,771
Accrued compensation	9,708	42,003	33,595
Accrued price protection liability	(41,562)	73,574	(7,320)
Lease liabilities	(11,671)	(11,440)	(9,905)
Other long-term liabilities	4,920	(5,997)	7,701
Net cash provided by operating activities	<u>43,372</u>	<u>388,726</u>	<u>168,233</u>
Investing Activities			
Purchases of property and equipment	(13,454)	(41,253)	(39,176)
Purchases of intangible assets	(6,355)	(11,184)	(7,581)
Cash used in acquisitions, net of cash acquired	(13,324)	—	(40,000)
Proceeds loaned under notes receivable	—	(10,000)	—
Purchases of long-term investments	—	(29,325)	(5,000)
Sale of trading securities	17,198	—	—
Net cash used in investing activities	<u>(15,935)</u>	<u>(91,762)</u>	<u>(91,757)</u>
Financing Activities			
Proceeds from the issuance of debt	—	—	350,000
Payment of debt issuance cost	(18,325)	—	(4,173)
Repayment of debt	—	(185,000)	(409,813)
Net proceeds from issuance of common stock	4,559	5,006	8,780
Minimum tax withholding paid on behalf of employees for restricted stock units	(12,590)	(28,896)	(13,149)
Repurchase of common stock	—	(31,511)	(23,548)
Net cash used in financing activities	<u>(26,356)</u>	<u>(240,401)</u>	<u>(91,903)</u>
Effect of exchange rate changes on cash and cash equivalents	(1,082)	56	(2,869)
Increase (decrease) in cash, cash equivalents and restricted cash	(1)	56,619	(18,296)
Cash, cash equivalents and restricted cash at beginning of period	188,357	131,738	150,034
Cash, cash equivalents and restricted cash at end of period	<u>\$ 188,356</u>	<u>\$ 188,357</u>	<u>\$ 131,738</u>
Supplemental disclosures of cash flow information:			
Cash paid for interest	<u>\$ 9,481</u>	<u>\$ 9,078</u>	<u>\$ 11,034</u>
Cash paid for income taxes	<u>\$ 28,645</u>	<u>\$ 23,829</u>	<u>\$ 3,839</u>
Cash received for dividend income on investments	<u>\$ 716</u>	<u>\$ —</u>	<u>\$ —</u>
Supplemental disclosures of non-cash activities:			
Issuance of shares for payment of bonuses	<u>\$ 38,648</u>	<u>\$ 38,826</u>	<u>\$ 23,981</u>

See accompanying notes.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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, mixed-signal, 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. Examples of such devices include broadband modems compliant with Data Over Cable Service Interface Specifications, or DOCSIS, Passive Optical Network, or PON, and DSL; Wi-Fi and wireline routers for home networking; radio transceivers and modems for 4G/5G base-station and backhaul infrastructure; optical transceivers targeting hyperscale data centers; 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 to the consolidated financial statements. 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

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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, 2023 and 2022 and the activity in this account, including the current-period provision for expected credit losses for the years ended December 31, 2023, 2022, and 2021, 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.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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.

During the years 2023, 2022, and 2021, the Company recorded impairment of intangible assets of \$2.4 million, \$2.8 million and \$0, 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

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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, which are included in accrued price protection liability in the consolidated balance sheets, consist of estimates of price protection rights offered to the Company's end customer on products sold by the Company to the end customer's contract manufacturer at a standard price that are later incorporated into the end customers' product. The Company's price adjustments included in accrued expenses and other current liabilities are discounts and rebates expected to be claimed by the Company's distributors upon sell-through of the products to their customers, which are initially sold by the Company to the distributors at a standard price. Also included in accrued expenses and other current liabilities are amounts expected to be returned by distributors under stock rotation rights. 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, 2023 and 2022, the Company has warranty reserves of \$0.3 million and \$0.5 million, respectively, based on the Company's estimates.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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. 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. The Company also obtains research and development funding grants from governments in certain jurisdictions in which it operates. Both of these types of income are reflected as a credit to research and development expense when such income has been earned and any contingencies associated with retaining such income have been resolved. During the years ended December 31, 2023, 2022, and 2021, the Company recognized income from jointly funded research and development projects of \$0, \$23.3 million, and \$0, respectively. While the Company retains ownership and rights to the underlying technology developed under the joint development projects, the Company may be required to repay all or a portion of the funds provided by the other parties under certain conditions, and defers such funds as liabilities until the repayment conditions have been resolved (Note 15).

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

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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)

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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 Adopted 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 were effective for the Company in 2023. The impact of the adoption of the amendments in this update was not material to the Company's consolidated financial position and results of operations, since there were no customer contracts assumed in a business combination in 2023.

Recently Issued Not Yet Adopted Accounting Pronouncements

In December 2023, the FASB issued ASU No. 2023-09, *Income Taxes (Topic 740) - Improvements to Income Tax Disclosures*, to require enhanced income tax disclosures to provide information to assess how an entity's operations and related tax risks, tax planning, and operational opportunities affect its tax rate and prospects for future cash flows. The amendments in this update provide that a business entity disclose (1) a tabular income tax rate reconciliation, using both percentages and amounts, (2) separate disclosure of any individual reconciling items that are equal to or greater than 5% of the amount computed by multiplying the income (loss) from continuing operations before income taxes by the applicable statutory income tax rate, and disaggregation of certain items that are significant and (3) amount of income taxes paid (net of refunds received) disaggregated by federal, state and foreign jurisdictions, including separate disclosure of any individual jurisdictions greater than 5% of total income taxes paid. These amendments are effective for the Company for annual periods in 2025, applied prospectively, with early adoption and retrospective application permitted. The Company intends to adopt the amendments in this update prospectively in 2025. The impact of the adoption of the amendments in this update is not expected to be material to the Company's consolidated financial position and results of operations, since the amendments require only enhancement of existing income tax disclosures in the footnotes to the Company's consolidated financial statements.

In November 2023, the FASB issued ASU No. 2023-07, *Segment Reporting (Topic 280) – Improvements to Reportable Segment Disclosures*, to require enhanced disclosures that include reportable segment expenses. The amendments in this update provide that a business entity disclose significant segment expenses, segment profit or loss (after significant segment expenses), and allows reporting of additional measures of a segments profit or loss if used in assessing segment performance. Such disclosures apply to entities with a single reportable segment. These amendments are effective for the Company for annual periods in 2024 and interim periods in 2025, retrospectively to all prior periods using the significant segment expense categories identified and disclosed in the period of adoption. The impact of the adoption of the amendments in this update is not expected to be material to the Company's consolidated financial position and results of operations, since the requirements impact only segment reporting disclosures in the footnotes to the Company's consolidated financial statements.

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.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

	Year Ended December 31,		
	2023	2022	2021
	(in thousands, except per share amounts)		
Numerator:			
Net income (loss)	\$ (73,147)	\$ 125,040	\$ 41,969
Denominator:			
Weighted average common shares outstanding—basic	80,719	78,039	76,037
Dilutive common stock equivalents	—	2,813	3,642
Weighted average common shares outstanding—diluted	80,719	80,852	79,679
Net income (loss) per share:			
Basic	\$ (0.91)	\$ 1.60	\$ 0.55
Diluted	\$ (0.91)	\$ 1.55	\$ 0.53

For each of the years ended December 31, 2023, 2022, and 2021, the Company excluded common stock equivalents for outstanding stock-based awards, which represented potentially dilutive securities of 4.9 million for 2023, 1.8 million for 2022, and 0.07 million for 2021 from the calculation of diluted net income (loss) per share due to their anti-dilutive nature.

3. Business Combinations

Terminated 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 laws of the Cayman Islands, pursuant to which, among other things and subject to the terms and conditions thereof, MaxLinear agreed to acquire Silicon Motion pursuant to a statutory merger, under the laws of the Cayman Islands, 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.

On July 26, 2023, MaxLinear terminated the Merger Agreement and notified Silicon Motion that MaxLinear was relieved of its obligations to close because, among other reasons, (i) certain conditions to closing set forth in the Merger Agreement were not satisfied and were incapable of being satisfied, (ii) Silicon Motion had suffered a Material Adverse Effect that was continuing, (iii) Silicon Motion was in material breach of representations, warranties, covenants, and agreements in the Merger Agreement that gave rise to the right of the Company to terminate, and (iv) in any event, the First Extended Outside Date had passed and was not automatically extended because certain conditions in Article 6 of the Merger Agreement were not satisfied or waived as of May 5, 2023. For these same reasons, under the terms of the Merger Agreement, MaxLinear was not required to pay a break-up fee or other fee to Silicon Motion as a result of the termination of the Merger Agreement. Undefined capitalized terms in this paragraph have the same meaning as in the Merger Agreement. On August 16, 2023, Silicon Motion delivered to MaxLinear a notice, which Silicon Motion publicly disclosed, that it was purporting to terminate the Merger Agreement and that Silicon Motion would be commencing an arbitration to seek damages from MaxLinear arising from MaxLinear's alleged breaches of the Merger Agreement.

On October 5, 2023, Silicon Motion filed a Notice of Arbitration with the Singapore International Arbitration Centre alleging that MaxLinear breached the Merger Agreement. See Note 15 for more information on legal matters related to the termination of the Merger Agreement.

The second amended and restated commitment letter dated October 24, 2022 with Wells Fargo Bank, N.A., or Wells Fargo Bank, and other lenders, and related financing commitments for the previously pending (now terminated) merger were also terminated upon termination of the Merger Agreement. As a result of the termination of the financing, the Company was required to pay to Wells Fargo Bank a ticking fee of \$18.3 million, which is included in other income (expense), net in the year ended December 31, 2023.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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 transaction consideration included \$9.8 million in cash. In addition, Company Y 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, 2024.

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

Acquisition Consideration

The following table summarizes the fair value of purchase price consideration to acquire Company Y (in thousands):

Description	Amount
Fair value of purchase consideration:	
Cash	\$ 9,824
Contingent consideration ⁽¹⁾	2,600
Total purchase price	<u>\$ 12,424</u>

⁽¹⁾ The fair value of contingent consideration is based on applying the Monte Carlo simulation method to forecast achievement under various contingent consideration events which may result in up to \$2.6 million in payments subject to the acquired business's satisfying certain financial and personnel objectives by June 17, 2024 under the Purchase Agreement. Key inputs in the valuation include forecasted revenue, revenue volatility and discount rate. Underlying forecast mathematics were based on Geometric Brownian Motion in a risk-neutral framework and discounted back to the applicable period in which the accumulative thresholds were achieved at discount rates commensurate with the risk and expected payout term of the contingent consideration.

Purchase Price Allocation

An allocation of purchase price as of the January 17, 2023 acquisition closing date based upon an estimate of the fair value of the assets acquired and the liabilities assumed by the Company in the acquisition primarily includes \$2.0 million in net operating liabilities, with \$11.8 million in goodwill.

Assumptions in the Allocations of Purchase Price

Management prepared the purchase price allocations for Company Y and in doing so considered or relied in part upon reports of a third party valuation expert to calculate the fair value of certain acquired assets, which primarily included an acquired workforce and contingent consideration. Certain stockholders that are employees of Company Y were not required to remain employed in order to receive the contingent consideration; accordingly, the fair value of the contingent consideration was accounted for as a portion of the purchase consideration.

Estimates of fair value require management to make significant estimates and assumptions. The goodwill recognized is attributable primarily to the acquired workforce. Certain liabilities included in the purchase price allocations are based on management's best estimates of the amounts to be paid or settled and based on information available at the time the purchase price allocations were prepared.

Goodwill recorded in connection with Company Y was \$11.8 million as of December 31, 2023. The Company does not expect to deduct any of the acquired goodwill for tax purposes.

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 may include terminating employees, vacating certain leased facilities, and cancellation of contracts. During the year ended December 31, 2023, the Company entered into plans of restructuring to reduce its workforce.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table presents the activity related to the restructuring plans, which is included in restructuring charges in the consolidated statements of operations:

	Year Ended December 31,		
	2023	2022	2021
	(in thousands)		
Employee separation expenses	\$ 17,897	\$ 1,795	\$ 1,273
Lease related charges	42	462	608
Other	1,847	8	323
	\$ 19,786	\$ 2,265	\$ 2,204

Restructuring charges for the year ended December 31, 2023 included \$17.9 million in employee severance-related charges associated with reductions in the workforce and \$1.8 million in other charges related to abandonment of contracts used by the terminated employees.

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 \$0.4 million and \$0.2 million, respectively.

The following table presents a roll-forward of the Company's restructuring liability for the years ended December 31, 2023 and 2022. The restructuring liability is included in accrued expenses and other current liabilities and other long-term liabilities in the consolidated balance sheets.

	Employee Separation Expenses	Lease Related Charges	Other	Total
	(in thousands)			
Liability as of December 31, 2021	\$ —	\$ 444	\$ —	\$ 444
Restructuring charges	1,795	462	8	2,265
Cash payments	(824)	(273)	—	(1,097)
Non-cash charges and adjustments	—	(530)	—	(530)
Liability as of December 31, 2022	971	103	8	1,082
Restructuring charges	17,897	42	1,847	19,786
Cash payments	(11,388)	(142)	(265)	(11,795)
Non-cash charges and adjustments	(97)	(5)	(670)	(772)
Liability as of December 31, 2023	7,383	(2)	920	8,301
Less: current portion as of December 31, 2023	(7,383)	2	(920)	(8,301)
Long-term portion as of December 31, 2023	\$ —	\$ —	\$ —	\$ —

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).

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table presents the changes in the carrying amount of goodwill for the periods indicated:

	Year Ended December 31,	
	2023	2022
	(in thousands)	
Beginning balance	\$ 306,739	\$ 306,668
Acquisitions (Note 3)	11,849	71
Ending balance	<u>\$ 318,588</u>	<u>\$ 306,739</u>

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, 2023.

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, 2023, 2022, and 2021, 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:

	Weighted Average Useful Life (in Years)	December 31, 2023			December 31, 2022		
		Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Value	Accumulated Amortization	Net Carrying Amount
		(in thousands)					
Licensed technology	7.0	\$ 20,133	\$ (1,431)	\$ 18,702	\$ 21,764	\$ (580)	\$ 21,184
Developed technology	7.0	311,261	(263,635)	47,626	311,261	(228,532)	82,729
Trademarks and trade names	6.2	14,800	(14,276)	524	14,800	(13,461)	1,339
Customer relationships	5.0	128,800	(126,347)	2,453	128,800	(124,807)	3,993
Backlog	5.3	500	(500)	—	500	(429)	71
Patents	7.0	4,780	(455)	4,325	—	—	—
	6.1	<u>\$ 480,274</u>	<u>\$ (406,644)</u>	<u>\$ 73,630</u>	<u>\$ 477,125</u>	<u>\$ (367,809)</u>	<u>\$ 109,316</u>

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

	Year Ended December 31,		
	2023	2022	2021
	(in thousands)		
Cost of net revenue	\$ 35,952	\$ 39,638	\$ 43,078
Research and development	2	4	4
Selling, general and administrative	2,881	11,955	23,625
	<u>\$ 38,835</u>	<u>\$ 51,597</u>	<u>\$ 66,707</u>

Amortization of finite-lived intangible assets in cost of net revenue in the consolidated statements of operations results primarily from acquired developed technology.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

price fluctuations in the underlying securities held were recorded to other income (expense), net in the consolidated statement of operations.

The Company evaluated securities for other-than-temporary impairment on a quarterly basis. Impairment was evaluated considering numerous factors, and their relative significance varied depending on the situation. Factors considered include the length of time and extent to which fair value was 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 were valued on the basis of quoted market prices and are therefore classified as Level 1.

The contingent consideration liability as of December 31, 2023 is associated with the Company's acquisition of Company Y in January 2023 (Note 3) and the contingent consideration liability as of December 31, 2022 is associated with the Company's acquisition of Company X. The contingent consideration liability is classified as a Level 3 financial instrument. The contingent consideration as it relates to Company X was subject to the acquired business's satisfaction of certain financial and personnel objectives by March 31, 2023, while the contingent consideration as it relates to Company Y is subject to the acquired business's satisfaction of certain personnel objectives by June 17, 2024. The financial and personnel objectives of Company X were achieved by March 31, 2023 and contingent consideration for Company X of \$3.0 million was paid during the year ended December 2023. 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 included an assumption of total payments up to \$3.0 million to Company X and an assumption of total payments up to \$2.6 million to Company Y. 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.

The following summarizes the level in the fair value hierarchy for each financial instrument:

	Fair Value Measurements at December 31, 2023			
	Balance at December 31, 2023	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(in thousands)			
Liabilities				
Contingent consideration	\$ 2,462	\$ —	\$ —	\$ 2,462

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	Fair Value Measurements at December 31, 2022			
	Balance at December 31, 2022	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(in thousands)			
Assets				
Marketable equity securities	\$ 18,529	\$ 18,529	\$ —	\$ —
Liabilities				
Contingent consideration	\$ 2,941	\$ —	\$ —	\$ 2,941

The following summarizes the activity in Level 3 financial instruments:

	Year Ended December 31,	
	2023	2022
	(in thousands)	
Contingent consideration		
Beginning balance	\$ 2,941	\$ 2,700
Acquisitions ⁽¹⁾ (Note 3)	2,200	—
Payments	(3,000)	—
Accretion of discount ⁽¹⁾	321	241
Ending balance	\$ 2,462	\$ 2,941

⁽¹⁾ These changes to the balance associated with the estimated fair value of contingent consideration for the year ended December 31, 2023 were due to the addition of contingent consideration associated with the acquisition of Company Y and accretion of discounts on contingent consideration.

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, 2023, 2022 and 2021.

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 \$11.8 million and \$11.8 million as of December 31, 2023 and December 31, 2022, 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.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

7. Balance Sheet Details

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

	<u>December 31, 2023</u>	<u>December 31, 2022</u>
	(in thousands)	
Cash and cash equivalents	\$ 187,288	\$ 187,353
Short-term restricted cash	1,051	982
Long-term restricted cash	17	22
Total cash, cash equivalents and restricted cash	<u>\$ 188,356</u>	<u>\$ 188,357</u>

As of December 31, 2023 and December 31, 2022, cash and cash equivalents included money market funds of approximately \$78.1 million and \$0.4 million, respectively. As of December 31, 2023 and December 31, 2022, the Company had restricted cash of approximately \$1.1 million and \$1.0 million, respectively. The cash is restricted in connection with guarantees for certain import duties and office leases.

Inventory consists of the following:

	<u>December 31, 2023</u>	<u>December 31, 2022</u>
	(in thousands)	
Work-in-process	\$ 60,368	\$ 97,840
Finished goods	39,540	62,704
	<u>\$ 99,908</u>	<u>\$ 160,544</u>

Inventory decreased \$60.6 million from \$160.5 million as of December 31, 2022 to \$99.9 million as of December 31, 2023, as the Company's management lowered inventory levels due to reduced supply chain constraints and decreased customer demand for certain products.

Property and equipment, net consists of the following:

	<u>Useful Life (in Years)</u>	<u>December 31, 2023</u>	<u>December 31, 2022</u>
		(in thousands)	
Furniture and fixtures	5	\$ 3,995	\$ 3,924
Machinery and equipment	3-5	76,732	74,258
Masks and production equipment	2-5	54,240	50,970
Software	3	11,427	10,111
Leasehold improvements	1-5	35,867	34,236
Construction in progress	N/A	348	7,602
		182,609	181,101
Less: accumulated depreciation and amortization		(116,178)	(102,083)
		<u>\$ 66,431</u>	<u>\$ 79,018</u>

Depreciation expense for the years ended December 31, 2023, 2022, and 2021 was \$23.8 million, \$20.3 million and \$17.7 million, respectively.

In March 2022, the Company entered into a note receivable with a supplier for \$10.0 million, which is included in other long-term assets in the consolidated balance sheet as of December 31, 2023 and December 31, 2022, respectively. In September 2023, the terms of this note receivable were renegotiated, and the first initial repayment of \$1.5 million is now due by March 31, 2025, and annual repayments of \$1.7 million per year are due annually thereafter by March 31, from 2026 through 2030, provided that certain production utilization targets for the prior year are met. Previously, repayments of \$2.0 million per year were due annually by March 31, in years 2024 through 2027.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Accrued price protection liability consists of the following activity:

	Year Ended December 31,	
	2023	2022
	(in thousands)	
Beginning balance	\$ 113,274	\$ 40,509
Charged as a reduction of revenue	62,644	180,538
Payments	(104,234)	(107,773)
Ending balance	<u>\$ 71,684</u>	<u>\$ 113,274</u>

The reason for the significant decrease in price protection liability from approximately \$113.3 million as of December 31, 2022 to approximately \$71.7 million as of December 31, 2023, was due to a significant decrease in revenues from customers with such price protection rights from 2022 to 2023, which decreased the corresponding price protection accruals to such customers.

Accrued expenses and other current liabilities consist of the following:

	December 31, 2023	December 31, 2022
	(in thousands)	
Accrued technology license payments	\$ 3,843	\$ 7,402
Accrued professional fees	3,736	4,072
Accrued engineering and production costs	2,861	2,560
Accrued restructuring	8,301	1,082
Accrued royalty	603	1,662
Short-term lease liabilities	9,132	10,489
Accrued customer credits	3,984	304
Income tax liability	521	8,895
Customer contract liabilities	1,597	1,072
Accrued obligations to customers for price adjustments	54,837	52,392
Accrued obligations to customers for stock rotation rights	349	605
Contingent consideration – current portion	2,462	2,941
Other	6,242	6,679
	<u>\$ 98,468</u>	<u>\$ 100,155</u>

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

	Cumulative Translation Adjustments	Pension and Other Defined Benefit Plan Obligation	Total
	(in thousands)		
Balance at December 31, 2021	\$ 21	\$ 2,104	\$ 2,125
Other comprehensive income (loss) before reclassifications, net of tax	(5,201)	2,055	(3,146)
Balance at December 31, 2022	(5,180)	4,159	(1,021)
Other comprehensive income (loss) before reclassifications, net of tax	121	(206)	(85)
Reclassification adjustments of unrealized gain (loss) on pension and other defined benefit plans, net of tax	—	(2,685)	(2,685)
Net current period other comprehensive income (loss)	121	(2,891)	(2,770)
Balance at December 31, 2023	<u>\$ (5,059)</u>	<u>\$ 1,268</u>	<u>\$ (3,791)</u>

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

8. Debt

Debt

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

	December 31, 2023	December 31, 2022
	(in thousands)	
Principal balance:		
Initial term loan under June 23, 2021 credit agreement	\$ 125,000	\$ 125,000
Total principal balance	125,000	125,000
Less:		
Unamortized debt discount	(571)	(695)
Unamortized debt issuance costs	(2,054)	(2,548)
Net carrying amount of long-term debt	122,375	121,757
Less: current portion of long-term debt	—	—
Long-term debt, non-current portion	\$ 122,375	\$ 121,757

As of December 31, 2023 and December 31, 2022, the weighted average effective interest rate on aggregate debt was approximately 7.6% and 3.8%, respectively.

During the years ended December 31, 2023, 2022 and 2021, the Company recognized total amortization of debt discount and debt issuance costs of \$0.6 million, \$0.6 million, and \$1.3 million, respectively, to interest expense.

The approximate aggregate fair value of the term loans outstanding as of December 31, 2023 and December 31, 2022 was \$135.7 million and \$137.4 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, 2023, 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, 2023, the Revolving Facility was undrawn. Under the terminated amended and restated commitment letter with Wells Fargo Bank and other lenders entered into in connection with the previously pending (now terminated) merger with Silicon Motion (Note 3), the Company had expected 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.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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 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 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 daily 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 was amended on June 29, 2023 to implement a benchmark replacement.

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 guaranties, 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, 2023, 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 \$0.9 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.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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, 2023, 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.

Awards granted under the 2010 Plan, as amended, are subject to a compensation recovery policy adopted by the Company on August 9, 2023, or the Policy, that applies to certain incentive-based compensation that is received on or after October 2, 2023. The Policy requires the Company to recover certain excess incentive-based compensation from current and former executive officers if the Company is required to prepare an accounting restatement due to a material noncompliance of the Company with any financial reporting requirement under the securities laws or as otherwise described in the Policy and paid during the three completed fiscal years immediately preceding the trigger date, as defined in the Policy. Recoverable compensation is defined in the Policy but generally includes any incentive-based compensation that was granted, earned or vested based wholly or in part upon attainment of any financial reporting measure, to the extent the amount actually received exceeds the amount that would have been received if the incentive-based compensation had been determined based on the restated financial statements. To date, there has been no recovery or repayment of compensation from executive officers pursuant to the Policy, or any prior compensation recovery policy of the Company which it replaced, including the executive compensation clawback policy adopted by the Company on December 13, 2018, which applies to compensation that was received prior to October 2, 2023.

As of December 31, 2023, the number of shares of common stock available for future issuance under the 2010 Plan was 15,081,087 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, 2023, the number of shares of common stock available for future issuance under the ESPP was 5,658,561 shares.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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 2023 and February 2022, the Company issued 0.9 million and 0.5 million freely-tradable (subject to certain restrictions for affiliates) shares, respectively, of the Company's common stock in settlement of bonus awards to employees, including executives, for the 2023 and 2022 performance periods. At December 31, 2023, the Company has an accrual of \$11.5 million for bonus awards for employees for achievement in the 2023 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:

	Year Ended December 31,		
	2023	2022	2021
	(in thousands)		
Cost of net revenue	\$ 763	\$ 734	\$ 620
Research and development	44,189	40,635	30,364
Selling, general and administrative	10,224	40,335	28,374
	\$ 55,176	\$ 81,704	\$ 59,358

The total unrecognized compensation cost related to unvested restricted stock units as of December 31, 2023 was \$135.7 million, and the weighted average period over which these equity awards are expected to vest is 2.34 years.

The total unrecognized compensation cost related to unvested performance-based restricted stock units as of December 31, 2023 was \$0 as a result of revised estimates of performance achievement levels as of that date, and the weighted average period over which these equity awards are expected to vest is 1.14 years. Actual levels of future performance for the unvested periods may differ from current estimates.

There was no unrecognized compensation cost related to unvested stock options as of December 31, 2023.

Restricted Stock Units

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

	Number of Shares (in thousands)	Weighted-Average Grant-Date Fair Value per Share
Outstanding at December 31, 2022	6,080	\$ 35.01
Granted	3,135	37.93
Vested	(2,958)	34.07
Canceled	(625)	38.71
Outstanding at December 31, 2023	5,632	\$ 36.72

Performance-Based Restricted Stock Units

Performance-based restricted stock units are eligible to vest at the end of each year-long performance period, as defined in the underlying agreement, 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.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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, 2023, achievement to date under the performance metrics specified in the respective award agreements are 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. To the extent any prior achievement levels are no longer probable, any compensation expense recorded is adjusted to the revised achievement levels.

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

	Number of Shares (in thousands)	Weighted-Average Grant-Date Fair Value per Share
Outstanding at December 31, 2022	1,950	\$ 34.07
Granted ⁽¹⁾	1,039	32.66
Vested	(248)	22.03
Canceled	(88)	41.75
Outstanding at December 31, 2023	2,653	\$ 34.38

⁽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, 2023, there were 231,794 shares of common stock purchased under the ESPP at a weighted average price of \$18.89. 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.

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:

	Year Ended December 31,		
	2023	2022	2021
Weighted-average grant date fair value per share	\$6.35 - 11.97	\$11.97 - 14.25	\$10.85 - 18.82
Risk-free interest rate	4.54 - 5.41%	1.54 - 4.54%	0.04% - 0.06%
Dividend yield	— %	— %	— %
Expected life (in years)	0.50	0.50	0.50
Volatility	59.78 - 70.46%	59.78 - 69.74%	43.83 - 61.1%

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.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Stock Options

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

	Number of Options (in thousands)	Weighted- Average Exercise Price	Weighted- Average Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2022	393	\$ 17.22		
Exercised	(15)	15.30		
Canceled	(3)	(19.62)		
Outstanding at December 31, 2023	<u>375</u>	\$ 17.29	1.52	\$ 1,583
Vested and expected to vest at December 31, 2023	<u>375</u>	\$ 17.29	1.52	\$ 1,583
Exercisable at December 31, 2023	<u>375</u>	\$ 17.29	1.52	\$ 1,583

No stock options were granted by the Company during the years ended December 31, 2023 and 2022.

The intrinsic value of stock options exercised during 2023, 2022, and 2021 was \$0.2 million, \$0.9 million, and \$9.8 million, respectively. Cash received from exercise of stock options was \$0.2 million, \$0.3 million and \$4.2 million during the years ended December 31, 2023, 2022, and 2021, respectively. The tax benefit from stock options exercised was \$0.4 million, \$1.2 million and \$14.4 million during the years ended December 31, 2023, 2022, and 2021, respectively.

10. Income Taxes

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

	Year Ended December 31,		
	2023	2022	2021
	(in thousands)		
Domestic	\$ (85,032)	\$ 19,228	\$ (31,975)
Foreign	21,222	154,970	79,845
Income (loss) before income taxes	<u>\$ (63,810)</u>	<u>\$ 174,198</u>	<u>\$ 47,870</u>

The income tax provision consists of the following:

	Year Ended December 31,		
	2023	2022	2021
	(in thousands)		
Current:			
Federal	\$ 3,827	\$ 12,002	\$ 498
State	65	237	84
Foreign	9,896	13,432	7,630
Total current	<u>13,788</u>	<u>25,671</u>	<u>8,212</u>
Deferred:			
Federal	(371)	32,317	5,108
State	(4,942)	(3,686)	(4,506)
Foreign	(6,910)	(3,490)	484
Change in valuation allowance	7,772	(1,654)	(3,397)
Total deferred	<u>(4,451)</u>	<u>23,487</u>	<u>(2,311)</u>
Total income tax provision	<u>\$ 9,337</u>	<u>\$ 49,158</u>	<u>\$ 5,901</u>

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

	Year Ended December 31,		
	2023	2022	2021
	(in thousands)		
Provision (benefit) at statutory rate	\$ (13,288)	\$ 36,582	\$ 10,071
State income taxes (net of federal benefit)	7	187	62
Research and development credits	(10,066)	(10,146)	(10,441)
Foreign rate differential	(375)	(21,629)	(10,063)
Stock compensation	2,213	6,186	4,029
Foreign income inclusion	27,678	27,971	14,119
Provision to return	(4,741)	6,236	(263)
Uncertain tax positions	1,272	2,551	1,072
Permanent and other	(377)	1,101	726
Foreign unremitted earnings	(758)	(490)	(59)
Transaction costs	—	5	45
Foreign tax credits	—	2,224	—
Attribute expirations	—	34	—
Valuation allowance	7,772	(1,654)	(3,397)
Total income tax provision	<u>\$ 9,337</u>	<u>\$ 49,158</u>	<u>\$ 5,901</u>

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

	December 31,	
	2023	2022
	(in thousands)	
Deferred tax assets:		
Net operating loss carryforwards	\$ 29,860	\$ 30,225
Research and development credits	78,246	73,965
Foreign tax credits	71	—
Accrued expenses and other	13,106	10,271
Lease obligation	2,942	1,961
Accrued compensation	3,447	6,919
Stock-based compensation	11,203	9,976
Intangible assets	8,967	5,582
	<u>147,842</u>	<u>138,899</u>
Less valuation allowance	(74,292)	(66,273)
	<u>73,550</u>	<u>72,626</u>
Deferred tax liabilities:		
Fixed assets	(966)	(4,350)
Leased right-of-use assets	(2,839)	(1,784)
Pension liability	(371)	(1,569)
Net deferred tax assets	<u>\$ 69,374</u>	<u>\$ 64,923</u>

At December 31, 2023, the Company had federal, state and foreign tax net operating loss carryforwards of approximately \$100.2 million, \$77.8 million and \$49.5 million, 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.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

At December 31, 2023, the Company had federal, state and foreign tax credit carryforwards of approximately \$29.6 million, \$106.3 million and \$3.2 million, respectively. The federal, state and foreign tax credit carryforwards will begin to expire in 2024, 2030 and 2026, respectively, unless previously utilized. The Company also has foreign incentive deductions of approximately \$7.2 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 \$9.3 million in the year ended December 31, 2023, 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, 2023 primarily related to the mix of pre-tax income among jurisdictions, permanent tax items including tax credits and a tax on global intangible low-taxed income, stock based compensation, excess tax benefits related to stock-based compensation, and release of uncertain tax positions under ASC 740-10. 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 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 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.

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.

At December 31, 2023, the Company's unrecognized tax benefits totaled \$68.6 million, \$58.5 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, 2023, the Company had accrued approximately \$0.3 million of interest and penalties. The total amounts of interest and penalties recognized for the years ended December 31, 2023, 2022 and 2021 were not material.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table summarizes the changes to the unrecognized tax benefits during 2023, 2022 and 2021:

	(in thousands)
Balance as of December 31, 2020	\$ 63,765
Additions based on tax positions related to the current year	3,366
Additions related to acquisitions	241
Decreases based on tax positions of prior year	(1,688)
Balance as of December 31, 2021	65,684
Additions based on tax positions related to the current year	3,431
Decreases based on tax positions of prior year	(1,981)
Balance as of December 31, 2022	67,134
Additions based on tax positions related to the current year	3,032
Decreases based on tax positions of prior year	(1,528)
Balance as of December 31, 2023	<u>\$ 68,638</u>

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, 2023, the statutes of limitations for the assessment of federal, state, and foreign income taxes are closed for the years before 2020, 2019, 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 concessionary 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 years ended December 31, 2023 and 2022 at the incentive rate. Due to the valuation allowance release in 2021 and the Company's use of loss carryforwards, 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.

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 end-customers and through third-party distributors, both of which are referred to as the Company's customers (Note 12). The Company makes periodic evaluations of the credit worthiness of its customers.

Customers comprising 10% or greater of net revenues for each of the periods presented are as follows:

	Year Ended December 31,		
	2023	2022	2021
Percentage of total net revenue			
Customer A	*	21 %	15 %
Customer B	10 %	10 %	11 %

* Represents less than 10% of the net revenues for the period presented.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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

	December 31,	
	2023	2022
Percentage of gross accounts receivable		
Customer C	33 %	12 %
Customer D	24 %	28 %
Customer E	*	11 %

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

Significant Suppliers

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

	Year Ended December 31,		
	2023	2022	2021
Vendor A	23 %	25 %	38 %
Vendor B	23 %	26 %	22 %
Vendor C	10 %	12 %	12 %

Geographic Information

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

	Year Ended December 31,					
	2023		2022		2021	
	Amount	% of total net revenue	Amount	% of total net revenue	Amount	% of total net revenue
Asia	\$ 521,433	75 %	\$ 915,024	82 %	\$ 736,808	83 %
Europe	124,556	18 %	142,494	13 %	106,428	12 %
United States	36,955	5 %	40,077	4 %	35,978	4 %
Rest of world	10,319	2 %	22,657	2 %	13,184	1 %
Total	<u>\$ 693,263</u>	<u>100 %</u>	<u>\$ 1,120,252</u>	<u>100 %</u>	<u>\$ 892,398</u>	<u>100 %</u>

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

	Year Ended December 31,		
	2023	2022	2021
Percentage of total net revenue			
Hong Kong	37 %	43 %	40 %
China	11 %	16 %	12 %
Vietnam	*	*	13 %

* Represents less than 10% of total net 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, mainland China, Taiwan, and Vietnam, the Company

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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 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):

	December 31,			
	2023		2022	
	Amount	% of total	Amount	% of total
United States	\$ 337,696	69 %	\$ 368,882	70 %
Singapore	113,248	23 %	109,613	21 %
Rest of world	38,969	8 %	45,093	9 %
Total	<u>\$ 489,913</u>	<u>100 %</u>	<u>\$ 523,588</u>	<u>100 %</u>

12. Revenue from Contracts with Customers

Revenue by Market

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

	Year Ended December 31,		
	2023	2022	2021
Broadband	\$ 203,519	\$ 493,232	\$ 492,482
% of net revenue	29 %	44 %	55 %
Connectivity	138,228	303,925	149,285
% of net revenue	20 %	27 %	17 %
Infrastructure	177,083	136,274	119,421
% of net revenue	26 %	12 %	13 %
Industrial and multi-market	174,433	186,821	131,210
% of net revenue	25 %	17 %	15 %
Total net revenue	<u>\$ 693,263</u>	<u>\$ 1,120,252</u>	<u>\$ 892,398</u>

Revenues from sales through the Company's distributors accounted for 50%, 46% and 47% of net revenue for the years ended December 31, 2023, 2022, and 2021, respectively.

Contract Liabilities

As of December 31, 2023 and 2022, customer contract liabilities were approximately \$1.6 million and \$1.1 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, 2023, 2022, and 2021 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, 2023, 2022, and 2021, respectively.

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

As of December 31, 2023 and December 31, 2022, obligations to customers consisting of estimates of price protection rights offered to the Company's end customers totaled \$71.7 million and \$113.3 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 customer and estimates of stock rotation returns to be claimed by distributors on products sold as of December 31, 2023 were \$54.8 million and \$0.3 million, respectively, and as of December 31, 2022 were \$52.4 million and \$0.6 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,

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

2023, 2022, and 2021 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, 2023 and December 31, 2022, 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 \$0.1 million and \$0.2 million, respectively. Right of return assets are included in inventory in the consolidated balance sheets.

As of December 31, 2023 and December 31, 2022, 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 2029. 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, 2023 and December 31, 2022, the weighted average discount rate for operating leases was 4.6% and 3.4%, respectively, and the weighted average remaining lease term for operating leases was 3.9 years and 3.9 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, 2023:

	<u>Operating Leases</u> (in thousands)
2024	\$ 10,769
2025	10,726
2026	8,104
2027	5,766
2028	2,479
Thereafter	<u>1,596</u>
Total minimum payments	39,440
Less: imputed interest	<u>(4,065)</u>
Total lease liabilities	35,375
Less: short-term lease liabilities	<u>(9,132)</u>
Long-term lease liabilities	<u>\$ 26,243</u>

Operating lease cost was \$10.8 million, \$10.4 million, and \$9.4 million for the years ended December 31, 2023, 2022, and 2021, respectively.

Short-term lease costs for each of the years ended December 31, 2023, 2022, and 2021, respectively, were not material. There were \$12.3 million, \$12.0 million, and \$13.2 million of right-of-use assets obtained in exchange for new lease liabilities for the years ended December 31, 2023, 2022, and 2021, 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.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Pension and Other Defined Benefit Retirement Obligations

The Company maintains certain defined benefit retirement plans, including a pension plan, in foreign jurisdictions. During the year ended December 31, 2023, the Company paid approximately \$3.2 million to a third party life insurance and pension provider to fund and administer future benefit payments for substantially all of the employees in one of the Company's defined benefit retirement plans and recorded a gain on partial settlement of such pension plan of approximately \$1.0 million. As of December 31, 2023 and December 31, 2022, the defined benefit obligation was \$1.4 million and \$1.7 million, respectively. The benefit is based on a formula applied to eligible employee earnings. Net periodic benefit costs were \$0.5 million, \$0.3 million, and \$0.5 million respectively for the years ended December 31, 2023, 2022, and 2021 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.

	December 31, 2023	December 31, 2022
	(in thousands)	
Changes in projected benefit obligation:		
Projected benefit obligation, beginning of period	\$ 6,573	\$ 9,733
Service cost	233	289
Interest cost	247	79
Actuarial (gain) loss	284	(2,817)
Benefits paid and settlements	(6,060)	(124)
Currency exchange rate changes	106	(587)
Projected benefit obligation, end of period	1,383	6,573
Changes in fair value of plan assets:		
Fair value of plan assets, beginning of period	4,895	5,198
Actual return on plan assets	(194)	(24)
Employer contributions	3,245	—
Plan settlements	(8,162)	—
Currency exchange rate changes	216	(279)
Fair value of plan assets, end of period	—	4,895
Net unfunded status	\$ 1,383	\$ 1,678
Amounts recognized in the Consolidated Balance Sheets		
Other long-term liabilities	\$ 1,383	\$ 1,678
Accumulated other comprehensive (income) loss, before tax	\$ 4,083	\$ (2,837)

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, 2023 and December 31, 2022, all plans had accumulated benefit obligations and projected benefit obligations in excess of plan assets. As of December 31, 2023 and December 31, 2022, the accumulated benefit obligations were \$1.1 million and \$6.3 million for the pension plans.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	December 31, 2023	December 31, 2022
	(in thousands)	
Plans with accumulated benefit obligation in excess of plan assets		
Accumulated benefit obligation	\$ 1,145	\$ 6,258
Plan assets	\$ —	\$ 4,895
Plans with projected benefit obligation in excess of plan assets		
Projected benefit obligation	\$ 1,383	\$ 6,573
Plan assets	\$ —	\$ 4,895

Assumptions for Pension Benefit Plans

	December 31, 2023	December 31, 2022
	(in thousands)	
Weighted average actuarial assumptions used to determine benefit obligations		
Discount rate	3.5% - 3.9%	3.5% - 3.9%
Rate of compensation increase	3.0% - 3.8%	3.0% - 3.8%
Weighted average actuarial assumptions used to determine costs		
Discount rate	3.5% - 3.9%	3.5% - 3.9%
Expected long-term rate of return on plan assets	— %	— %
Rate of compensation increase	3.0% - 3.8%	3.0% - 3.8%

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 were \$0 as of December 31, 2023, since all assets were transferred to the third party life insurance and pension provider that is funding and administering future benefit payments for substantially all of the employees in the plan. Prior to the transfer, pension assets were held in liquid cash and cash equivalents.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Estimated Future Benefit Payments for Pension Benefit Plans

At December 31, 2023, the estimated benefit payments over the next five years and beyond are as follows:

	Estimated Future Benefit Payments
	(in thousands)
2024	\$ 59
2025	60
2026	46
2027	46
2028	32
Thereafter	63
	\$ 306

15. Commitments and Contingencies

Inventory Purchase and Other Contractual Obligations

As of December 31, 2023, future minimum payments under inventory purchase and other obligations are as follows:

	Inventory Purchase Obligations	Other Obligations	Total
2024	\$ 28,754	\$ 32,563	\$ 61,317
2025	10,231	29,405	39,636
2026	—	18,567	18,567
2027	—	3,673	3,673
Total minimum payments	\$ 38,985	\$ 84,208	\$ 123,193

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, funds of \$15.0 million received from the other parties as of December 31, 2023 have been deferred in other long-term liabilities. 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, 2023 and 2022, the Company recognized \$0 and \$3.8 million, respectively, in previously deferred amounts from other parties due to resolution of such repayment conditions.

Dispute with Silicon Motion

As disclosed in Note 3, on July 26, 2023, MaxLinear terminated the Merger Agreement on multiple grounds. On August 16, 2023, Silicon Motion delivered to MaxLinear a notice, which Silicon Motion publicly disclosed, that it was purporting to terminate the Merger Agreement and that Silicon Motion would be commencing an arbitration before the Singapore International Arbitration Centre to seek damages from MaxLinear arising from MaxLinear's alleged breaches of the Merger Agreement. Silicon Motion's position is that MaxLinear's Willful and Material Breaches (as such term is defined in the Merger Agreement) of the Merger Agreement prevented the Merger from being completed by August 7, 2023 and that MaxLinear is consequently liable for substantial monetary damages in excess of the termination fee as provided in the Merger Agreement.

On October 5, 2023, Silicon Motion filed a Notice of Arbitration with the Singapore International Arbitration Centre alleging that MaxLinear breached the Merger Agreement. Silicon Motion seeks payment of the termination fee, additional damages, fees, and costs. The arbitration will be confidential.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

MaxLinear believes that it properly terminated the Merger Agreement. MaxLinear remains confident in its decision and will vigorously defend its right to terminate the Silicon Motion transaction without penalty.

Class Action Complaint

On August 31, 2023, a Silicon Motion stockholder filed a putative class action complaint in the United States District Court for the Southern District of California captioned *Water Island Event-Driven Fund v. MaxLinear, Inc.*, No. 23-cv-01607 (S.D. Cal.), against MaxLinear and certain of its current officers. The complaint includes two claims: (1) an alleged violation of Section 10(b) of the Securities Exchange Act of 1934, or the “Exchange Act”, and Rule 10b-5 promulgated thereunder; and (2) an alleged violation of Section 20(a) of the Exchange Act. The complaint alleges that the defendants made false and misleading statements and/or omitted material facts that MaxLinear had a duty to disclose, concerning the Company’s ability and intention to timely close the merger with Silicon Motion, including that: (i) MaxLinear had allegedly decided it would not consummate the merger because the economic circumstances surrounding the merger had materially changed, including a material downturn in the semiconductor industry and rising interest rates; (ii) MaxLinear had allegedly determined to unilaterally terminate the merger in the event the merger was approved by SAMR; (iii) MaxLinear had allegedly intended to argue that certain conditions in Article 6 of the Merger Agreement had not been satisfied as required by May 5, 2023 as a basis to terminate the merger; and (iv) as a result, MaxLinear had allegedly materially misrepresented the viability of the merger, the purported benefits of the merger, and the likelihood that the merger would be consummated. The complaint seeks compensatory damages, including interest, costs and expenses and such other equitable or injunctive relief that the court deems appropriate. MaxLinear will vigorously defend its position. On December 20, 2023, the Court appointed the lead plaintiffs, who are expected to file an amended complaint by February 15, 2024. Defendants expect to answer or move to dismiss by March 29, 2024.

Comcast Litigation

On December 1, 2023, MaxLinear filed claims against Comcast Management, LLC and Comcast Cable Communications, LLC, or together, Comcast, in the United States District Court for the Southern District of New York. MaxLinear alleges that in 2020, MaxLinear shared its proprietary design and know-how for a full-duplex, or FDX, amplifier with Comcast in the hope of securing future business with Comcast. MaxLinear shared its design and know-how on several occasions, all pursuant to a non-disclosure agreement between MaxLinear and Comcast, with the expectation that Comcast would keep the information confidential. Comcast needed this technology in order to effectively compete with fiber-optic internet providers. Instead of engaging MaxLinear to develop the FDX amplifier, Comcast shared MaxLinear’s proprietary designs with MaxLinear’s direct competitor. Comcast then worked with MaxLinear’s competitor to develop the FDX-amplifier technology. MaxLinear brought claims for trade secret misappropriation, unfair competition, and breach of the parties’ non-disclosure agreement, and it sought an unspecified amount of compensatory damages, punitive damages, pre-judgment and post-judgment interest, costs, expenses, and attorney fees as well as an injunction against Comcast’s use or disclosure of MaxLinear’s trade secrets.

Dish Litigation

On February 10, 2023, Entropic Communications, LLC, or Entropic, filed claims for patent infringement against Dish Network Corporation, Dish Network LLC, Dish Network Service, LLC, and Dish Network California Service Corporation, or together, Dish,. At that time, MaxLinear was not a party to the action. On September 21, 2023, Dish Network California Service Corporation, or Dish California, filed four counterclaims against MaxLinear in the United States District Court for the Central District of California. The four claims are declaratory judgment, breach of contract, fraud and negligent misrepresentation, and civil conspiracy. Dish California alleges that when MaxLinear assigned certain patents to Entropic, MaxLinear violated its obligations owed to the Multimedia over Coax Alliance, or MoCA, under MoCA’s Intellectual Property Rights, or IPR, Policy. Dish California alleges that MaxLinear also allegedly violated the MoCA IPR Policy by failing to offer Dish California a fair, reasonable, and nondiscriminatory, or FRAND, license for these patents. Dish California seeks an unspecified amount of compensatory damages, disgorgement, attorneys’ fees, experts’ fees, and costs.

Cox Litigations

On October 6, 2023, Cox Communications, Inc., CoxCom, LLC, and Cox Communications California, LLC, or together, Cox, filed claims in two separate actions against MaxLinear in the United States District Court for the Central District of California.

In the first action, in response to Entropic suing Cox for patent infringement, Cox filed counterclaims alleging that when MaxLinear assigned certain patents to Entropic, MaxLinear violated its obligations under MoCA’s IPR Policy by assigning these patents and by failing to offer Cox a FRAND license for these patents. Cox amended its counterclaims on January 9, 2024 and is asserting claims of breach of contract, unjust enrichment, and declaratory judgment against MaxLinear. Cox seeks an unspecified amount of compensatory damages, equitable relief, attorneys’ fees, expenses, and costs.

MAXLINEAR, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In the second action, in response to Entropic suing Cox for patent infringement, Cox filed counterclaims against MaxLinear. Cox alleges that MaxLinear granted CableLabs a non-exclusive, royalty-free license to all patents essential for compliance with DOCSIS specifications. It further alleges that MaxLinear breached this agreement when MaxLinear assigned certain patents to Entropic. Cox amended its counterclaims on January 9, 2024 and is asserting claims for breach of contract, unjust enrichment, and declaratory judgment. Cox seeks an unspecified amount of compensatory damages, equitable relief, attorneys' fees, expenses, and costs.

The Company records 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. As of December 31, 2023, no material loss contingencies have been accrued for litigation and other legal claims in the consolidated financial statements, since the Company's management currently does not believe that the ultimate outcome of any of the matters described above is probable. An unfavorable outcome of these matters may be reasonably possible in excess of recorded amounts; however, a reasonable estimate of the amount or range of such loss cannot be made at this time.

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. Results of litigation and claims are inherently unpredictable. Regardless of the outcome, litigation and claims can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources, and other factors.

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 previously pending (now terminated) merger with Silicon Motion (Note 3).

During the year ended December 31, 2023, the Company did not repurchase any shares of its common stock under the repurchase program.

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, 2023, 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.

(This page has been left blank intentionally.)

(This page has been left blank intentionally.)

BOARD OF DIRECTORS AND MANAGEMENT

Directors

Kishore Seendripu, Ph.D.—Chairman, President and Chief Executive Officer.

Daniel Artusi—former Vice President in the Client Computing Group and General Manager for the connected home division at Intel Corporation, a designer and manufacturer of advanced integrated digital technology platforms.

Carolyn Beaver—former Chief Financial Officer of Sequenom, Inc. a life-sciences testing company.

Gregory P. Dougherty—former Chief Executive Officer and Director of Oclaro Inc., a provider of optical components and modules for the long-haul, metro and data center markets.

Tsu-Jae King Liu, Ph.D.—Dean of the College of Engineering at the University of California, Berkeley.

Albert J. Moyer—private financial consultant and former Chairman of the Board of Directors of CalAmp Corp., a provider of wireless communications solutions; former member of the Board of Directors of Collectors Universe, Inc., a third-party grading and authentication service for high-value collectibles.

Thomas E. Pardun—former non-executive chairman of Western Digital Corporation, a computer drive manufacturer and provider of data storage devices.

Theodore Tewksbury, Ph.D.—served as Interim Chief Executive Officer and President of Entropic from November 2014 until MaxLinear's acquisition of Entropic in April 2015; former CEO of Velodyne Lidar, Inc., a provider of lidar sensor technologies.

Executive Officers

Kishore Seendripu, Ph.D.—Chairman, President and Chief Executive Officer.

Steven G. Litchfield—Chief Financial Officer and Chief Corporate Strategy Officer

Connie Kwong—Corporate Controller and Principal Accounting Officer.

William G. Torgerson—Vice President and General Manager, Broadband Group.

Michelle Sayer—General Counsel and Chief Compliance Officer.

CORPORATE INFORMATION

Corporate Headquarters

MaxLinear, Inc.
5966 La Place Court
Suite 100
Carlsbad, California 92008

Annual Meeting

MaxLinear's 2024 annual meeting of stockholders will take place on Thursday, May 23, 2024 at 8:30 a.m., Pacific time at our offices located at 5966 La Place Court, Suite 100, Carlsbad, California 92008.

Independent Auditors

Grant Thornton LLP
Newport Beach, California

Legal Counsel

Wilson Sonsini, Goodrich & Rosati, P.C.
San Francisco, California

Shareowner Services

You may contact our transfer agent by writing Computershare Investor Services, P.O. Box 43006, Providence, RI 02940-3006 or telephoning (800) 662-7232 or (781) 575-4238, or via its Investor Center at www.computershare.com/investor.

Stock Exchange Information

Our common stock is traded on the Nasdaq Global Select Market, or Nasdaq, under the symbol MXL.

Internet Address Information and Annual Report on 10-K

Visit us online at www.maxlinear.com for more information about MaxLinear and its products and services. The 2023 Annual Report is available online by visiting www.edocumentview.com/MXL.

Special Note Regarding Forward-Looking Statements

This annual report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements include, among others, statements concerning our potential growth, future revenue and opportunities; potential future demand for our products; and timing of production ramps and opportunities. These forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements.

Special Note Regarding Forward-Looking Statements (continued)

Given these uncertainties, you should not place undue reliance on any forward-looking statements. In particular, we cannot predict MaxLinear's future revenues or operating results or its future rates of revenue growth, if any. MaxLinear's business, revenue, operating results and revenue growth, if any, are subject to numerous risks and uncertainties including, without limitation, risks relating to our terminated merger with Silicon Motion and related arbitration and class action complaint and the risks related to potential payment of damages; the effect of intense and increasing competition; impacts of a global economic conditions; the cyclical nature of the semiconductor industry; a significant variance in our operating results and impact on volatility in our stock price, and our ability to sustain our current level of revenue, which has declined, and/or manage future growth effectively, and the impact of excess inventory in the channel on our customers' expected demand for certain of our products; the geopolitical and economic tensions among the countries in which we conduct business and other factors related to our international operations; increased tariffs, export controls or imposition of other trade barriers; our ability to obtain or retain government authorization to export certain of our products or technology; risks related to international geopolitical conflicts; risks related to the loss of, or a significant reduction in orders from major customers; a decrease in the average selling prices of our products; failure to penetrate new applications and markets; development delays and consolidation trends in our industry; inability to make substantial research and development investments; delays or expenses caused by undetected defects or bugs in our products; failure to timely develop and introduce new or enhanced products; order and shipment uncertainties; failure to accurately predict our future revenue and appropriately budget expenses; lengthy and expensive customer qualification processes; customer product plan cancellations; failure to maintain compliance with government regulations; failure to attract and retain qualified personnel; information technology failures; any adverse impact of rising interest rates on us, our customers, and our distributors and related demand; risks related to compliance with privacy, data protection and cybersecurity laws and regulations; risks related to conforming our products to industry standards; risks related to business acquisitions and investments; costs of legal proceedings; claims of intellectual property infringement; our ability to protect our intellectual property; risks related to security vulnerabilities of our products; use of open source software in our products; and a failure to manage our relationships with, or negative impacts from, third parties. In addition, investors in MaxLinear should review the more detailed discussions of risks and uncertainties affecting MaxLinear's business described under the caption Risk Factors in our most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission on January 31, 2024.



MaxLinear, Inc.

5966 La Place Court, Suite 100, Carlsbad, California 92008

www.MaxLinear.com