

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-K

(Mark One)

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 1-10560

BENCHMARK ELECTRONICS, INC.

(Exact name of registrant as specified in its charter)

Texas

(State or other jurisdiction of
incorporation or organization)

74-2211011

(I.R.S. Employer
Identification Number)

**56 South Rockford Drive
Tempe, Arizona 85288
(623) 300-7000**

(Address, including zip code, and telephone number, including area code, of principal executive offices)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value \$0.10 per share	BHE	The New York Stock Exchange

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 (\S 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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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.

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 \S 240.10D-1(b).

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

As of June 30, 2023, the number of outstanding common shares was 34,995,303. As of such date, the aggregate market value of the common shares held by non-affiliates, based on the closing price of the common shares on the New York Stock Exchange on such date, was approximately \$0.9 billion.

As of February 22, 2024, there were 35,774,555 common shares of Benchmark Electronics, Inc. outstanding, par value \$0.10 per share.

Documents Incorporated by Reference:

Portions of the registrant's Proxy Statement for the 2024 Annual Meeting of Shareholders, to be filed with the Securities and Exchange Commission not later than 120 days after the end of the registrant's fiscal year ended December 31, 2023, are incorporated herein by reference (Part III, Items 10-14 of this Annual Report on Form 10-K).

TABLE OF CONTENTS

	Page
PART I	
Item 1. <u>Business</u>	1
Item 1A. <u>Risk Factors</u>	16
Item 1B. <u>Unresolved Staff Comments</u>	28
Item 1C. <u>Cybersecurity</u>	28
Item 2. <u>Properties</u>	30
Item 3. <u>Legal Proceedings</u>	30
Item 4. <u>Mine Safety Disclosures</u>	30
PART II	
Item 5. <u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	31
Item 6. <u>[Reserved]</u>	32
Item 7. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	33
Item 7A. <u>Quantitative and Qualitative Disclosures about Market Risk</u>	43
Item 8. <u>Financial Statements and Supplementary Data</u>	43
Item 9. <u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	74
Item 9A. <u>Controls and Procedures</u>	74
Item 9B. <u>Other Information</u>	75
Item 9C. <u>Disclosure Regarding Foreign Jurisdictions that Prevent Inspections</u>	75
PART III	
Item 10. <u>Directors, Executive Officers, and Corporate Governance</u>	76
Item 11. <u>Executive Compensation</u>	76
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters</u>	76
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	76
Item 14. <u>Principal Accountant Fees and Services</u>	76
PART IV	
Item 15. <u>Exhibits and Financial Statement Schedules</u>	77
Item 16. <u>Form 10-K Summary</u>	80
<u>SIGNATURES</u>	81

PART I

Item 1. Business

This Annual Report on Form 10-K (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 (Exchange Act). These forward-looking statements are identified as any statement that does not relate strictly to historical or current facts and may include words such as "anticipate," "believe," "intend," "plan," "project," "forecast," "strategy," "position," "continue," "estimate," "expect," "may," "will," "could," "predict," and similar expressions of the negative or other variations thereof. In particular, statements, expressed or implied, concerning the Company's outlook and guidance for first quarter and fiscal year 2024 results, future operating results or margins, the ability to generate sales and income or cash flow, expected revenue mix, the Company's business strategy and strategic initiatives, the Company's repurchases of shares of its common stock, the Company's expectations regarding restructuring charges and amortization of intangibles, and the Company's intentions concerning the payment of dividends, among others, are forward-looking statements. Although the Company believes these statements are based on and derived from reasonable assumptions, they involve risks, uncertainties and assumptions, that are beyond the Company's ability to control or predict, relating to operations, markets and the business environment generally, including those discussed under Part I, Item 1A of this Annual Report on Form 10-K for the year ended December 31, 2023 (the Report) and in any of the Company's subsequent reports filed with the Securities and Exchange Commission. Events relating to the possibility of customer demand fluctuations, supply chain constraints, continuing inflationary pressures, the effects of foreign currency fluctuations and high interest rates, geopolitical uncertainties including continuing hostilities and tensions, trade restrictions and sanctions, the ability to utilize the Company's manufacturing facilities at sufficient levels to cover its fixed operating costs, or write-downs or write-offs of obsolete or unsold inventory, may have resulting impacts on the Company's business, financial condition, results of operations, and the Company's ability (or inability) to execute on its plans. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual outcomes, including the future results of the Company's operations, may vary materially from those indicated. Undue reliance should not be placed on any forward-looking statements. Forward-looking statements are not guarantees of performance. All forward-looking statements included in this document are based upon information available to the Company as of the date of this document, and the Company assumes no obligation to update.

Our fiscal year ends on December 31. Consequently, references to 2023 relate to the calendar year ended December 31, 2023; references to 2022 relate to the calendar year ended December 31, 2022, etc.

General

Benchmark Electronics, Inc. (the Company) is a Texas corporation that provides advanced manufacturing services (electronic manufacturing services (EMS) and precision technology (PT) services), which includes design and engineering services and technology solutions. From initial product concept to volume production, including direct order fulfillment and aftermarket services, we are a trusted integrated services partner to original equipment manufacturers (OEMs). Served markets include: commercial aerospace and defense (A&D), medical technologies, complex industrials, semiconductor capital equipment (semi-cap), next-generation communications and advanced computing. The Company has manufacturing operations located in the United States and Mexico (the Americas), Asia and Europe. In this Report, references to Benchmark, the Company or use of the words "we," "our" and "us" include Benchmark's subsidiaries unless otherwise noted.

Our customer engagement focuses on three principal areas:

- *Manufacturing Services*, which include printed circuit board assemblies (PCBAs) using both traditional surface mount technologies (SMT) and microelectronics, subsystem assembly, system build and integration. System builds and integration often involve building a finished assembly that includes PCBAs, complex subsystem assemblies, mechatronics, displays, mechanicals, and other components. These final products may be configured to order and delivered directly to the end customer across all the industries we serve. Manufacturing services also includes precision technology services comprised of precision machining, advanced metal joining and welding, cleaning, assembly and functional testing primarily for the semi-cap (serving semiconductor capital equipment customers) and A&D markets.
- *Design & Engineering Services*, which include design for manufacturability, design optimization for our factory processes and supply chain, and test development, concurrent and sustaining engineering, turnkey product design and regulatory services. Our engineering services may be for systems, sub-systems, printed circuit boards and assemblies, and components. We have the flexibility and capability to engage anywhere in the customer's design process flow. We provide these services across all the industries we serve.

- *Technology Solutions*, which involve developing a library of building blocks or reference designs primarily in defense solutions, surveillance systems, millimeter wave (mmWave) radio frequency (RF) subsystems, and front-end managed connected data collection systems. We often partner with our customers to merge these solutions utilizing our engineering services to provide turnkey product development from requirements through the launch to volume production into our factories. Our building blocks can be utilized across a variety of industries, but we have significant focus and capabilities in the A&D, medical, next-generation communications, and the complex industrials markets. We have also developed differentiated capabilities in RF. The need to improve size, weight, and power (SWaP) to accommodate high frequency electronics communications is important to customers in the A&D, medical, and next-generation communications markets.

Our core strength lies in our ability to partner with our customers to provide concept-to-production solutions through a tightly integrated and seamless set of design, test, manufacturing, supply chain, and support services. The integration of these product realization services along, with our global manufacturing presence, increases our ability to respond to our customers' needs by providing accelerated time-to-market and time-to-volume production of high-quality products, with an emphasis on complex products serving regulated markets with higher reliability requirements. These capabilities and attributes enable us to build strong strategic relationships with our customers while becoming an integral part of their business.

We believe our primary source of differentiation and value-add rests with our ability to engage with our customers at any point, from product development through volume production. This is enabled by our highly skilled personnel's ability to provide leading-edge technical capabilities in engineering services (including full lifecycle), high frequency RF solutions, microelectronics, miniaturization, and manufacturing services (including electronics and complex precision machining). These capabilities are brought to bear across diversified commercial end-markets, many of which are government regulated. To support customers across these sectors, we have strategically invested in geographically diverse manufacturing locations and global supply chain efficiencies.

In addition, we believe that a strong focus on human capital through the talent we hire and retain is critical to maintaining our competitiveness. Our people-first culture is centered on our five core values and we take pride in our innovative and continuous improvement mindset. We desire to delight our customers and deliver operational and financial performance aligned with our goals. Through our employee engagement and customer satisfaction feedback processes, we continuously solicit and act upon information to improve our company and better support our customers and business processes. We have invested in attracting and developing leadership throughout the organization and are committed to diversity and inclusion in our efforts to develop an innovative and forward-thinking workforce.

Our Industry

Outsourcing engineering and manufacturing services enables OEMs to concentrate on their core strengths, such as research and development, branding, marketing, and sales. Leveraging an outsourcing model, OEMs also benefit from improved economies of scale, including reduced production costs, volume purchasing leverage, reduced fixed capital investments, improved inventory management, and access to global engineering and manufacturing resources. At the same time, OEMs are increasingly seeking to diversify their supplier base geographically, including the trend toward "on-shoring" or "near-shoring" to the United States and Mexico. These dynamics combined have resulted in OEMs increasingly turning to outsourcing partners, which is a trend we expect to continue.

Outsourcing rates fluctuate periodically, and not all industries we serve outsource at the same rate. Historically, the computing and telecommunications markets have been early to adopt the outsourcing model and are currently the most fully penetrated. This compares to the traditionally lower level of outsourcing within our other served markets in medical, complex industrials, A&D and semi-cap. In all markets we target, our efforts on higher complexity sub-sectors and often times highly regulated markets where our unique capabilities enable us to differentiate from our competitors.

Today, we believe that each of our market sectors is high value and well-aligned with our expertise in more complex products. We do not typically participate in high volume and commoditized markets often associated with the consumer or automotive sectors. As such, we believe we are well positioned to benefit from the intersecting trends of increased outsourcing, and redistribution of global manufacturing capacity.

Our Strategy

Our goal is to be the solutions provider of choice to the leading OEMs in our target markets which we believe offer the greatest potential for profitable growth. To meet this goal, we have implemented the following strategies:

- *Focus on More Complex Products for Customers.* EMS providers serve a wide range of OEMs in different industries, offering scalable electronics assembly as a service. The EMS industry product scope ranges from easy-to-assemble, low-cost, high-volume products targeted for the consumer market to complicated, state-of-the-art, mission-critical products. Higher-volume manufacturing customers often compete on the price of products with short lifecycles, which require less value-add from EMS providers. We avoid these lower-value market sector opportunities and focus on lower-volume manufacturing, high complexity opportunities with customers, specifically within the A&D, semi-cap, medical, and complex industrials markets, which are often in highly regulated industries that have been increasingly outsourcing value-added services to their EMS providers. In the advanced computing and next-generation communications markets, we focus on customers with more complex requirements (high performance computing and next-generation broadband solutions) as compared to more commoditized offerings within the broader computing and telecommunications markets. Within each of our targeted sectors, we believe there is a general trend toward higher complexity, additional outsourcing, and elongated product life cycles.
- *Lead with Design & Engineering Services and Leverage Advanced Technology Solutions.* In addition to strength in manufacturing complex high-density PCBAs, complex mechanical systems, and full systems integration, we offer customers specialized and tailored advanced design solutions, including technology building blocks and engineering services. We provide this engineering expertise through our design centers in the Americas, Asia, and Europe. Leading with design and engineering is important to our strategy to partner with our customers through the entire product lifecycle, ensuring high quality, extreme reliability and low product failure rates. By leveraging our advanced technology and engineering solutions, our customers can focus their efforts on branding and go-to-market, while relying on a trusted partner to deliver products faster and more efficiently.
- *Maintain and Develop Close, Long-Term Relationships with our Customers.* Our strategy is focused on establishing long-term relationships with leading OEMs in targeted growth industries by becoming an integral part of their concept-to-production and full product life cycle solution. To accomplish this, we rely on our business development executives, account managers, site program managers and general management teams to respond with speed and flexibility to address frequently changing customer design specifications and production requirements. We focus on caring for our customers and responding to their feedback as appropriate to continue to improve our offerings and delivery.
- *Deliver Complete Manufacturing Solutions Globally.* OEMs increasingly require a wide range of specialized design engineering and manufacturing services from EMS providers to reduce costs and accelerate their time-to-market and time-to-volume production. Building on our integrated engineering and manufacturing capabilities, we offer our OEM customers services from initial product design and test to final product assembly and distribution. Our PT services and complex mechanical manufacturing, along with our systems integration assembly and direct order fulfillment services, enable our customers to potentially reduce product cost and risk of product obsolescence by reducing their total work-in-process and finished goods inventory. These services are available at many of our manufacturing locations and allow us to offer customers the flexibility to move quickly from design and initial product introduction to production and distribution. We also offer our customers the opportunity to combine the benefits of low-cost manufacturing with the benefits and capabilities of our higher complexity support in the Americas, Asia, and Europe.
- *Continue to Seek Cost Savings and Operational Excellence.* We seek to optimize our global network of facilities to provide cost-efficient services for our customers. We have a company-wide culture of continuous improvement, which rewards the sharing of best practices and implementation of lean principles. We will continue to drive lean and operational excellence initiatives, bound by common global processes, which enable us to optimize our capacity and efficiency. Our customers benefit from these initiatives by sharing in the cost savings while having comfort we can scale to meet their future growth needs.
- *Optimize our Global Footprint.* We will continue to evaluate our global footprint to ensure we are optimizing the utilization of our facilities, including expansion in regions of strategic importance to our customers and investing in new capabilities aligned to evolving market needs. Historically, this has led to re-allocation of resources, including site closures, new facilities and capacity expansion, as appropriate.
- *Pursue Strategic Acquisitions.* We have historically had an acquisition-oriented expansion strategy. In more recent years, we have focused on driving growth by organic means. However, we will continue to selectively evaluate acquisitions which may expand our core technology capabilities and expand the value of our services to new and existing customers.

- *Capital Allocation.* In support of our financial goals, we will maintain a strong focus on cash conversion and working capital management. We are focused on effective capital deployment through the balance of investments to support organic growth of the business and returns to our shareholders through our regular dividend distributions and share repurchases.

Services We Provide

Through the Benchmark network, we offer a wide range of design, engineering, automation, test, manufacturing, and fulfillment solutions that support our customers' products from initial concept and design through prototyping, design validation, testing, ramp-to-volume production, worldwide distribution, and aftermarket support. With our balanced footprint, we have the ability to serve global and regional customers. We support all of our service offerings with supply chain management systems, superior quality program management, and integrated information technology systems. Our comprehensive service offerings enable us to provide a complete solution for our customers' outsourcing requirements. All of our services are supported through a strong quality management system designed to globally provide the process discipline to reliably deliver high quality services, solutions and products to our customers.

Manufacturing Services (Electronics Manufacturing and Testing Services)

As OEMs seek to provide greater functionality in smaller form-factors, they increasingly require sophisticated manufacturing technologies and processes. Our investment in advanced manufacturing equipment and process development, as well as our experience in innovative packaging and interconnect technologies, enable us to address these evolving requirements.

Our specialization in packaging and interconnect technologies include but are not limited to:

- *Printed Circuit Board Assembly (PCBA) and Test.* We offer our customers expertise in a wide variety of traditional and advanced manufacturing technologies. Our technical expertise supports complex PCBA and test solutions, assembly of subsystems, circuitry and functionality testing of printed assemblies, environmental and stress testing and component reliability testing.

We provide our customers with a comprehensive set of PCBA manufacturing technologies and solutions, which include:

- Surface Mount Technology
- Substrate Technology; Rigid Epoxy, Flex, Ceramic, Glass, Rigid-Flex;
- Plated Through Hole Technology;
- Pin-in-Paste Technology;
- Hybrid RoHS Soldering Processes;
- Wafer-Level CSP (WLCSP);
- Flip Chip;
- Chip-on-Board and Wire-Bonding;
- In-Circuit Test;
- Microelectronics
 - Mixed SMT and Microelectronics Assembly
- Inspection and Test Solutions
 - Automated Optical Inspection (2D & 3D)
 - Automated X-ray Inspection
 - Flying Probe
 - Boundary Scan Test
 - In-Circuit Test
 - Board Level Functional Testing
 - Device/System Integration Functional Test
 - Electrical Safety Test
 - Microelectronics Test; and
 - Vibration, ESS, HASS and HALT

We also provide specialized solutions in support of our customers' components, products and systems, which include:

- Conformal Coating and Potting;
- Underfill and Encapsulation;
- Ultrasonic Welding;
- Automation Solutions;
- Complex Final Assembly;
- Configure | Build to Order;
- Fluidics Assembly;
- Splicing and Connectorization for Optical Applications;
- Hybrid Optical/Electrical Printed Circuit Board Assembly and Testing; and
- Sub-Micron Alignment of Optical Sub-Assemblies.

- *Component Engineering Services.* We provide support to our customers to assist their understanding of the evolving international environmental laws and regulations on content, packaging, labeling and similar issues concerning the environmental impact of their products, including: "RoHS" (EU Directives 2011/65/EU on Restriction of certain Hazardous Substances Directive and 2015/863 amending Annex II to Directive 2011/65/EU); "WEEE" (EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment); "REACH" (EC Regulation No 1907/2006 on Registration, Evaluation and Authorization of Chemicals); EU Member States' Implementation of the foregoing; "Conflict Minerals" as defined in the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act § 1502(b), implementing legislation and rules; and the People's Republic of China (PRC) Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products. Manufacturing sites in the Americas, Asia and Europe regions are experienced with both water soluble and no-clean processes.
- *Systems Assembly and Test.* We offer a full spectrum of subsystem and system integration services, including assembly, configuration and testing for all industries we service. We design, develop and build product-specific manufacturing processes utilizing manual, mechanized or fully automated lines to meet our customers' product volume and quality requirements. We work with our customers to develop product-specific test strategies. Our test capabilities include manufacturing defect analysis, in-circuit tests to check the circuitry of the board and functional tests to confirm that the board or assembly operates in accordance with its final design and manufacturing specifications. We either custom design test equipment and software ourselves or use test equipment and software provided by our customers. We also offer our own internally designed functional test solutions for greater cost savings and flexibility in addition to providing environmental stress tests of assemblies of boards or systems. Additionally, we provide product life cycle testing services, such as ongoing reliability testing where units are continuously cycled for extended periods while monitoring for early-life failures.
- *Failure Analysis.* We offer an array of analytical solutions and expertise to help our customers address their most challenging engineering and business issues, including focused techniques for failure mode, failure mechanism, and root cause determination. Specialized analytical skill sets associated with electrical, mechanical, and metallurgical disciplines are used in conjunction with a vast array of equipment such as ion chromatography, x-ray fluorescence, and scanning electron microscopy. Our state-of-the-art lab facilities provide customers with detailed reporting and support in an unbiased, timely and cost-effective manner. Mastering emerging technologies, coupled with an understanding of potential failure mechanisms, positions us to exceed customer expectations and maintain our technological diversity.

Precision Technology Services (Precision Machining and Complex Vertically Integrated Assemblies)

In addition to traditional EMS, we offer complex precision technology (PT) services including full electromechanical assembly and test services. Benchmark Precision Technologies delivers critical tolerance to metal fabrication and assembly, building components, sub-assemblies, and full module assemblies for highly regulated industries, including semi-conductor capital equipment, aerospace and defense, medical, and complex industrials. Benchmark Precision Technologies' capabilities go well beyond the typical machine shop in that they can design and engineer a prototype, transition it to an accelerated manufacturing protocol (AMP) center to prepare for full volume production, and then shift it to any of Benchmark's global manufacturing facilities.

- *Precision Technologies Group.* We provide vertically integrated precision mechanical components and complex electromechanical assemblies.

The processes supporting these include:

- Complex Small / Medium / Large Precision Machining;
- Advanced metal joining including vacuum chamber welding, electron beam laser and brazing;
- Multi-Axis Robotic Grinding for demanding applications such as turbine blades and scientific instruments;
- Complex Clean Room Assembly and Functional Test;
- Major Electromechanical Assemblies;
- Large precision and industrial frame fabrication, welding, grinding, bead blasting and coating; and
- Sheet metal forming, powder coating and painting.

Our Global Network

Our operations include manufacturing facilities in seven countries, which are strategically located to support full product life cycle services for our customers. We have domestic facilities in Alabama, Arizona, California, Minnesota, New Hampshire and Texas and international facilities in China, Malaysia, Mexico, Netherlands, Romania and Thailand. Our network also includes design centers that lead customer engagements and provide solutions to customers in the Americas, Asia and Europe.

We are compliant with and/or hold the following accreditations, certifications and registrations by geographic region:

	Americas	Asia	Europe
ISO 13485:2016 – Medical	√	√	√
FDA/QSR Compliant – Medical	√	√	
ISO 14971:2019 – Medical Risk Management	√		
MedAccred	√	√	
AS9100:2016 – Aerospace	√	√	√
ITAR (International Traffic and Arms)	√		√
Nadcap (National Aerospace and Defense Association Program)	√		
FAA Approved Parts Manufacturer – Aviation	√		
IATF 16949:2016 – Automotive			√
TL9000 – Telecommunications	√		
ANSI ESD S20:20-2014	√	√	√
ISO 9001:2015 – Quality	√	√	√
ISO 14001:2015 – Environmental	√	√	√
ISO 45001:2018 – Occupational Health and Safety	√	√	√

Design and Engineering Services and Technology Solutions

We endeavor to add value to customers through coordination and integration from concept, design, prototype and other engineering services in support of our customers' go-to-market and product life cycle requirements. These services strengthen our relationships with our manufacturing customers and help attract new customers seeking similarly specialized design and engineering services. Early engagement with engineering-led solutions is key to our strategy of focusing on products with greater complexity in our targeted verticals.

- *New Product Design, Prototype, Testing and Related Engineering Services.* We offer a full spectrum of new product design, automation, test development, prototype and related engineering services for projects contracted by our customers who pay for and maintain ownership of the resulting designs in our contract design services business. We employ a proven seven-step process from concept-to-production in our design services model which enables a shorter product development cycle and provides our customers with a competitive advantage in time-to-market and time-to-profit. Our multi-disciplined engineering teams provide expertise in several core competencies critical to serving OEMs in our target markets, including award-winning industrial design, mechanical and electrical hardware, firmware, software and systems integration and support. We create for our customers specifications, designs and quick-turn prototypes, which are then validated and ramped into volume manufacturing.

- *Custom Test and Automation Equipment Design and Build Services.* We provide our customers with a comprehensive range of custom circuit and functional test equipment, process automation and replication solutions. We have expertise in tooling design, test solutions, equipment control and process, systems planning, process automation, systems integration, replication and programming. Our custom test solutions, process automation and replication services are available to our customers as part of our full-service product design and manufacturing solutions package or on a stand-alone basis for products designed elsewhere. We also provide custom test equipment and automation system solutions to OEMs, which pay for and own the designs. Our ability to provide these solutions allows us to capitalize on OEMs' increasing needs for custom manufacturing solutions, which in turn provides an additional opportunity for us to introduce these customers to our comprehensive engineering and manufacturing services.
- *Technology Solutions.* We are investing in building blocks and solutions such as secure defense turnkey design and reference platforms in avionics, ground vehicle electronics, vision systems and soldier platforms that require ruggedization for harsh environments and secure communications. We are developing advanced manufacturing capabilities and processes for RF microwave designs that utilize highly accurate micro-electronics, complementing our engineering expertise in these areas. We are focused on the high frequency and size, weight and power requirements which address the challenges in the defense and next-generation communications markets.

Supply Chain, Order Fulfillment, and Aftermarket Support Services

Our customers often face challenges in designing supply chains, demand planning, procuring materials and managing their inventories efficiently due to fluctuations in their customer demand, product design changes, short product life cycles and component price fluctuations.

We employ enterprise resource planning (ERP) systems and lean manufacturing principles to manage procurement and manufacturing processes in an efficient and cost-effective manner so that, where possible, components arrive on a just-in-time, as-and-when-needed basis. Because we are a significant purchaser of electronic components and other raw materials, we are generally able to capitalize on the economies of scale associated with our relationships with suppliers to negotiate price discounts, obtain components and other raw materials that are in short supply, and return excess components.

In support of our engineering services, technology solutions and manufacturing services, we offer our customers a wide array of capabilities from early supply chain design, to order fulfillment, to aftermarket services.

- *Value-Added Support Systems.* We support our engineering, manufacturing, distribution and aftermarket support services with an efficient supply chain management system and a superior quality management program. Our value-added support services are primarily implemented and managed through a web-based information technology system that enables us to collaborate with our customers throughout all stages of the engineering, manufacturing and order-fulfillment processes.
- *Supply Chain Management.* We offer full end-to-end supply chain design, inventory-management and volume-procurement capabilities to improve access to supply, optimize cost, and reduce total cycle time. Our materials strategy focuses on leveraging our procurement volume company-wide while providing local execution for maximum flexibility. We employ a full complement of electronic data interchange transactions with our suppliers to coordinate forecasts, orders, reschedules, and inventory and component lead times. Our ERP systems provide product and production information to our supply chain management, engineering change management and floor control systems. Our information systems include a proprietary software stack that controls serialization, production and quality data for all of our facilities around the world using state-of-the-art equipment and control techniques to provide high quality product with superior traceability throughout the product lifecycle. To enhance our ability to rapidly respond to changes in our customers' requirements by effectively managing changes in our supply chain, we utilize web-based interfaces and real-time supply chain management software products, which allow for scaling operations to meet customer needs, shifting capacity in response to product demand fluctuations, reducing materials costs and effectively distributing products to our customers or their end customers.

- *Direct Order Fulfillment.* We provide direct order fulfillment for some of our OEM customers. Direct order fulfillment involves receiving customer orders, configuring products to quickly fill the orders and delivering the products either to the OEM, a distribution channel or directly to the end customer. We manage our direct order fulfillment processes using a core set of common systems and processes that receive order information from the customer and provide comprehensive supply chain management, including procurement and production planning. These systems and processes enable us to process orders for multiple system configurations and varying production quantities, including single units. Our direct order fulfillment services include build-to-order (BTO) and configure-to-order (CTO) capabilities. BTO involves building a complete system in real-time to a highly customized configuration ordered by the OEM's end customer. CTO involves configuring systems to an end customer's specifications at the time the product is ordered. The end customer typically places this order by choosing from a variety of possible system configurations and options. We are often capable of meeting a 2- to 24-hour turnaround time for BTO and CTO fulfillment. We support our direct order fulfillment services with logistics that include delivery of parts and assemblies to the final assembly site, distribution and shipment of finished systems, and processing of customer returns.
- *Aftermarket Non-Warranty Services.* We provide our customers with a range of aftermarket non-warranty services, including repair, replacement, refurbishment, remanufacturing, exchange, systems upgrade and spare part manufacturing throughout a product's life cycle. These services are tracked and supported by specific information technology systems that can be tailored to meet our customers' individual requirements.

Marketing and Customers

We market our services and solutions primarily through a direct sales force organized by market sector. In addition, our engineering, operations, and executive management teams are an integral part of our sales and marketing approach. We generally enter into master supply agreements with our customers. These arrangements generally govern the conduct of our business with customers relating to, among other things, the design and manufacturing of products that in some cases were previously produced by the customer. The arrangements also generally identify the specific products to be designed and manufactured, quality and production requirements, product pricing and materials management. There can be no assurance that these arrangements will remain in effect or be renewed, but we focus intently on customer care to anticipate and meet the current and future needs of our customers.

Our key customer accounts are supported by dedicated teams directly responsible for global account management. These teams coordinate activities across the Benchmark global network to effectively satisfy customer requirements and have direct access to leadership and executive management to quickly address customer concerns. Local program managers and customer account teams further support the global teams and are linked by a comprehensive communications and information management infrastructure. In addition, our executive management is heavily involved in customer relations and devotes significant attention to broadening existing and developing new customer relationships.

The following table sets forth the percentages of our sales by market sector:

	Year Ended December 31,		
	2023	2022	2021
Complex Industrials	21%	21%	20%
A&D	13%	12%	15%
Medical	20%	21%	20%
Semi-Cap	23%	25%	26%
Advanced Computing	12%	10%	9%
Next-Generation Communications	11%	11%	10%
Total sales	100%	100%	100%

A substantial percentage of our sales are made to a small number of customers and the loss of a major customer, if not replaced, would adversely affect us. Sales to our ten largest customers represented 52%, 52% and 47% of our total sales in 2023, 2022 and 2021, respectively. Sales to our largest customer, Applied Materials, Inc. and subsidiaries, represented 12%, 15% and 16% of our total sales in 2023, 2022 and 2021, respectively.

Seasonality

We have historically experienced higher sales during the fourth quarter of the calendar year aligned to the fiscal year end for many of our customers. In addition, we typically experience our lowest sales volume in the first quarter of each year.

Suppliers

We maintain a network of suppliers of components and other materials used in our operations. We procure components when a purchase order or forecast is received from a customer and occasionally utilize components or other materials for which a supplier is the single source of supply. If any of these single-source suppliers were unable to provide these materials, a shortage of components could temporarily interrupt our operations and lower our profits until an alternate component could be identified and qualified for use. For additional information, see "Risk Factors—Shortages or price increases of components specified by our customers have in the past delayed, and are expected to continue delaying shipments and may adversely affect our profitability" in Part I, Item 1A of this Report. Although we have experienced component shortages and longer lead times for various components, we continually strive to reduce the impact of component shortages by working with customers to reschedule deliveries and with suppliers to provide the needed components using just-in-time inventory programs, or by working with OEMs on qualifying alternative components or completing redesigns to eliminate the constrained part, or purchasing components at higher prices from distributors rather than directly from manufacturers. In addition, by developing long-term relationships with suppliers, we endeavor to minimize the effects of component shortages compared to manufacturers without such relationships. The goal of these procedures is to reduce our inventory risk. However, due to recent global labor and supply disruptions and increased demand for electronics in general, over the last several years we coordinated with customers to enhance our procurement of components to solidify our supply chain and inventory of component parts, which caused our inventory balances to increase. As a result, our efforts to reduce inventory risk resulting from component shortages can expose us to inventory risk related to obsolete or unsold inventory. For additional information, see "Risk Factors—Our customers may cancel their orders, change production quantities, delay production or change their sourcing strategies" in Part I, Item 1A of this Report.

Competition

The services we provide are available from many independent sources as well as from the in-house manufacturing capabilities of current and potential customers. Our competitors include Celestica Inc., Flex Ltd., Jabil Inc., Plexus Corp and Sanmina Corporation. We believe that the principal competitive factors in our targeted markets are engineering solutions capabilities, product quality, flexibility, cost and timeliness in responding to design and schedule changes, reliability in meeting product delivery schedules, pricing, technological sophistication and geographic location.

In addition, original design manufacturers (ODMs) that provide design and manufacturing services to OEMs have significantly increased their share of outsourced manufacturing services provided to OEMs in some largely outsourced sectors, such as advanced computing and telecommunication. Competition from ODMs may increase if our business in these markets grows or if ODMs expand further into or beyond these markets.

Environmental, Social & Governance (ESG) & Sustainability

Benchmark continues to evolve and improve upon its ESG strategy and is implementing and managing long-term, strategic sustainability initiatives. The Nominating, Sustainability and Governance Committee of our Board of Directors is sponsoring this effort and in 2020, Benchmark established an ESG/Sustainability Council. The ESG/Sustainability Council is currently chaired by our General Counsel & Chief Legal Officer, who is a member of our senior executive leadership team and provides regular updates to the Nominating, Sustainability and Governance Committee on ESG initiatives and progress. The Council also includes a cross-functional team of leaders representing operations, human resources, supply chain, regulatory compliance, finance, marketing communications, investor relations, facilities and the legal department. On March 21, 2022, the Company achieved a major milestone in its effort to advance our comprehensive approach to ESG initiatives with the publication of our inaugural 2021 Sustainability Report. The Company's Sustainability Report, published each year, aligns with the Sustainability Accounting Standards Board (SASB) and other frameworks such as the Global Reporting Initiative (GRI), United Nations Sustainable Development Goals (SDG) and the Task Force on Climate-Related Financial Disclosures (TCFD). We published our 2022 Sustainability Report on February 27, 2023. We expect to publish our 2023 Sustainability Report in the first quarter of 2024. Our most current sustainability information is posted on our website at <https://www.bench.com/sustainability>.

Our 2022 Sustainability Report highlights the work we are doing across the globe and within the four tenets of our ESG strategy – Environmental Responsibility, Our People, Governance and Our Community.

Environmental Responsibility

Benchmark's commitment to environmental responsibility is an ESG focus that starts at the corporate level with meaningful goal setting followed by purposeful action. We expect to minimize our environmental impact with our Energy Management and Saving Guidelines which include procedures for reducing our waste sent to landfills through recycling, purchasing environmentally responsible products, and reducing energy and water consumption. All of Benchmark's sites also comply with local water laws and regulations. Beyond compliance, wherever possible, sites have demonstrated a commitment to water efficiency and conservation by, among other things, utilizing hands-free faucets, toilets, and water fill stations to limit water usage.

Benchmark's long-term commitment to sustainability is comprehensive, placing increased focus and emphasis on environmental consciousness, social responsibility, ethics and corporate governance, and supply chain ecosystem responsibility. Our goal is to do our part in contributing to a more sustainable world, while providing value to our shareholders consistent with our business objectives.

Other environmental priorities include:

- We apply an ethical approach to source reduction and disposal efforts.
- All Benchmark manufacturing facilities are certified to ISO 14001:2015, which is a set of standards related to environmental management and systems. The ISO 14001:2015 standard helps organizations minimize adverse impacts to the environment, comply with applicable laws, regulations and other requirements, and achieve continual improvement in these areas.
- Benchmark has launched a number of global initiatives designed to reduce energy consumption in our facilities, including upgrades and or retrofits in LED and motion detector lighting, solar panels, cooling towers, compressed air and vacuum systems, and exhaust fans. In April 2022, the Company launched an internal global manufacturing site competition to promote the environmental benefits of energy, water and waste reduction called the Benchmark Environmental Challenge which continued in 2023. In 2023, our annual global competition focused on implementing projects to support the achievement of our 2025 greenhouse gas (GHG) emissions target and to encourage increased environmental responsibility. Reductions in electricity, natural gas and water usage were achieved as a result of the 45+ energy reduction projects implemented by the competition participants.
- In 2023, we issued our second company-wide response to the Climate Disclosure Project (CDP) questionnaire on climate change and our first response on water security. Our responses detail our management and oversight of climate-related issues as well as key challenges and opportunities for our Company related to climate change.
- Benchmark is pursuing opportunities to expand our renewable energy use by procuring renewable electricity, where available, and installing solar panels on a site-by-site basis. Benchmark installed rooftop solar panels at production facilities in Korat, Thailand in 2022 and in Suzhou, China in 2023.
- We understand that energy management involves changing a company's culture along with changing out inefficient equipment. To that end, we have developed a set of principles and initiatives that we communicate company-wide to help reduce energy use.

Our People

We believe in upholding the principle of human rights, worker safety and observing fair labor practices within our organization and our supply chain. We embrace diverse viewpoints and perspectives, recognizing that greater inclusion fosters innovation and achieves better decision making and financial results. Supporting initiatives included organizational training, refreshed company values and a revitalized recruiting strategy focused on building a more diverse team. In 2022, we created our first Employee Resource Group (ERG), the Women's Inclusion Network (WIN), that hosts quarterly events around its mission to build friendships, develop careers, and foster support for women employees. In 2023, we launched our second ERG, Benchmark Resources Advocating Veteran Employees (BRAVE) and we intend to continue creating additional groups in response to employee interest. For additional information, see "Human Capital Management" below.

We are also committed to ensuring that proper working conditions exist for the safety of our employees, such as the implementation of 6S lean management concepts (sort, set, shine, standardize, sustain, and safety) and visual management practices, developing, implementing and continuously improving our Occupational Health and Safety Management System, and providing appropriate education, reporting and controls. Benchmark's global environment, health and safety (EHS) policy expresses our commitment to ensuring a safe working environment for our employees, contractors, customers, and communities and is a guide for manufacturing sites to use when developing or updating their environmental, health and safety programs.

In 2023, Benchmark's site in Suzhou, China received an upgraded safety certification stemming from a routine government safety audit. The Benchmark sites in Thailand received numerous awards and recognition for their health and safety programs from both the Thai government and public organizations. In 2023 the Korat site received the prestigious "Model Factory for Workplace Safety" award from the Workmen's Compensation Fund section at the Korat Social Security office as well as the platinum-class award for its Zero Accident Campaign. This was Korat's seventh consecutive year receiving recognition from Thailand's Department of Labour Protection and Welfare, Ministry of Labour.

Governance

We are committed to ensuring ethical organizational governance, promoting business ethics and integrity, and embracing diversity, equity and inclusion in the boardroom and throughout the organization. Benchmark has comprehensive corporate governance policies and structures in place to foster accountability and transparency. These policies reflect our underlying commitment to maintain the highest standards of ethics and integrity and to operate our business in compliance with all applicable laws and regulations, including anti-corruption, anti-bribery, and antitrust.

We are also committed to observing fair, transparent and accountable operating practices. To this end, Benchmark believes that its ultimate responsibility is to help create and foster the best possible work environment for everyone in our organization. We continue to utilize a "Speak Up!" campaign designed to promote a positive and ethical organizational culture. We believe that each team member, regardless of position, shares in this responsibility, and we encourage all of them to "Speak Up!" with questions or concerns about actual or potential ethical issues, questions about company policies, suggestions about how we can make our organization better and to address any other concerns. To facilitate open and honest communication, our whistleblower Helpline includes local phone numbers in each global location, together with language support, which allows reporters to "Speak Up!" in over 150 native languages. In addition, team members access our web portal to report concerns, ask questions, or quickly access ethics and compliance policies. We believe these efforts strengthen our enterprise ethics and compliance efforts and foster an environment where employees and stakeholders can express and have concerns resolved.

From a governance perspective, Benchmark continues to advance its ESG strategy and is implementing and managing long-term, strategic sustainability initiatives. This effort is led by the Company's ESG/Sustainability Council, and is overseen by the Nominating, Sustainability and Governance Committee of the Board of Directors. Established in 2020, the ESG/Sustainability Council includes a cross-functional team of leaders representing operations, human resources, supply chain, quality and regulatory compliance, finance, marketing communications, investor relations, facilities and legal.

Our Community and Supply Chain Responsibility

We are committed to sourcing with suppliers willing to support our sustainability initiatives. Benchmark endorses the Responsible Business Alliance (RBA) (formerly the Electronics Industry Citizenship Coalition or EICC) Code of Conduct, which provides guidance in five critical areas of corporate social responsibility (CSR) performance, including labor, health and safety, environment, management systems, and ethics. Benchmark also seeks the same endorsement from our business partners, requesting that each business partner adhere to the RBA Code of Conduct or its equivalent at initial engagement and flowing these requirements through our commercial contracts to our business partners and supply chain. Benchmark also conducts a supply chain monitoring system to assess adherence in these areas with regard to our supply chain partners.

Benchmark also supports the EcoVadis rating system; EcoVadis is a provider of sustainability ratings, intelligence and collaborative performance improvement tools for global supply chains. The EcoVadis methodology evaluates criteria across four themes: environment, labor and human rights, ethics and sustainable procurement. In 2023, Benchmark was again awarded the EcoVadis Silver Medal-Sustainability rating, placing it in the top 11% of EcoVadis rated companies.

Benchmark also supports Rule 13p-1 under the Securities Exchange Act (Conflict Minerals Law) and efforts to avoid sourcing conflict minerals (tin, tantalum, tungsten, and gold or other derivatives) that directly or indirectly finance or benefit armed groups in the Democratic Republic of Congo (DRC) and in adjoining countries (Covered Countries). Consistent with the Conflict Minerals Law and the OECD Due Diligence Guidance concerning conflict minerals, Benchmark adopted the Responsible Minerals Initiative Due Diligence reporting process and seeks to obtain conflict minerals content declarations from its suppliers, promoting supply chain transparency. Benchmark does not directly source tin, tantalum, tungsten or gold (3TG) from mines, smelters or refiners, and is in most cases several or more levels removed from these supply chain participants.

Benchmark therefore expects our suppliers to:

- utilize responsible sourcing practices per the Benchmark Conflict Minerals policy and to purge all high-risk smelters from their supply chain.
- preferentially source 3TG from smelters and refiners validated as being conflict free and do not directly or indirectly benefit or finance armed groups in any Covered Country.
- fully-comply with the Conflict Minerals Law and provide all necessary Conflict Minerals (3TG) declarations.
- have a credible, robust conflict minerals program (3TG) which should include: a written conflict minerals policy, communication of requirements to suppliers, CM data collection using the RMI CMRT template, a professional analysis and risk assessment with corrective action on the basis of the CMRTs collected from the suppliers.
- pass these requirements through their supply chain and determine the 3TG sources (Smelters or Refiners – SORs).
- for suppliers representing the top 90% of our global corporate materials spend (our yearly corporate sample), provide their most recent RMI CMRT form, complete and accurate in the latest version with robust comments where appropriate, during our active yearly CM data collection campaign.

Any suppliers not willing to comply with these requirements shall be reviewed by global procurement with regard to future business and sourcing declarations. This conflict minerals policy encourages our suppliers to respect and protect human rights throughout the world.

Human Capital Management

Our employees are an indispensable contributor to our success. Only an inspired community of talented employees enable us to realize our Company Vision to “positively impact lives by solving complex challenges with our customers, creating innovative products that no one imagined were possible.”

We believe we have a responsibility to foster the best possible work environment for everyone in our organization through sound ethical and organizational governance, by promoting business ethics and integrity, and by embracing equality, diversity and inclusion throughout our organization.

Culture and Values

Benchmark focuses on delivering an engaging employee experience for our team members, creating a workplace where they can build the career of their dreams. Through encouragement, our desire is to have our team members unleash their full potential to drive industry leading business results, while making a lasting difference in the lives of others. We embrace diverse viewpoints and perspectives, recognizing that greater inclusion fosters innovation and improves decision-making and financial results. In 2021, the Company published a refreshed set of core values that drive our culture.

These core values include:

- **We act with integrity** by doing what we say we are going to do, exhibiting accountability, and building trust at all times.
- **We value inclusion** by respecting diverse opinions to collaborate effectively.
- **We are committed to customers** both internally and externally, with a dedication to excellence in every encounter.
- **We promote ingenuity** by proactively attacking challenges, creating innovative solutions, and constantly learning to drive continuous improvement.
- **We genuinely care** for each other, our customers, and our communities.

As mentioned above, we established an ESG/Sustainability Council with Board oversight to drive the four tenets of our long-term ESG strategy: Environmental Responsibility, Our People, Governance and Our Community. Our commitment to ESG and these tenets is a strategic and operational imperative as we build a sustainable infrastructure across the Company. In partnership with our employees, we are committed to protecting the natural environment and our community through pollution prevention, conservation, responsible use and sustainable practices. Through our sustainability initiatives, we further engage our employees to ensure that our business practices support diversity, equity and inclusion to build an innovative workforce and to strive toward having our organization reflect the diversity of our customers and suppliers.

Our Human Capital and Compensation Committee of our Board of Directors is responsible for overseeing the Company's human capital practices and management compensation philosophy, including the incentive compensation and equity-based plans for executives. Our Chief Human Resources Officer reports on important human capital management topics to this committee every quarter, including the Company's diversity, equity and inclusion initiatives.

Diversity, Equity and Inclusion

Benchmark's Diversity, Equity and Inclusion (DEI) strategy is focused on creating a culture of belonging where team members can be their authentic selves and cultivate a workplace where everyone can succeed.

Our commitment to DEI starts at the top with the Company's Board of Directors. The Board's Nominating, Sustainability and Governance Committee has demonstrated its commitment to adding more diversity to our Board with continued female representation, as well as a racially and/or ethnically diverse member as we continue to shift our Board structure. For example, in October 2021, Benchmark appointed Ramesh Gopalakrishnan to fill a vacant board position who is a native of India and brings diverse perspectives and thought leadership to the Board based on his significant global operational and strategy experience at several multinational companies. We will continue to keep diversity in mind as we add new directors to our Board in the future.

In 2023, the senior executive team selected 11 Benchmark team members to serve on the Company's Inclusion Council for the current year. In 2024, the team was expanded to 30 Benchmark team members. Sponsored by our Chief Executive Officer and our Chief Human Resources Officer, the Inclusion Council meets regularly to discuss the Company's role in DEI and provide advice to integrate, inform and shape the DEI strategy at Benchmark. Our aim is to ensure that the Company is a place where diverse thinking, experiences and ideas are encouraged, presented and celebrated in order to see the best ideas come to life. To advance these objectives, the Company increased the availability of training on topics such as leading inclusively, anti-harassment, anti-discrimination and unconscious bias. The Company is also training our talent acquisition team and hiring managers on how to work to eliminate bias in the interview process. The Company has also conducted a global engagement and inclusion survey each fall starting in 2021 to elicit feedback from employees and continues to develop action plans for continuous improvement in the areas of leadership, feedback and recognition, communication, inclusion, learning and development. The Human Capital and Compensation Committee of our Board of Directors reviews these initiatives and results with our CEO and Chief Human Resources Officer quarterly to track progress on our DEI strategy.

Career Development

Benchmark is committed to developing a qualified and motivated workforce to power our continued innovation and growth. We provide opportunities for employees to gain the skills and knowledge they need to advance in the Company and fulfill their personal career goals.

We are on a journey to transform and modernize our talent management practices at Benchmark. The Company's Human Capital Management (HCM) system, which was established to provide a common database upon which the Company can centralize people-related data and standardize people management processes across the globe, provides an operating framework to enable leaders to better hire talent and manage teams, including goal setting, performance evaluations, succession planning, and learning and development. The HCM system also provides visibility for the Company to monitor employee retention rates, employee promotions and other data to help ensure that we focus on giving employees opportunities to advance within the Company. The Company also offers competency-based training on leadership and skills development through our online learning platform.

We offer competitive compensation and benefits packages that reflect the needs of our workforce. For our U.S. operations, we offer medical, dental, and vision benefits, disability coverage, survivor benefits, and a wellness program. We also offer competitive retirement benefits including a 401(k) match program at 100% of eligible employee contributions up to 4%, as well as similar retirement financial contributions in other countries in which we operate. In addition to base salary, Benchmark employees participate in a Quarterly Incentive Plan or Annual Incentive Plan that supports our organizational philosophy of allowing employees to share in the Company's performance and success. These plans align employee efforts to achieve the Company's strategic objectives through cash bonus payouts based primarily on performance results achieved against plan performance measures. Our executive compensation program is designed to attract, retain, and reward performance and align incentives with achievement of the Company's strategic plan and both short- and long-term operating objectives. In accordance with our compensation philosophy established by the Human Capital and Compensation Committee and the Board, we believe our executive pay is well-aligned with performance, creating a positive relationship between our operational performance and shareholder returns. Benchmark utilizes equity grants as part of at-risk incentive compensation for Named Executive Officers using a combination of performance-based restricted stock units and time-based restricted stock units to align their compensation with the creation of shareholder value.

Our Chief Human Resources Officer, and other key leaders in our organization, update the Human Capital and Compensation Committee on our strategy for talent development and retention, including succession planning for key positions in the Company.

Health and Safety

The safety of our employees is also of paramount concern to us. We are committed to ensuring that proper working conditions exist for the safety of our employees, such as the implementation of 6S and visual management practices, developing, implementing and continuously improving our Occupational Health and Safety Management System, and providing appropriate education, reporting and controls. We engage our employees to participate in decision-making as part of our Occupational Health and Safety Management System to ensure that we are developing, implementing and continuously improving our health and safety ecosystem and performance to prevent injury and illness.

As of December 31, 2023, we employed approximately 12,703 people, approximately 306 of whom were engaged in design and development engineering. Additionally, our contractor workforce included approximately 850 people. None of our domestic employees are represented by a labor union. In certain international locations, our employees are represented by labor unions and by works councils. Some European countries also often have mandatory legal provisions regarding terms of employment, severance compensation and other conditions of employment that are more restrictive than U.S. laws. We have never experienced a strike or similar work stoppage, and we believe that our employee and labor relations are strong.

Segments and International Operations

We have manufacturing facilities in the Americas (United States and Mexico), Asia (China, Malaysia and Thailand) and Europe (Netherlands and Romania) to serve our customers. Benchmark is operated and managed geographically, and management evaluates performance and allocates resources on a geographic basis. During 2023, 2022 and 2021, 58%, 61% and 55%, respectively, of our total sales were from our international operations. See Note 13 to the consolidated financial statements in Part II, Item 8 of this Report for segment and geographical information.

Governmental Regulation

Our operations, and the operations of businesses that we acquire, are subject to foreign, federal, state and local regulatory requirements relating to security clearance, trade compliance, anti-corruption, environmental, waste management, and health and safety matters. We are committed to operating in compliance with all applicable requirements. Significant costs and liabilities may arise from these requirements or from new, modified or more stringent requirements, which could affect our earnings and competitive position. In addition, our past, current and future operations, and those of businesses we acquire, may give rise to claims of exposure by employees or the public or to other claims or liabilities relating to environmental, waste management or health and safety concerns.

We periodically generate and temporarily handle limited amounts of materials that are considered hazardous waste under applicable law. We contract for the off-site disposal of these materials and have implemented a waste management program to address related regulatory issues. For additional information, see "Risk Factors—Compliance or the failure to comply with environmental and climate change regulations could cause us significant expense" in Part I, Item 1A of this Report.

Available Information

Our website may be viewed at <https://www.bench.com>. Reference to our website is for informational purposes only and the information contained therein is not incorporated by reference into this Report. We make available free of charge through our internet website our filings with the Securities and Exchange Commission (SEC), including our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after electronically filing such material with, or furnishing it to, the SEC. All reports we file with the SEC are also available free of charge via EDGAR through the SEC's website at <https://www.sec.gov>.

Item 1A. Risk Factors

The following risk factors should be read carefully when reviewing the Company's business, the forward-looking statements contained in this Report, and the other statements the Company or its representatives make from time to time. Any of the following risk factors could materially and adversely affect the Company's business, operating results, financial condition and the actual results of the matters addressed by the forward-looking statements.

Operational Risks

Shortages or price increases of components specified by our customers have in the past delayed, and are expected to continue delaying, shipments and may adversely affect our profitability.

Substantially all of our sales are derived from manufacturing services in which we purchase components specified by our customers. Recently, supply shortages for components and commodity categories used in manufacturing resulted in industry-wide shortages of electronic components and curtailed production of assemblies, primarily as a result of labor and supply disruptions. In some instances, such components shortages resulted in delayed shipment. Meanwhile, the increased demand in surface mount components caused us to experience component shortages and longer lead times for certain components. Because of the continued increase in demand for surface mount components, we experienced component shortages and longer lead times for certain components have occurred. Also, we have and may continue to bear the risk of component price increases that occur between periodic re-pricings of products during the term of a customer contract. If shortages or delays in component products persist, the price of certain components may increase further, we may be exposed to quality issues, including the risk of receiving counterfeit parts, or the components may not be available at all. Further, we may not be able to secure enough components at reasonable prices or of acceptable quality to build products or provide services in a timely manner in the quantities needed or according to customer specifications. Accordingly, our business, cash flows, results of operations and financial condition could suffer if we lose time-sensitive sales, incur additional freight costs or are unable to pass on price increases to our customers due to such component shortages or delays.

We are dependent on the success of our customers and the markets in which they operate. When our customers or the markets in which they operate experience declines or grow at a significantly slower pace than anticipated, we may be adversely affected.

We are dependent on the continued growth, viability and financial stability of our customers. Our customers are OEMs of:

- industrial equipment;
- products for the A&D industries;
- telecommunication equipment;
- advanced computing systems and related products for business enterprises;
- medical devices; and
- semi-cap equipment.

These markets are subject to rapid technological change, vigorous competition, short product life cycles and consequent product obsolescence. When our customers are adversely affected by these factors, we may be similarly affected.

The loss of a major customer would adversely affect us.

A substantial percentage of our sales are made to a small number of customers, and the loss of a major customer, if not replaced, would adversely affect us. Further, developments adverse to our major customers or their products, or the failure of a major customer to pay for components or services, could have an adverse effect on us. Sales to our ten largest customers represented 52%, 52% and 47% of our total sales in 2023, 2022 and 2021, respectively.

We expect to continue to depend on sales to our largest customers, and any material delay, cancellation or reduction of orders from these customers or other significant customers would have a material adverse effect on our results of operations. In addition, we generate significant accounts receivable in connection with providing services to our customers. If one or more of our customers were to become insolvent or otherwise unable to pay for the services provided by us, our operating results and financial condition would be adversely affected.

Most of our customers do not commit to long-term production schedules, which makes it difficult for us to schedule production and achieve maximum efficiency of our manufacturing capacity.

The volume and timing of sales to our customers vary due to:

- changes in demand for their products;
- their attempts to manage their inventory;
- design changes;
- changes in their manufacturing strategies; and
- acquisitions of, or consolidations among, customers.

Due in part to these factors, most of our customers do not commit to firm production schedules for more than one quarter in advance. Our inability to forecast the level of customer orders with certainty makes it difficult to schedule production and maximize utilization of manufacturing capacity and on-hand inventory components and supplies. In the past, we have been required to increase staffing and other expenses, including component parts inventory, in order to meet the anticipated demand of our customers. Anticipated orders from many of our customers have, in the past, failed to materialize or delivery schedules have been deferred as a result of changes in our customers' business needs, thereby adversely affecting our results of operations due to inefficient use of manufacturing capacity, increasing inventory balances and potential write-downs or write-offs of obsolete or unsold inventory. On other occasions, our customers have required rapid increases in production, which has placed an excessive burden on our resources. Such customer order fluctuations and deferrals have had a material adverse effect on us in the past and may again in the future.

A business downturn resulting from any of these external factors could result in restructuring and other charges, write-downs or write-offs of obsolete or unsold inventory and a deterioration in our gross profit, each of which could have a material adverse effect on our operating income.

Winning business is subject to lengthy, competitive bid selection processes that often require us to incur significant expense, from which we may ultimately generate no revenue.

Our business is dependent on us winning competitive bid selection processes. These selection processes are typically lengthy and can require us to dedicate significant development expenditures and scarce engineering resources in pursuit of a single customer opportunity. Failure to obtain a particular design win may prevent us from obtaining design wins in subsequent generations of a particular product. This could result in lost revenue and could weaken our position in future competitive bid selection processes.

Our customers may cancel their orders, change production quantities, delay production or change their sourcing strategies.

The degree of success or failure of our customers' products in the market also affects our business. On occasion, customers require rapid increases in production, which can stress our resources and reduce operating margins. In addition, because many of our costs and operating expenses are relatively fixed, a reduction in customer demand can harm our gross profits and operating results.

EMS providers must provide increasingly rapid product turnaround for their customers. We generally do not obtain firm, long-term purchase commitments from our customers, and we continue to experience reduced lead-times in customer orders. Customers may cancel their orders, change production quantities, delay production or change their sourcing strategy for a number of reasons. Cancellations, reductions, delays or changes in the sourcing strategy by a significant customer or by a group of customers could negatively impact our operating income.

In addition, we make significant decisions, including determining the levels of business that we will seek and accept, production schedules, component procurement commitments, personnel needs, capital expenditures and other resource requirements, based on our estimate of customer requirements. The short-term nature of our customers' commitments and the possibility of rapid changes in demand for their products impede our ability to accurately estimate the future requirements of those customers. This could result in manufacturing inefficiencies and the buildup of component inventories, especially with respect to components ordered from single source suppliers and/or that are under non-cancellable, non-returnable purchase orders, each of which could have a material adverse effect on our gross profits, results of operations, liquidity and financial position.

As part of our business strategy, we employ an extensive supply chain management strategy that works to coordinate, on a customer-by-customer basis, forecasts, orders, reschedules and inventory component lead times. As part of this strategy, we engage the supply chain (sometimes with customer directed suppliers) to determine optimal component inventory levels based on orders and forecasted demand. In many cases, the component inventories maintained, which relate to orders placed and demand forecasts from the customer, are unique to a particular customer. In addition, some component inventories we maintain are procured under non-cancellable, non-returnable purchase orders. This supply chain management strategy can result in a buildup of component inventories in times of decreasing demand or other supply chain and manufacturing disruptions. Due to recent global labor and supply disruptions and increased demand for electronics in general, over the last several years we coordinated with customers to enhance our procurement of components to solidify our supply chain and inventory of component parts, which caused our inventory balances to increase over the last several years.

To mitigate our risks related to obsolete or unsold inventory, particularly with respect to component inventory that is procured under non-cancellable, non-returnable purchase orders and/or that is unique to a specific customer, we generally structure our agreements with contractual provisions that require the customer to purchase or reimburse us for component inventories maintained on their behalf or under binding non-returnable, non-cancellable purchase orders in the event the customer terminates the contract, or reduces or delays their purchase commitments or forecasts. Such contractual provisions are subject to conditions and interpretation, and our customers may allege defenses to the payment obligations we maintain are owed to us. Our ability to enforce these reimbursement provisions in our contracts could be costly and a customer could refuse or be unable to meet their obligations to us, which could result in material impairments of our inventories, litigation, increased inventory carrying costs and decreased liquidity, all of which could have a material adverse effect on our gross profit, results of operations and financial position.

We may encounter significant delays or defaults in payments owed to us by customers for products we have manufactured or components we have produced that are unique to particular customers.

We structure our agreements with customers to mitigate our risks related to obsolete or unsold inventory. However, enforcement of these contracts may result in material expense and delay in payment for inventory. If any of our significant customers become unable or unwilling to purchase such inventory, our business may be materially harmed.

Our international operations are subject to certain risks.

During 2023, 2022 and 2021, 58%, 61% and 55% respectively, of our sales were from our international operations. These international operations are subject to a number of risks, including:

- public health crises, such as the COVID pandemic, which can result in varying impacts to our business, employees, customers, suppliers, vendors and partners internationally;
- difficulties in staffing and managing foreign operations;
- coordinating communications and logistics across geographic distances and multiple time zones;
- less flexible employee relationships, which complicate meeting demand fluctuations and can be difficult and expensive to terminate;
- political and economic instability (including acts of terrorism, outbreaks of war, ongoing conflicts, such as between Russia and Ukraine and in Israel and Gaza, and trade restrictions and tariffs), which could impact our ability to ship and/or receive product;
- changes in foreign or domestic government policies, regulatory requirements and laws, which could impact our business;
- longer customer payment cycles and difficulty collecting accounts receivable;
- export controls, import duties, tariffs, and trade restrictions (including quotas and border taxes);
- governmental restrictions on the transfer of funds;
- risk of governmental expropriation of our property;

- burdens of complying with a wide variety of foreign laws and labor practices, including various and changing minimum wage regulations;
- high inflation and fluctuations in currency exchange rates, which could affect foreign taxes due, component costs, local payroll, utility and other expenses; and
- inability to utilize net operating losses incurred by our foreign operations which would increase our overall effective tax rate.

Changes that impact the way we operate internally could have a negative impact on us and reduce the demand for our foreign manufacturing facilities. Moreover, any regulatory actions by other countries where we operate could also negatively impact our financial performance. In addition, changes in policies by the U.S. or other governments could negatively affect our operating results due to trade wars, changes in duties, tariffs or taxes, currency exchange rate fluctuations, or limitations on currency or fund transfers, as well as government-imposed restrictions on producing certain products in, or shipping them to, specific countries. Also, our current facilities in Mexico operate under the Mexican Maquiladora (IMMEX) program. This program provides for reduced tariffs and eased import regulations. We could be adversely affected by changes in the IMMEX program or our failure to comply with its requirements. Additionally, increasing tariffs and other trade protection measures between the United States and China may affect the cost of our products originating in China as well as the demand for our products manufactured in China in the event our customers reduce operations in China as a result of such tariffs or trade protection measures. These actions could also affect the cost and/or availability of components that we procure from suppliers in China.

In addition, several of the countries where we operate have emerging or developing economies, which may be subject to greater currency volatility, negative growth, high inflation, limited availability of foreign exchange and other risks. Certain events, including natural disasters, can impact the infrastructure of a developing country more severely than they would impact the infrastructure of a developed country. A developing country can also take longer to recover from such events, which could lead to delays in our ability to resume full operations. These factors may harm our results of operations, and any measures that we may implement to reduce the effect of volatile currencies and other risks of our international operations may not be effective. In our experience, entry into new international markets requires considerable management time as well as start-up expenses for market development, hiring and establishing office facilities before any significant revenues are generated. As a result, initial operations in a new market may operate at low margins or may be unprofitable.

Certain foreign jurisdictions, as well as the U.S. government, restrict the amount of cash that can be transferred to the United States or impose taxes and penalties on such transfers of cash. To the extent we have excess cash in foreign locations that could be used in, or is needed by, our operations in the United States, we may incur penalties and/or taxes to repatriate these funds.

Another significant legal risk resulting from our international operations is compliance with the U.S. Foreign Corrupt Practices Act (FCPA). In many foreign countries, particularly in those with developing economies, it may be a local custom that businesses operating in such countries engage in business practices that are prohibited by the FCPA, other U.S. laws and regulations, or similar laws of host countries and related anti-bribery conventions. Although we have implemented policies and procedures designed to comply with the FCPA and similar laws, there can be no assurance that all of our employees, agents, or those companies to which we outsource certain of our business operations, will not take actions in violation of our policies. Any such violation, even if prohibited by our policies, could have a material adverse effect on our business.

Start-up costs and inefficiencies related to new or transferred programs can adversely affect our operating results and such costs may not be recoverable if the new programs or transferred programs are cancelled.

Start-up costs, the management of labor and equipment resources in connection with the establishment of new programs and new customer relationships, and the need to estimate required resources in advance can adversely affect our gross margins and operating results. These factors are particularly evident in the early stages of the life cycle of new products and new programs or program transfers and in the opening of new facilities. These factors also affect our ability to efficiently use labor and equipment. We are currently managing a number of new programs. If any of these new programs or new customer relationships were terminated, our operating results could be harmed, particularly in the short-term. We may not be able to recoup these start-up costs or replace anticipated new program revenues.

Our financial results depend, in part, on our ability to perform on our U.S. government contracts, which are subject to uncertain levels of funding, timing and termination.

We provide services both as a prime contractor and subcontractor for the U.S. government. Consequently, a portion of our financial results depend on our performance under these contracts. Delays, cost overruns or product failures, in connection with one or more contracts, could lead to their termination and negatively impact our results of operations, financial condition or liquidity. We can give no assurance that we will be awarded new contracts to offset the revenues lost as a result of such a termination.

U.S. government programs require congressional appropriations, which are typically made for a single fiscal year even though a program may extend over several years. Programs often are only partially funded, and additional funding requires further congressional appropriations. The programs in which we participate compete with other programs for consideration and funding during the budget and appropriations process, which can be impacted by shifting and often competing political priorities.

Our government contracts often involve the development, application and manufacture of advanced defense and technology systems and products aimed at achieving challenging goals. New technologies used for these contracts may be untested or unproven and product requirements and specifications may be modified. Consequently, technological and other performance difficulties may cause delays, cost overruns or product failures. Moreover, there can be no assurance that the amounts we spend to develop new products or solutions to compete for a government contract will be recovered since we may not be awarded the contract.

Our business may be adversely impacted by climate change or natural disasters.

Some of our facilities are located in areas that may be impacted by hurricanes, earthquakes, water shortages, tsunamis, floods, typhoons, fires, extreme weather conditions and other natural or manmade disasters. For example, our facilities in Thailand experienced extensive flooding in 2011. Our insurance coverage for natural disasters is limited and is subject to deductibles and coverage limits. This coverage may not be adequate or may not continue to be available at commercially reasonable rates and terms. See “—Operational Risks—We bear the risk of uninsured losses.”

In addition, some of our facilities possess certifications necessary to work on specialized products that our other locations lack. If work is disrupted at one of these facilities, it may be impractical, or we may be unable, to transfer such specialized work to another facility without significant costs and delays. Thus, any disruption in operations at a facility with specialized certifications could adversely affect our ability to provide products and services to our customers, and thus negatively affect our relationships and financial results.

We bear the risk of uninsured losses.

As a result of extensive 2011 flooding in Thailand, we have been unable to obtain cost-effective flood insurance to adequately cover assets at our facilities in Thailand. We continue to monitor the insurance market in Thailand; however, we have made physical alterations to help mitigate a similar natural disaster. We maintain insurance on all our properties and operations for risks and in amounts customary in the industry. While such insurance includes general liability, property & casualty, cybersecurity and directors & officers liability coverage, not all losses are insured, and we retain certain risks of loss through deductibles, limits and self-retentions. In the event we experience a significant uninsured loss, it could have a material adverse effect on our business, financial condition and results of operations.

Energy price increases may negatively impact our results of operations.

Some of the components that we use in our manufacturing activities are petroleum-based. In addition, we, along with our suppliers and customers, rely on various energy sources (including oil) in our transportation activities. While significant uncertainty exists about the future levels of energy prices, a significant increase is possible. Increased energy prices could cause an increase in our raw material and transportation costs. In addition, increased costs of our suppliers or customers could be passed along to us, and we may not be able to increase our product prices enough to offset them. Moreover, any increase in our product prices may reduce our future customer orders and profitability.

Introducing programs requiring implementation of new competencies, including new process technology within our mechanical operations, could affect our operations and financial results.

The introduction of programs requiring implementation of new competencies, including new process technology within our mechanical operations, presents challenges in addition to opportunities. Deployment of such programs may require us to invest significant resources and capital in facilities, equipment and/or personnel. We may not meet our customers' expectations or otherwise execute properly or in a cost-efficient manner, which could damage our customer relationships and result in remedial costs or the loss of our invested capital and anticipated revenues and profits. In addition, there are risks of market acceptance and product performance that could result in less demand than anticipated and our having excess capacity. The failure or inability to reflect the anticipated costs, risks and rewards of such an opportunity in our customer contracts could adversely affect our profitability. If we do not meet one or more of these challenges, our operations and financial results could be adversely affected.

Customer relationships with start-up or emerging companies may present more risks than with established companies.

Customer relationships with start-up or emerging companies present special risks because these companies do not have an extensive product history. As a result, there is less demonstration of market acceptance of their products, making it harder for us to anticipate needs and requirements than with established customers. In addition, funding for such companies may be more difficult to obtain and these customer relationships may not continue or materialize to the extent we plan or previously experienced. This tightening of financing for start-up customers, together with many early stage customers' lack of prior operations and unproven product markets increase our credit risk, especially in trade accounts receivable and inventories. Although we perform ongoing credit evaluations of our customers and adjust our allowance for doubtful accounts receivable for all customers, including start-up customers and emerging companies, based on the information available, these allowances may not be adequate. This risk may exist for any new start-up or emerging company customers in the future.

We face risks arising from the restructuring of our operations.

Over the past several years, we have undertaken initiatives to restructure our business operations with the intention of improving utilization and realizing cost savings. These initiatives have included changing the number and location of our production facilities, largely to align our capacity and infrastructure with current and anticipated customer demand. The process of restructuring entails, among other activities, moving production between facilities, transferring programs from higher cost geographies to lower cost geographies, closing facilities, reducing the level of staff, realigning our business processes and reorganizing our management.

Restructurings could adversely affect us, including a decrease in employee morale, delays encountered in finalizing the scope of, and implementing, the restructurings, failure to achieve targeted cost savings, and failure to meet operational targets and customer requirements due to the restructuring process. These risks are further complicated by our extensive international operations, which subject us to different legal and regulatory requirements that govern the extent and speed of our ability to reduce our manufacturing capacity and workforce.

Industry Risks

We operate in a highly competitive industry; if we are not able to compete effectively in the EMS industry, our business could be adversely affected.

We compete against many providers of electronics manufacturing services. Some of our competitors have substantially greater financial, manufacturing or marketing resources than we do and have more geographically diversified international operations than we do. Our competitors include Celestica Inc., Flex Ltd., Jabil Inc., Plexus Corporation and Sanmina Corporation. In addition, we may in the future encounter competition from other large electronic manufacturers that are selling, or may begin to sell, electronics manufacturing services.

We also face competition from the manufacturing operations of our current and future customers, who are continually evaluating the merits of manufacturing products internally against the advantages of outsourcing to EMS providers. In addition, in recent years, ODMs that provide design and manufacturing services to OEMs, have significantly increased their share of outsourced manufacturing services provided to OEMs in several markets, such as notebook and desktop computers, personal computer motherboards, and consumer electronic products. Competition from ODMs may increase if our business in these markets grows or if ODMs expand further into or beyond these markets.

During periods of recession in the electronics industry, our competitive advantages in the areas of quick turnaround manufacturing and responsive customer service may be of reduced importance to electronics OEMs, who may become more price sensitive. We may also be at a competitive disadvantage with respect to price when compared to manufacturers with lower cost structures, particularly those with more offshore facilities located where labor and other costs are generally lower.

The availability of excess manufacturing capacity at many of our competitors creates intense pricing and competitive pressure on the EMS industry as a whole. To compete effectively, we must continue to provide technologically advanced manufacturing services, maintain strict quality standards, respond flexibly and rapidly to customers' design and schedule changes, deliver products globally on a reliable basis at competitive prices and seek to create enhanced relationships with our customers with our advanced technology and engineering solutions. Our inability to do so could have an adverse effect on us.

We may be affected by consolidation in the electronics industry, which could create increased pricing and competitive pressures on our business.

Consolidation in the electronics industry could result in a decrease in manufacturing capacity as companies seek to close plants or take other steps to increase efficiencies and realize synergies of mergers, creating increased pricing and competitive pressures for the EMS industry as a whole and our business in particular. In addition, consolidation could also result in an increasing number of very large electronics companies offering products in multiple sectors of the electronics industry. The growth of these large companies, with significant purchasing and marketing power, could also result in increased pricing and competitive pressures for us. Accordingly, industry consolidation could harm our business. We may need to increase our efficiencies to compete and may incur additional restructuring charges.

Regulatory, Compliance and Litigation Risks

Government contracts are subject to significant regulation, including rules related to bidding, billing, kickbacks and false claims, and any non-compliance could subject us to fines and penalties or debarment.

Like all government contractors, we are subject to risks associated with federal and/or state contracting and procurement terms. These risks include substantial civil and criminal fines and penalties if we were to fail to follow procurement integrity and bidding rules or cost accounting standards, employ improper billing practices, receive or pay kickbacks or file false claims. We have been, and expect to continue to be, subjected to audits and investigations by U.S. and foreign government agencies and authorities. The failure to comply with the terms of our government contracts could result in progress payments being withheld, our suspension or debarment from future government contracts or harm to our business reputation.

Regulatory, legislative or self-regulatory/standard developments regarding privacy and data security matters could adversely affect our ability to conduct our business.

U.S. privacy and data security laws apply to our various businesses. We also do business globally in countries that have more stringent data protection laws than those in the United States that may be inconsistent across jurisdictions and are subject to evolving and differing interpretations. Governments, privacy advocates and class action attorneys are increasingly scrutinizing how companies collect, process, use, store, share and transmit personal data. In Europe, the General Data Protection Regulation (GDPR) requires us to protect the privacy of certain personal data of European Union (EU) citizens. The California Consumer Privacy Act (CCPA), which went into effect January 1, 2020, has similar protections, and other states have passed similar legislation. While we have implemented processes and controls to comply with GDPR and CCPA requirements, we could incur significant fines, individual damages and reputational risks if our controls and processes are ineffective, and we fail to comply.

Unanticipated changes in our tax position, the adoption of new tax legislation or exposure to additional tax liabilities could adversely affect our financial results.

We base our tax position upon the anticipated nature and conduct of our business and upon our understanding of the tax laws of the various countries in which we have assets or conduct activities. Our tax position, however, is subject to review and possible challenge by taxing authorities and to possible changes in law. We cannot determine in advance the extent to which some jurisdictions may assess additional tax or interest and penalties on such additional taxes.

Several countries where we operate allow for tax holidays or provide other tax incentives to attract and retain business. We have obtained holidays or other incentives where available. Our taxes could increase if certain tax holidays or incentives were retracted, or if they were not renewed upon expiration, such as the non-renewal of our tax holiday in Malaysia that expired as of March 31, 2021, for which the Company is applying for an extension, or tax rates applicable to us in such jurisdictions were otherwise increased. In addition, further acquisitions may cause our effective tax rate to increase. Given the scope of our international operations and our international tax arrangements, changes to the manner in which U.S. based multinational companies are taxed in the United States. could have a material impact on our financial results and competitiveness.

Based on current and future tax policy in Washington D.C., our effective tax rates and overall cash taxes may change in the future and could have an impact on our financial results.

The Organization for Economic Co-operation and Development (OECD) and the G20 Inclusive Framework on Base Erosion and Profit Shifting have published the Pillar Two model rules designed to address the tax challenges arising from the digitalization of the global economy. The Pillar Two model rules adopt a global corporate minimum tax of 15% for multinational enterprises with average revenue in excess of €750 million per their consolidated global financial statements. The Council of the European Union has adopted the Pillar Two model rules and has directed European Union (EU) member states to implement legislation enacting the Pillar Two model rules. Many countries, including non-EU member states, have implemented laws based on the Pillar Two model rules to be effective as of January 1, 2024. The Pillar Two model rules have been enacted in some of our international manufacturing locations. The potential impact, if any, to our provision for income taxes, net income, and cash flows could be materially impacted by the implementation of the Pillar Two model rules in our international locations.

Any litigation, even where a claim is without merit, could result in substantial costs and diversion of resources.

In the past, we have been notified of claims relating to various matters including intellectual property rights, contractual matters, labor issues or other matters arising in the ordinary course of business. In the event of any such claim, we may be required to spend a significant amount of money and resources, even where the claim is without merit. Accordingly, the resolution of such disputes, even those encountered in the ordinary course of business, could have a material adverse effect on our business, consolidated financial conditions and results of operations. See Part I, Item 3 of this Report.

Compliance or the failure to comply with environmental and climate change regulations could cause us significant expense.

We are subject to a variety of federal, state, local and foreign environmental laws and regulations relating to environmental, waste management, and health and safety concerns, including the handling, storage, discharge and disposal of hazardous materials used in or derived from our manufacturing processes. If we or the companies we acquire have failed or fail in the future to comply with such laws and regulations, then we could incur liabilities and fines and our operations could be suspended. Such laws and regulations could also restrict our ability to modify or expand our facilities, could require us to acquire costly equipment, or could impose other significant expenditures. In addition, our operations may give rise to claims of property contamination or human exposure to hazardous chemicals or conditions.

Our worldwide operations are subject to local laws and regulations. Some of our operations are subject to various environmental laws and related regulations, including: the “RoHS” (EU Directive 2011/65/EC on Restriction of certain Hazardous Substances); “WEEE” (EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment); “REACH” (EC Regulation No 1907/2006 on Registration, Evaluation and Authorization of Chemicals); EU Member States’ Implementation of the foregoing; “Conflict Minerals” as defined in the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act § 1502(b), implementing legislation and rules; and the People’s Republic of China (PRC) Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products; and other environmental laws and regulations. These laws and regulations impose administrative burdens on and restrict the sourcing and distribution of products containing certain substances, including lead, within applicable geographies and require a manufacturer or importer to recycle products containing those substances.

These directives affect the worldwide electronics and electronics components industries as a whole. If we or our customers fail to comply with such laws and regulations, we could incur liabilities and fines and our operations could be suspended.

In addition, as climate change concerns become more prevalent, the U.S. and foreign governments have sought to limit the effects of any such changes. This increasing governmental focus on climate change may result in new environmental regulations that may negatively affect us, our suppliers and our customers. This could cause us to incur additional direct costs or obligations in complying with any new environmental regulations and reporting requirements, as well as increased indirect costs resulting from our customers, suppliers or both incurring additional compliance costs that get passed on to us. These costs may adversely impact our operations and financial condition. Further, the cost of implementing our sustainability and/or Environmental, Social and Governance (“ESG”) initiatives, our ability to execute on our sustainability and/or ESG targets and objectives as planned, the effectiveness and impact of intended actions, the impact of changing legislation, regulations and directives, and other factors, many of which are beyond the Company’s control, could cause the outcomes, results and achievement of our sustainability and/or ESG targets, goals, objectives, commitments and/or the implementation of our sustainability and/or ESG initiatives to differ materially than those expressed or implied by the Company. In addition, our adherence to certain reporting standards or mandated compliance to certain requirements could necessitate additional investments that could impact our profitability, including investments to meet new or enhanced requirements and/or stakeholder expectations to reduce or mitigate the effects of greenhouse gas emissions and transition to low-carbon alternatives, driven by policy and regulations, low-carbon technology advancement and shifting consumer sentiment and societal preferences.

If our manufacturing processes and services do not comply with applicable regulatory requirements, or if we manufacture products containing design or manufacturing defects, demand for our services may decline and we may be subject to liability claims.

We predominantly manufacture and design products to our customers' specifications; in some cases, our processes and facilities must comply with applicable regulatory requirements. For example, medical devices that we manufacture or design, as well as the facilities and manufacturing processes that we use to produce them, are regulated by the U.S. Food and Drug Administration or non-U.S. counterparts of this agency. Similarly, items we manufacture for customers in the A&D industries, as well as the processes we use to produce them, are regulated by the Department of Defense and the Federal Aviation Authority, which have increased their focus and penalties related to counterfeit materials. In addition, our customers' products and the manufacturing processes or documentation that we use to produce them often are highly complex. As a result, products that we manufacture may at times contain manufacturing or design defects, and our manufacturing processes may be subject to errors or noncompliance with applicable statutory and regulatory requirements. Defects in the products we manufacture or design, whether caused by a design, manufacturing or component failure or error, or deficiencies in our manufacturing processes, may result in delayed shipments to customers or reduced or cancelled customer orders. If these defects or deficiencies are significant, our business reputation could also be damaged. The failure of our products, manufacturing processes or facilities to comply with applicable statutory and regulatory requirements could subject us to fines or penalties and, in some cases, require us to shut down or incur considerable expense to correct a product, process or facility. In addition, these defects may result in liability claims against us or expose us to liability to pay for the recall of a product. The magnitude of any such claim may increase as we expand our medical and aerospace and defense manufacturing services, as defects in medical, aerospace or defense devices or systems could seriously harm or kill users of these products and others. Even if our customers are responsible for the defects, they may not, or may not have resources to, assume responsibility for any costs or liabilities arising from these defects, which could expose us to additional liability claims.

Technology Risks

If we are unable to maintain our technological and manufacturing process expertise, our business could be adversely affected.

The market for our manufacturing and engineering services is characterized by rapidly changing technology and continuing process development. We are continually evaluating the advantages and feasibility of new manufacturing processes. We believe that our future success will depend upon our ability to develop and provide manufacturing services that meet our customers' changing needs. This requires that we maintain technological leadership and successfully anticipate or respond to technological changes in manufacturing processes on a cost-effective and timely basis. Our failure to maintain our technological and manufacturing process expertise could have a material adverse effect on our business.

Our operations are subject to cyberattacks that could have a material adverse effect on our business.

We are increasingly dependent on digital technologies and services to conduct our business. We use these technologies for internal purposes, including data storage, processing and transmissions, as well as in our interactions with customers and suppliers. Examples of these digital technologies include ERP, shop floor control, test equipment, and other similar business applications, our global infrastructure and networks as well as external systems, analytics, automation, and cloud services. Digital technologies and services are subject to the risk of cyberattacks and, given the nature of such attacks, some incidents can remain undetected for a period of time despite our efforts to monitor, detect and respond to them in a timely manner. In particular, as discussed further below, our operations have been, and may in the future be, subject to ransomware or cyber-extortion attacks, which could significantly disrupt our operations. Generally, such attacks involve restricting access to computer systems or the restriction or theft of vital data including customer supplied data.

We monitor our systems for cyber threats and have processes in place to detect, mitigate and remediate vulnerabilities. Nevertheless, we have experienced cyberattacks and attempted breaches, including phishing emails and other targeted attacks. In the fourth quarter of fiscal 2019, a ransomware incident encrypted information on our systems and disrupted customer and employee access to our systems and services, which resulted in the Company incurring costs relating to this event, including costs to retain third party consultants and forensic experts to assist with the restoration and remediation of systems and, with the assistance of law enforcement, to investigate the attack, as well as increased expenditures for our information technology (IT) infrastructure, systems and network. This ransomware incident also adversely affected our operations and the Company's fourth quarter 2019 revenue. See Note 18 to the consolidated financial statements in Part II, Item 8 of this Report for additional information.

Future cybersecurity incidents could result in the misappropriation of confidential information of the Company or that of its customers, employees, business partners or others; litigation and potential liability; enforcement actions and investigations by regulatory authorities; loss of customers and contracts; damage to the Company's reputation and/or otherwise harm its business. We also expect to incur substantial costs in the future to satisfy customer requirements (including costs arising from the U.S. government's Cybersecurity Maturity Model Certification program) and to mitigate against cybersecurity attacks as threats are expected to continue to become more persistent and sophisticated. If our systems for protecting against cybersecurity risks prove not to be sufficient, we could be adversely affected by, among other things: loss of or damage to intellectual property, proprietary or confidential information, or customer, supplier, or employee data; interruption of our business operations; and increased costs required to prevent, respond to, or mitigate cybersecurity attacks. These risks could harm our reputation and our relationships with customers, suppliers, employees and other third parties, and may result in claims against us. These risks could have a material adverse effect on our business, consolidated results of operations and consolidated financial condition.

Any delay in the upgrade of our information systems could disrupt our operations and cause unanticipated increases in our costs.

We are currently upgrading our information technology (IT) infrastructure and ERP system, which we anticipate taking several years. Failure to complete the upgrade timely or at all could leave us with sites without the systems capability to flexibly support future customer requirements for manufacturing capabilities and data driven analytics, as well as result in unanticipated increases in costs.

Financial Risks

Our level of indebtedness may limit our flexibility in operating our business and reacting to changes in our business or industry, or prevent us from making payments on our debt or obtaining additional financing.

As of December 31, 2023, our total outstanding debt (excluding unamortized debt issuance costs and finance leases) was \$332.1 million, all of which represented borrowings under our credit facility). Our level of indebtedness could have important consequences. For example, it could:

- increase our vulnerability to general adverse economic and industry conditions;
- impair our ability to obtain additional debt or equity financing in the future for working capital, capital expenditures, acquisitions or other purposes;
- require us to dedicate a material portion of our cash flows from operations to the payment of principal and interest on our indebtedness, thereby reducing the availability of our cash flows to fund working capital needs, capital expenditures, acquisitions and other purposes;
- expose us to the risk of increased interest rates since the term loan has a variable rate;
- limit our flexibility in planning for, or reacting to, changes in our business or industry;
- place us at a disadvantage compared to our competitors that have less debt; and
- make it more difficult for us to satisfy our debt obligations.

Any of these risks could materially impact our ability to fund our operations or limit our ability to expand our business, which could have a material adverse effect on our business, financial condition and results of operations.

We are exposed to intangible asset risk; our goodwill may become impaired.

We have recorded intangible assets, including goodwill, in connection with business acquisitions. We are required to assess goodwill and intangible assets for impairment at least on an annual basis and whenever events or circumstances indicate that the carrying value may not be recoverable from estimated future cash flows. A significant and sustained decline in our market capitalization could result in material charges in future periods that could be adverse to our operating results and financial position. As of December 31, 2023, we had \$192.1 million in goodwill and \$51.0 million of identifiable intangible assets. See Note 1(i) to the consolidated financial statements in Part II, Item 8 of this Report.

We may be exposed to interest rate fluctuations.

We have exposure to interest rate risk on our outstanding borrowings under our variable rate credit agreement. These borrowings' interest rates are based on the spread, at our option, over the Secured Overnight Financing Rate (SOFR), the bank's prime rate or the federal funds rate. We are also exposed to interest rate risk on our invested cash balances.

Risks Related to the Ownership of Our Common Shares

We may experience fluctuations in quarterly results.

Our quarterly results may vary significantly depending on various factors, many of which are beyond our control.

These factors include:

- the volume of customer orders relative to our capacity;
- customer introduction and market acceptance of new products;
- changes in demand for customer products;
- seasonality in demand for customer products;
- pricing and other competitive pressures;
- the timing of our expenditures in anticipation of future orders;
- our effectiveness in managing manufacturing processes;
- changes in cost and availability of labor and components, including due to recent labor and supply constraints and inflation;
- changes in our product mix;
- changes in tax laws in the jurisdictions in which we operate;
- changes in tariffs, trade agreements and other trade protection measures;
- fluctuations in currency exchange rates;
- changes in political and economic conditions;
- disruptions caused by computer malfunctions or cybersecurity incidents; and
- local factors and events that may affect our production volume, such as local holidays, pandemics or natural disasters.

Additionally, as is the case with many high technology companies, a significant portion of our shipments typically occur in the last few weeks of a given quarter. Accordingly, sales shifts from quarter to quarter may not be readily apparent until the end of a given quarter and may have a significant effect on projected and reported results. Further, the price of our common shares may experience volatility in response to fluctuating quarterly results.

Provisions in our governing documents and state law may make it harder for others to obtain control of the Company.

Certain provisions of our governing documents and the Texas Business Organizations Code may delay, inhibit or prevent someone from gaining control of the Company through a tender offer, business combination, proxy contest or some other method, even if shareholders might consider such a development beneficial.

These provisions include:

- a provision in our certificate of formation granting the Board of Directors authority to issue preferred stock in one or more series and to fix the relative rights and preferences of such preferred stock;
- provisions in our bylaws restricting shareholders from acting by less than unanimous written consent and requiring advance notification of shareholder nominations and proposals;
- a provision in our bylaws restricting anyone, other than the Chief Executive Officer, the President, the Board of Directors or the holders of at least 10% of all outstanding shares entitled to vote, from calling a special meeting of the shareholders;
- a statutory restriction on the ability of shareholders to take action by less than unanimous written consent; and
- a statutory restriction on business combinations with some types of interested shareholders.

General Risk Factors

We are exposed to general economic and market conditions that could have a material adverse impact on our business, operating results and financial condition.

Uncertainty over the erosion of global consumer confidence, geopolitical events, such as ongoing conflict between Russia and Ukraine and conflicts in Israel and Gaza, global pandemics, the availability and cost of credit, concerns about volatile energy costs, declining asset values, continued inflation, rising interest rates, and the stability and solvency of financial institutions, financial markets, businesses, and sovereign nations can slow global economic growth and result in recessionary conditions. Any of these potential negative economic conditions may reduce demand for our customers' products and adversely affect our sales. Consequently, our past operating results, earnings and cash flows may not be indicative of our future operating results, earnings and cash flows.

In addition to our customers or potential customers reducing or delaying orders, a number of other negative effects on our business could materialize, including the insolvency of key suppliers, which could result in production delays, shorter payment terms from suppliers due to reduced availability of credit default insurance in the market, the inability of customers to obtain credit, continued supply chain constraints and the insolvency of one or more customers. Any of these effects could impact our ability to effectively manage inventory levels and collect receivables, increase our need for cash, and decrease our net revenue and profitability.

In cases where the evidence suggests a customer may not be able to satisfy its obligation to us, we establish reserves in an amount we determine appropriate for the perceived risk. There can be no assurance that our reserves will be adequate. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional receivable and inventory reserves may be required and restructuring charges may be incurred.

The acquisition, integration and operation of acquired businesses may disrupt our business and create additional expenses, and we may not achieve the anticipated benefits of the acquisitions.

Our capabilities have historically grown through acquisitions, and we may pursue additional acquisitions in the future. Our projections of results and successful integration of acquired operations into our network involve risks, including:

- integration and management of the operations;
- as noted above, demand can vary, and our projections of results may be wrong due to deferred or reduced demand;
- retention of key personnel;
- integration of purchasing operations and information systems;
- retention of the customer base of acquired businesses;
- management of an increasingly larger and more geographically disparate business;

- the possibility that past transactions or practices may lead to future commercial or regulatory risks;
- diversion of management's attention from other ongoing business concerns; and
- inadequate internal control over financial reporting and our ability to bring such controls into compliance with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 in a timely manner.

Our profitability will suffer if we are unable to successfully integrate an acquisition, if the acquisition does not further our business strategy as we expected or if we do not achieve sufficient revenue to offset the increased expenses associated with these acquisitions. We may overpay for, or otherwise not realize the expected return on, our investments, which could adversely affect our operating results and potentially cause impairments to assets that we record as a part of an acquisition including intangible assets and goodwill.

Our success will continue to depend to a significant extent on our workforce and our key personnel.

We depend significantly on our executive officers and other key personnel. The unexpected loss of the services of any one of these executive officers or other key personnel, or the failure to attract and retain new personnel, could have an adverse effect on us. Our ability to attract, develop and retain sufficient qualified personnel may be adversely affected by a number of factors, including labor availability in one or more of our locations, labor law and practices or union activities, wage pressure and changing wage requirements, increasing healthcare costs, local competition, high employment rates and turnover. Moreover, inflationary or other general labor cost increases have become more pronounced due to current economic conditions and if we are unable to offset these labor cost increases through price increases, growth or operational efficiencies, these cost increases could have a material adverse impact on our operating results and cash flow.

Our business or stock price could be negatively affected by the actions of activist shareholders or others.

Responding to actions by activist shareholders or others can be costly and time-consuming, disrupt our operations and divert the attention of management and our employees. Our ability to execute our strategic plan could also be impaired. In addition, a proxy contest for the election of directors would require us to incur significant fees and expenses, as well as requiring significant time and attention by management and our Board of Directors. Perceived uncertainties as to our future direction also could affect the market price and volatility of our common shares, our ability to attract and retain qualified personnel and business partners and may affect our relationships with vendors, customers or others.

Item 1B. Unresolved Staff Comments

None.

Item 1C. Cybersecurity

Global cybersecurity vulnerabilities and threats continue to evolve and are increasingly more sophisticated. The Company is aware of the dynamic nature of the cybersecurity threats we face and has a security program led by our Chief Information Security Officer (CISO) that strives to monitor and mitigate risks from cybersecurity threats. The CISO reports to the Chief Information Officer (CIO), provides periodic reports to the Chief Executive Officer (CEO) and Chief Financial Officer (CFO), and reports quarterly to the Audit Committee of the Board of Directors, which oversees risks from cybersecurity threats, regarding the Company's cybersecurity risk profile and mitigation activities. The Company's CISO has over 35 years of security and cybersecurity experience between the military and corporate sectors. Prior to joining Benchmark, he oversaw cybersecurity for Masco Corporation, a Fortune 500 company and La-Z-Boy Incorporated, both of which are global manufacturing organizations with similar complexities as the Company. The CISO also served as a member of the Department of Defense as a civilian in charge of cybersecurity for an Army acquisition command, overseeing the cybersecurity for approximately 320 programs of record.

The Company's CIO has been responsible for Global IT, including overseeing cybersecurity since joining the Company in 2017. In addition, he was responsible for cybersecurity in previous roles prior to joining the Company, including during his time at DigitalGlobe, a satellite imagery provider to the U.S. Government, as well as other global high tech manufacturing companies.

The Company has an Enterprise Risk Management (ERM) process, with an annual risk assessment performed. A universe of key risks is updated annually, with key risks rated by and discussed with corporate and site-level executives, as well as our Board of Directors, which oversees the Company's ERM process. As a result of the annual risk assessment, the enterprise's top risks are identified, with action plans developed to address each risk. Results of the annual enterprise risk assessment are presented to and discussed with the Board of Directors at least annually. One of the key risks evaluated annually is cybersecurity. Our cybersecurity risk evaluation assesses whether, or to what extent, information assets (hardware, software, systems, laptops, data, intellectual property) might be compromised in an attack by a malicious actor, resulting in potential data leakage, data destruction, malware infiltration, or a ransomware attack. With the increasing sophistication of cyber-criminals and constantly evolving threat vectors, the Company continues to identify cybersecurity as a top risk, prompting numerous actions and measures across the Company that endeavor to mitigate and, where possible, minimize such risks.

The Company increasingly leverages and relies upon digital technologies and services to conduct our business and support our customers. These technologies and services are a blend of organic and third-party supplied solutions that encompass data storage, processing and transmissions. Our digital technologies support business processes for financial management, human capital management, customer engagement, and manufacturing services. Examples of such technologies include Enterprise Resource Planning (ERP) systems, shop floor controls, test equipment, general business applications, and our global infrastructure and networks, as well as external systems, analytics, automation and cloud services. Such digital technologies and services are subject to numerous risks including, but not limited to, ransomware or cyber-extortion, denial of service to systems, malicious code introduced through third party software products or software updates or theft of company, customer, vendor and employee data. As discussed further below, our operations have been, and may in the future be, subject to ransomware or cyber-extortion attacks, which could significantly disrupt our operations. Generally, such attacks involve restricting access to electronic and computer systems or the restriction or theft of vital data including customer supplied data.

The Company has a security program that strives to implement best practices for protecting our systems with the understanding that adversaries have varying skills and competencies and may be able to exploit or evade our current protective technologies. We actively monitor our systems for cyber threats and have processes in place to detect and remediate vulnerabilities. Our approach relies on both internal and external monitoring, vulnerability assessments as well as penetration testing by third parties. We also use leading end-point detection response tools to continuously monitor our security environment. We regularly conduct a review of our data management practices to ensure the proper retention, protection and storage of data, and to apply new technology-based tools to better manage the protection of customer data. Our information security policies and practices, including our Information Technology Disaster Recovery Plan, are designed to comply with several regulatory requirements including DFARS/NIST 800-171 controls, and for our defense customers, we are undergoing certification to the U.S. Cybersecurity Maturity Model Certification (CMMC) program and performed a CMMC self-assessment with the assistance of a qualified third-party inspector. To ensure security awareness throughout the Company, we conduct employee training on multiple topics, and also conduct simulated phishing campaign tests. Regular communications remind all employees of how to be vigilant against cyberattacks. We have also recently implemented a third-party cybersecurity risk management program that continuously monitors key suppliers and customers' cybersecurity scores.

The Company's protective technologies include firewall and email protection against malware and phishing campaigns, and information system access management solutions such as multifactor authentication (MFA). We augment these protective technologies with security monitoring and detection capabilities to limit the impact of cybersecurity incidents. The security monitoring and detection tools we utilize leverage Endpoint Detection and Response (EDR) and Security Incident and Event Management (SIEM) augmented with threat intelligence information from multiple sources. We have further enhanced the security posture of the Company by implementing data security technologies and measures to reduce the impact of attempts to steal data. These technologies are tested regularly by both internal resources and external experts that evaluate the technology and identify vulnerabilities for mitigation and/or remediation. Our security program leverages Company and third-party security professionals and services to achieve an appropriate level of security and resilience that is reviewed periodically by an information technology (IT) steering committee that includes senior officers such as the CEO, CFO, Chief Legal Officer, CIO, Chief Operating Officer and Chief Technology Officer, and the efficacy of these programs is also reviewed quarterly with the Audit Committee of the Company's Board of Directors. We have also recently implemented a third-party cybersecurity risk management program that continuously monitors cybersecurity scores of key suppliers and customers.

Despite the systems and processes we have in place to monitor, detect, mitigate and remediate potential vulnerabilities, in the past, we have experienced cyberattacks, and attempted breaches, including phishing emails and other targeted attacks. In the fourth quarter of fiscal year 2019, a ransomware incident encrypted information on our systems and disrupted customer and employee access to our systems and services, which resulted in the Company incurring costs relating to this event, including costs to retain third party consultants and forensic experts to assist with the restoration and remediation of systems and, with the assistance of law enforcement, to investigate the attack. As a result of this cybersecurity incident, we experienced increased expenditures for our IT infrastructure, systems and network. This ransomware incident also adversely affected our operations and the Company's fourth quarter 2019 revenue. See Note 18 to the consolidated financial statements in Part II, Item 8 of this Report for additional information.

Item 2. Properties

Our customers market numerous products throughout the world and therefore need to access manufacturing services on a global basis. To enhance our service offerings, we seek to locate our facilities either near our customers and our customers' end markets in major centers for the electronics industry or, where appropriate, in lower cost locations.

A summary of the approximate square footage of each of our principal manufacturing facilities by country follows:

(in thousands)	Square Footage
Americas:	
United States:	
Alabama	200
Arizona	234
California	310
Minnesota	481
New Hampshire	153
Texas	45
Mexico	838
Asia:	
China	326
Malaysia	436
Thailand	756
Europe:	
Netherlands	159
Romania	222
Total square footage	<u><u>4,160</u></u>

Our principal manufacturing facilities consist of 1.9 million square feet in facilities that we own, with the remaining 2.3 million square feet in leased facilities whose terms expire between 2024 and 2036. We currently lease our corporate headquarters in Tempe, Arizona. This lease consists of approximately 64,000 square feet. We lease other facilities with a total of 26,700 square feet dedicated to engineering, sales and procurement services. We believe our facilities are suitable for their intended uses and are sufficient to meet our expected needs for the foreseeable future.

Item 3. Legal Proceedings

We are involved in various legal actions arising in the ordinary course of business. Information about our legal proceedings is included in Note 16 to the consolidated financial statements in Part II, Item 8 of this Report and is incorporated by reference herein. In the opinion of management, the ultimate disposition of these matters will not have a material adverse effect on our consolidated financial position or results of operations.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common shares are listed on the New York Stock Exchange under the symbol "BHE."

The last reported sale price of our common shares on February 22, 2024, as reported by the New York Stock Exchange, was \$29.62. There were approximately 500 record holders of our common shares as of February 22, 2024. Because many of our common shares are held by brokers and other institutions on behalf of shareholders, we are unable to estimate the total number of shareholders represented by these record holders.

Dividends

We began declaring and paying quarterly dividends of \$0.15 per share during the first quarter of 2018. In the first quarter of 2020, we increased the quarterly dividend from \$0.15 to \$0.16 per share and in the second quarter of 2021, we increased the quarterly dividend from \$0.16 to \$0.165 per share. During 2023, cash dividends paid totaled \$23.5 million. The Board of Directors currently intends to continue paying quarterly dividends. However, the Company's future dividend policy is subject to its compliance with applicable law, and depending on, among other things, our results of operations, financial condition, level of indebtedness, capital requirements, contractual restrictions, restrictions in our debt agreements, and other factors that the Board of Directors may deem relevant. Dividend payments are not mandatory or guaranteed; there can be no assurance that we will continue to pay a dividend in the future.

Issuer Purchases of Equity Securities

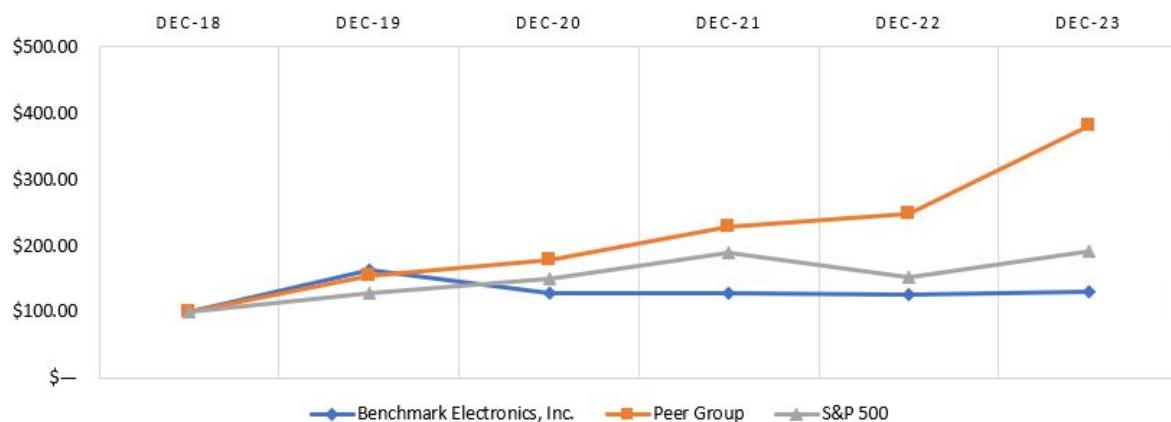
The following table provides information about the Company's repurchase activity during the quarter ended December 31, 2023 related to its equity securities that are registered pursuant to Section 12 of the Exchange Act:

(amounts in millions, except per share data)	(a) Total Number of Shares (or Units) Purchased	(b) Average Price Paid per Share (or Unit)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs ⁽¹⁾
October 1 to 31, 2023	—	\$ —	—	\$ 154.6
November 1 to 31, 2023	—	—	—	154.6
December 1 to 31, 2023	—	—	—	154.6
Total	<u>—</u>	<u>\$ —</u>	<u>—</u>	<u>\$ 154.6</u>

The Company did not repurchase shares in 2023. Since 2018, the Company has repurchased a total of 15.7 million common shares for an aggregate of \$408.5 million at an average price of \$26.06 per share. As of December 31, 2023, the Company had 154.6 million remaining under the share repurchase authorization.

Performance Graph

The following graph compares the cumulative total shareholder return on our common shares for the five-year period commencing December 31, 2018 and ending December 31, 2023, with the cumulative total return of the Standard & Poor's 500 Stock Index (which does not include Benchmark), and the Peer Group Index, which is composed of Celestica Inc., Flex Ltd., Jabil Inc., Plexus Corp and Sanmina Corporation. The graph assumes that \$100 was invested on December 31, 2018 in our common shares and in each of the two indices, and that dividends, if any, were reinvested.



	Base Year December 31,		December 31,				
	2018	2019	2020	2021	2022	2023	
Benchmark Electronics, Inc.	\$ 100.00	\$ 162.23	\$ 127.53	\$ 127.95	\$ 126.02	\$ 130.50	
Peer Group	100.00	154.16	177.30	227.52	248.78	380.85	
S&P 500	100.00	128.88	149.83	190.13	153.16	190.27	

Item 6. *[Reserved]*

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with the consolidated financial statements and Notes thereto in Part II, Item 8 of this Report. You should also bear in mind the Risk Factors set forth in Part I, Item 1A, any of which could materially and adversely affect the Company's business, operating results, financial condition and the actual results of the matters addressed by the forward-looking statements contained in the following discussion.

For discussion and analysis regarding our financial condition and results of operations for the year ended December 31, 2022 as compared to the year ended December 31, 2021, refer to Part II, Item 7 in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 filed with the SEC on February 24, 2023.

2023 OVERVIEW

Sales for 2023 were \$2.8 billion, a 2% decrease from sales of \$2.9 billion in 2022. During 2023, sales to customers in our various industry sectors fluctuated from 2022 as follows:

- Complex Industrials increased by 1%
- A&D increased by 4%
- Medical decreased by 6%
- Semi-Cap decreased by 11%
- Advanced Computing increased by 9%
- Next-Generation Communications increased by 6%

The overall revenue decrease was primarily due to lower semi-cap revenue, as a result of lower demand from existing customers, and lower medical revenue, as a result of general softness across the industry and lower demand from existing customers, which were mostly offset by an increase in A&D revenue, as a result of strength in both defense and commercial aerospace and improved supply availability, and an increase in next-generation communications revenue, as a result of growth in broadband infrastructure programs.

Our sales depend on the success of our customers, some of which operate in businesses associated with rapid technological change and consequent product obsolescence. Developments adverse to our major customers or their products, the availability of electronic component supply, or the failure of a major customer to pay for components or services have adversely affected us by not allowing us to fulfill our total customer demand. A substantial percentage of our sales are made to a small number of customers, and the loss of a major customer, if not replaced, would adversely affect us. Sales to our ten largest customers represented 52% of our total sales in 2023 and in 2022. Sales to Applied Materials, Inc. and subsidiaries, our largest customer in 2023 and 2022 represented 12% and 15% of our total sales in 2023 and 2022, respectively. After a period of unprecedented global labor and supply disruptions, we have seen a general easing of certain material constraints across commodity categories, with the exception of older technologies where semiconductor original equipment manufacturers are not adding incremental capacity. The lack of capacity regarding these older technologies could constrain our ability to produce the full demand forecasts we are receiving from customers needing those parts. Lead times are also improving from the previous highs that prompted many suppliers to categorize some of their constrained components with non-cancellable and non-returnable business terms. Until recently, these constraints led to last-minute allocations and created inefficiencies in our operations, as well as increased costs to us and our customers.

We experience fluctuations in gross profit from period to period. Different programs contribute different gross profits depending on the type of services involved, location of production, size of the program, complexity of the product and level of material costs associated with the various products. Moreover, new programs can contribute relatively less to our gross profit in their early stages when manufacturing volumes are usually lower, resulting in inefficiencies and unabsorbed manufacturing overhead costs. During periods of low production volume, we generally have unabsorbed manufacturing overhead costs and reduced gross profit. Gross profit can also be impacted by higher costs associated with other situations, such as supply chain constraints. This includes supply chain premiums for excess component costs paid to secure available supply resulting in revenue with cost recovery only with no margin. In addition, a number of our new program ramps require incremental investment during the launch and ramp phase, which can exert downward pressure on our gross profit.

We have undertaken initiatives to restructure our business operations with the intention of improving utilization and reducing costs. During 2023, we recognized \$7.3 million of restructuring charges primarily related to the previously announced closure of our site in Moorpark, California in the Americas, and other smaller activities involving capacity reductions and reductions in workforce in certain facilities across various regions. Moorpark, California operations ceased as of March 31, 2023 with restructuring activity substantially completed in 2023.

During 2022, we recognized \$5.7 million of restructuring charges primarily due to expenses associated with announced site closures or exits, reductions in workforce and other restructuring activities primarily in the Americas. During 2022, we also incurred a \$2.0 million loss on assets held for sale related to certain manufacturing capabilities in the Americas that the Company made the decision in 2021 to no longer continue and a gain on assets held for sale of \$2.4 million related to the sale of the Angleton, Texas facility. Additionally, during 2022, the Company agreed to \$3.3 million in legal settlements. See Note 17 to the consolidated financial statements in Part II, Item 8 of this Report for additional information on our restructuring charges.

Inflation, interest rates, disruption in the global economy and financial markets, and geopolitical events continue to create uncertainty. However, we are not aware of any specific event or circumstance that would require updates to our estimates or judgments or require us to revise the carrying value of our assets or liabilities as of the date we filed this Report. These estimates may change as new events occur and additional information is obtained. Actual results could differ from these estimates under different assumptions or conditions.

RESULTS OF OPERATIONS

The financial information and the discussion below should be read in conjunction with the consolidated financial statements and notes thereto in Part II, Item 8 of this Report. The following table presents the percentage relationship that certain items in our consolidated statements of income bear to sales for the periods indicated:

	Year Ended December 31,	
	2023	2022
Sales	100.0%	100.0%
Cost of sales	90.5%	91.2%
Gross profit	9.5%	8.8%
Selling, general and administrative expenses	5.1%	5.2%
Amortization of intangible assets	0.2%	0.2%
Restructuring charges and other costs	0.3%	0.3%
Income from operations	3.9%	3.1%
Other expense, net	(1.0)%	(0.1)%
Income before income taxes	2.9%	3.0%
Income tax expense	0.6%	0.6%
Net income	2.3%	2.4%

2023 Compared With 2022

Sales

As noted above, sales decreased 2% in 2023. The percentages of our sales by market sector were as follows:

	Year Ended December 31,	
	2023	2022
Complex Industrials	21%	21%
A&D	13%	12%
Medical	20%	21%
Semi-Cap	23%	25%
Advanced Computing	12%	10%
Next-Generation Communications	11%	11%
Total	100%	100%

Complex Industrials. 2023 sales increased 1% to \$596.5 million from \$593.6 in 2022 as a result of strength with existing customers.

Aerospace and Defense. 2023 sales increased 4% to \$361.5 million from \$347.6 million in 2022 primarily due to strength in both defense and commercial aerospace and improved supply availability.

Medical. 2023 sales decreased 6% to \$556.6 million from \$592.9 million in 2022 primarily due to general softness across the industry resulting in lower demand from existing customers.

Semi-Conductor Capital Equipment. 2023 sales decreased 11% to \$646.3 million from \$722.1 million in 2022 primarily due to slower overall market recovery.

Advanced Computing. 2023 sales increased 9% to \$337.7 million from \$310.5 million in 2022 primarily due to the contribution from multiple high performance computing programs completed during the period.

Next-Generation Communications. 2023 sales increased 6% to \$340.4 million from \$319.6 million in 2022 primarily due to growth in broadband infrastructure programs.

Our international operations are subject to the risks of doing business abroad. See Part I, Item 1A of this Report for risk factors pertaining to international sales, fluctuations in foreign currency exchange rates and a discussion of potential adverse effects in operating results associated with the risks of doing business abroad. During 2023 and 2022, 58% and 61%, respectively, of our sales were from international operations.

Sales by geographical segment were as follows:

(in thousands)	Year Ended December 31,	
	2023	2022
Sales:		
Americas	\$ 1,611,783	\$ 1,475,929
Asia	1,055,938	1,251,475
Europe	299,835	284,103
Elimination of intersegment sales	(128,580)	(125,176)
Total sales	<u>\$ 2,838,976</u>	<u>\$ 2,886,331</u>

Americas. 2023 sales increased 9% to \$1.6 billion from \$1.5 billion in 2022 primarily due to increases in sales in our advanced computing, complex industrials and next-generation communications sectors.

Asia. 2023 sales decreased 16% to \$1.1 billion from \$1.3 billion in 2022 primarily due to a decrease in existing customer demand of our semi-cap and medical sectors.

Europe. 2023 sales increased 6% to \$299.8 million from \$284.1 million in 2022 primarily due to an increase in sales in our semi-cap and A&D sectors.

Gross Profit

Gross profit increased 6% to \$271.1 million in 2023 from \$255.2 million in 2022 primarily due to our mix of revenue and expense discipline. Gross profit margin increased to 9.5% in 2023 from 8.8% in 2022 primarily due to improved operational efficiencies and the proactive cost reduction actions taken by our manufacturing sites.

Income from Operations

2023 income from operations increased 22% to \$109.7 million from \$90.1 million in 2022. The increase was primarily due to improved gross margin and cost actions taken to reduce selling, general and administrative (SG&A) expenses.

Income from operations by reportable segment was as follows:

(in thousands)	Year Ended December 31,	
	2023	2022
Income from operations:		
Americas	\$ 63,484	\$ 55,202
Asia	124,279	134,649
Europe	17,380	16,889
Corporate and intersegment eliminations	(95,479)	(116,671)
Total income from operations	<u>\$ 109,664</u>	<u>\$ 90,069</u>

Americas. 2023 operating income increased 15% to \$63.5 million from \$55.2 million in 2022. The increase was primarily due to higher revenue and expense control.

Asia. 2023 operating income decreased 8% to \$124.3 million from \$134.6 million in 2022. The decrease was primarily due to lower revenue partially offset by expense control.

Europe. 2023 operating income increased 3% to \$17.4 million from \$16.9 million in 2022. The increase was primarily due to higher revenue and expense control.

Selling, General and Administrative (SG&A) Expenses

SG&A expense decreased to \$147.0 million in 2023 from \$150.2 million in 2022. The decrease was primarily due to cost actions taken, coupled with lower variable compensation expense.

Amortization of Intangible Assets

Amortization of intangible assets was \$6.0 million in 2023 and \$6.4 million in 2022. The decrease was primarily due to certain assets becoming fully amortized in 2023.

Restructuring Charges and Other Costs

During 2023, we recognized \$7.3 million of restructuring charges primarily due to expenses associated with announced site closures or exits, reductions in work force and other restructuring activities primarily in the Americas. During 2023, we made the decision to no longer continue certain manufacturing capabilities in the Americas. In connection with that decision, we assessed the facility and equipment assets used in those manufacturing capabilities and recorded \$1.1 million of impairment charges as a result of that assessment. The asset impairment charges are included in restructuring charges and other costs in the consolidated statement of income.

During 2022, we recognized \$5.7 million of restructuring charges primarily due to expenses associated with announced site closures or exits, reductions in workforce and other restructuring activities primarily in the Americas. During 2022, we also incurred a \$2.0 million loss on assets held for sale related to certain manufacturing capabilities in the Americas that the Company made the decision in 2021 to no longer continue and a gain on assets held for sale of \$2.4 million related to the sale of the Angleton, Texas facility. Additionally, during 2022, the Company agreed to \$3.3 million in legal settlements.

See Note 17 to the consolidated financial statements in Part II, Item 8 of this Report for additional information on our restructuring charges.

Interest Expense

Interest expense increased to \$31.9 million in 2023 from \$12.9 million in 2022 primarily due to additional borrowings to support our operations as well as the higher interest rate environment.

Interest Income

Interest income increased to \$6.3 million in 2023 from \$1.7 million in 2022 primarily due to higher interest rates.

Other (Expense) Income, Net

Other expense, net, was \$2.8 million in 2023 primarily consisting of foreign exchange losses. Other income, net, was \$5.4 million in 2022 primarily consisting of gain on litigation settlements, partially offset by foreign exchange losses.

Income Tax Expense

Income tax expense in 2023 was \$16.9 million representing an effective tax rate of 20.8% compared with \$16.1 million of income tax expense in 2022 representing an effective tax rate of 19.1%. The higher effective tax rate in 2023 is the result of the mix of profits in our foreign and U.S. jurisdictions and higher tax rates for our locations in Asia.

The Company has been granted certain tax incentives, including tax holidays, for its subsidiaries in Thailand, China and Malaysia that expire at various dates, unless extended or otherwise renegotiated, and are subject to certain conditions with which the Company expects to comply. The tax incentives in Thailand will expire on December 31, 2030. The tax incentives in China expired on December 31, 2023 and the tax incentives in Malaysia expired on March 31, 2021. The Company has applied for a continuation of the Malaysia tax holiday, which will extend the tax incentive period for five to ten years if approved. The Company will also apply for a China tax holiday in 2024. There is no guarantee of being awarded these tax incentives in the future. See Note 8 to the consolidated financial statements in Part II, Item 8 of this Report.

Net Income

We reported net income of \$64.3 million, or \$1.79 per diluted share, for 2023, compared with net income of \$68.2 million, or \$1.91 per diluted share, for 2022. The decrease of \$3.9 million in 2023 is primarily the result of items discussed above.

LIQUIDITY AND CAPITAL RESOURCES

We have historically financed our organic growth and operations through funds generated from operations and occasional borrowings under our Credit Agreement (as defined below). Cash and cash equivalents and restricted cash totaled \$283.2 million at December 31, 2023 and \$207.4 million at December 31, 2022, of which \$269.6 million and \$167.7 million, respectively, was held outside the United States in various foreign subsidiaries.

Our operations, and the operations of businesses we acquire, are subject to certain foreign, federal, state and local regulatory requirements relating to environmental, waste management, health and safety matters. We believe we operate in substantial compliance with all applicable requirements, and we seek to ensure that newly acquired businesses comply or will comply substantially with applicable requirements. To date, the costs of compliance and workplace and environmental remediation have not been material to us. However, material costs and liabilities may arise from these requirements or from new, modified or more stringent requirements in the future. In addition, our past, current and future operations, and the operations of businesses we have or may acquire, may give rise to claims of exposure by employees or the public, or to other claims or liabilities relating to environmental, waste management or health and safety concerns.

Management believes that our existing cash balances, funds generated from operations, and borrowing availability under our revolving credit facility will be sufficient to permit us to meet our liquidity requirements over the next 12 months. Management further believes that our ongoing cash flows from operations and any borrowings we may incur under our revolving credit facility will enable us to meet operating cash requirements in future years. If we consummated significant acquisitions in the future, our capital needs would increase and could possibly result in our need to increase available borrowings under our Credit Agreement or access public or private debt and equity markets. There can be no assurance, however, that we would be successful in raising additional debt or equity on acceptable terms.

2023 Cash Flows

Cash provided from operating activities was \$174.3 million in 2023 and primarily consisted of \$64.3 million of net income, adjusted for \$45.4 million of depreciation and amortization, \$15.3 million of stock-based compensation expense, a \$42.1 million decrease in accounts receivable, and a \$45.1 million decrease in inventories partially offset by a \$35.3 million decrease in accounts payable. Working capital was \$0.9 billion as of December 31, 2023.

We primarily purchase components only after customer orders or forecasts are received, which mitigates, but does not eliminate, the risk of loss on inventories. Supplies of electronic components and other materials used in operations are subject to industry-wide shortages. In certain instances, suppliers may allocate available quantities to us. When shortages of these components and other material supplies used in operations have occurred, vendors have at times been unable to ship the quantities we need for production, forcing us to delay shipments, which can increase backorders and impact cash flows. Vendors also may increase the costs of components based on the market conditions including these shortages. In certain instances, we request and receive advance payments from customers as prepayments of inventory to meet working capital demands of a contract, offset inventory risks such as inventory purchased in advance of current needs and protect the Company from the failure of other parties to fulfill obligations under a contract. For example, we have been impacted by supply chain constraints, including shortages, longer lead times and increased transit times.

Cash used in investing activities was \$77.1 million in 2023 primarily due to capital expenditures for property, plant and equipment of \$73.5 million and purchased software of \$4.3 million. The purchases of property, plant and equipment were primarily for machinery and equipment in the Americas.

Cash used in financing activities was \$23.6 million in 2023. Borrowings under the Credit Agreement were \$749.5 million and principal payments under the Credit Agreement were \$743.6 million. In addition, we paid \$23.5 million of dividends during 2023 and \$5.8 million for employee taxes paid to settle stock-based awards exercised during the year.

Credit Agreement

On December 21, 2021, the Company amended and restated the Company's prior \$650 million credit agreement by entering into a \$381 million amended and restated credit agreement (the Amended and Restated Credit Agreement). Under the terms of the Amended and Restated Credit Agreement, in addition to the \$131.3 million term loan facility, we have a \$250.0 million five-year revolving credit facility to be used for general corporate purposes, both with a maturity date of December 21, 2026.

On May 20, 2022, the Company entered into Amendment No. 1 (the Amendment) to the Amended and Restated Credit Agreement (as amended, the Credit Agreement). The Amendment increased the revolving credit facility commitments from \$250 million to \$450 million. The Amendment also established that the interest on outstanding borrowings starting on the next reset date and any new borrowings under the Amendment (other than swingline loans) will accrue, at the Company's option, at (a) Bloomberg Short Term Bank Yield Index (BSBY) plus the Applicable Rate (as defined in the Credit Agreement, approximately 1.00% to 2.00% per annum depending on various factors) or (b) for U.S. dollar denominated loans, the base rate (which is the highest of (i) the federal funds rate plus 0.50%, (ii) the Bank of America, N.A. prime rate, (iii) the one-month BSBY adjusted daily rate plus 1.00% and (iv) 1.00%).

On February 3, 2023, the Company entered into Amendment No. 2 to the Credit Agreement, which increased the maximum amount of trade accounts that the Company may elect to sell at any one time to \$200.0 million.

On May 1, 2023, the Company entered into Amendment No. 3 to the Credit Agreement (Amendment No. 3), which increased the revolving credit facility commitments from \$450 million to \$550 million. Amendment No. 3 also established that the interest on outstanding borrowings starting on the next reset date and any new borrowings under Amendment No. 3 (other than swingline loans) will accrue, at the Company's option, at (a) Term Secured Overnight Financing Rate (SOFR) plus 0.10% plus the Applicable Rate (as defined in the Credit Agreement, approximately 1.00% to 2.00% per annum depending on various factors) or (b) for U.S. dollar denominated loans, the base rate (which is the highest of (i) the federal funds rate plus 0.50%, (ii) the Bank of America, N.A. prime rate, (iii) Term SOFR plus 1.00% and (iv) 1.00%).

As of December 31, 2023, we had \$127.1 million in borrowings outstanding under the term loan facility and \$205.0 million outstanding under our revolving credit facility and \$4.4 million in letters of credit outstanding under our revolving credit facility. See Note 5 to the consolidated financial statements in Part II, Item 8 of this Report for more information regarding the terms of our Credit Agreement.

The Credit Agreement contains certain financial covenants related to interest coverage and debt leverage, and certain customary affirmative and negative covenants, including restrictions on our ability to incur additional debt and liens, pay dividends, repurchase shares, sell assets and merge or consolidate with other persons. Amounts due under the Credit Agreement could be accelerated upon specified events of default, including a failure to pay amounts due, breach of a covenant, material inaccuracy of a representation, or occurrence of bankruptcy or insolvency, subject, in some cases, to cure periods. As of December 31, 2023, we were in compliance with all of these covenants and restrictions.

As of December 31, 2023, we had \$340.6 million available for borrowings under the Credit Agreement. During the next 12 months, we believe our capital expenditures will approximate \$60 million to \$70 million, principally for machinery and equipment to help increase our production capacity to support anticipated revenue growth and our ongoing business around the globe.

Share Repurchase Authorization

On March 6, 2018, the Board of Directors approved an expanded share repurchase authorization granting the Company authority to repurchase up to \$250 million in common stock in addition to the \$100 million previously approved on December 7, 2015. On October 26, 2018 and February 19, 2020, the Board of Directors authorized the repurchase of an additional \$100 million and \$150 million of the Company's common stock, respectively.

Share purchases may be made in the open market, in privately negotiated transactions or block transactions, at the discretion of the Company's management and as market conditions warrant. Purchases will be funded from available cash and may be commenced, suspended or discontinued at any time without prior notice. Shares repurchased under the program are retired. The Company did not repurchase shares in 2023. As of December 31, 2023, the Company had \$154.6 million remaining under the share repurchase authorization.

Dividends

During 2023, 2022 and 2021, cash dividends paid totaled \$23.5 million, \$23.2 million and \$23.3 million, respectively. On December 13, 2023, the Company declared a quarterly cash dividend of \$0.165 per share of the Company's common stock to shareholders of record as of December 29, 2023. The dividend of \$5.9 million was paid on January 12, 2024.

The Board of Directors currently intends to continue paying quarterly dividends. However, the Company's future dividend policy is subject to the Company's compliance with applicable law, and depending on, among other things, the Company's results of operations, financial condition, level of indebtedness, capital requirements, contractual restrictions, restrictions in the Company's debt agreements, and other factors that the Board of Directors may deem relevant. Dividend payments are not mandatory or guaranteed; there can be no assurance that the Company will continue to pay a dividend in the future.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Management's discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements in Part II, Item 8 of this Report, which have been prepared in accordance with accounting principles generally accepted in the United States. Our significant accounting policies are summarized in Note 1 to the consolidated financial statements in Part II, Item 8 of this Report. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to accounts receivable, inventories, revenue recognition, income taxes, long-lived assets, stock-based compensation and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from these estimates. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

Revenue Recognition

Our revenue is recognized when a contract exists and when, or as, we satisfy a performance obligation by transferring control of a product or service to the customer. A contract exists when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. For the Company, the arrangement with the customer is generally documented through a master agreement which outlines the general terms and conditions of the arrangement and a specific purchase commitment from the customer.

Our performance obligations are satisfied over time as work progresses or at a point in time. The determination of how our performance obligations are satisfied requires judgment and is assessed on a contract by contract basis. Under the majority of our contracts, our performance obligations are satisfied over time as work progresses since the customer controls all of the work-in-progress as products are being built. For these contracts, the selection of the method to measure progress towards completion requires judgment and is based on the nature of the products or services to be provided. We use a cost-based input measurement of progress because it best represents the transfer of assets to the customer. For our other contracts, revenue is recognized upon transfer of control of the product or service, which is generally upon shipment or delivery depending on the terms of the underlying contract. Revenue from design, development and engineering services is generally recognized over time as the services are performed.

Generally, there are no subjective customer acceptance requirements or further obligations related to goods or services provided. Our contracts with customers do not allow for a general right of return.

Income Taxes

We estimate our income tax provision in each of the jurisdictions where we operate, including estimating exposures related to uncertain tax positions. We must also make judgments regarding our ability to realize the future tax benefit from our deferred tax assets. We record a valuation allowance to reduce our deferred tax assets to the amount that we believe is more likely than not to be realized. As of December 31, 2023, our valuation allowance was \$18.5 million and primarily relates to the deferred tax assets of our foreign locations.

Differences in our future operating results as compared to the estimates utilized in the determination of the valuation allowance against our deferred tax assets could result in adjustments to the respective valuation allowances in future periods. For example, a significant increase in the operations of our foreign locations or future accretive acquisitions of our foreign locations would result in a reduction in our valuation allowance in the period of occurrence and would increase our income in the period such determination was made. Alternatively, significant economic downturns in our U.S. or foreign locations generating additional operating loss carryforwards could possibly result in an increase in our valuation allowance and would decrease our income in the period such determination was made.

The OECD and the G20 Inclusive Framework on Base Erosion and Profit Shifting have published the Pillar Two model rules designed to address the tax challenges arising from the digitalization of the global economy. The Pillar Two model rules adopt a global corporate minimum tax of 15% for multinational enterprises with average revenue in excess of €750 million on their global consolidated financial statements. The Council of the European Union has adopted the Pillar Two model rules and has directed EU member states to implement legislation enacting the Pillar Two model rules. Many countries, including non-EU member states, have implemented laws based on the Pillar Two model rules to be effective as of January 1, 2024.

The Company has manufacturing operations in several of the foreign jurisdictions that have implemented the Pillar Two model rules. The Company is still in the process of assessing the potential impact of the Pillar Two model rules on the Company's provision for income taxes, net income and cash flows for the calendar year of 2024 and future years. The potential impact, if any, of the Pillar Two model rules to the Company's provision for income taxes, net income and cash flows is currently not known or reasonably estimable. The Company expects to be in a position to report the potential impact, if any, in its interim financial statements for the quarterly period ending March 31, 2024.

We are subject to examination by tax authorities for different periods in various U.S. and foreign tax jurisdictions. During the course of such examinations, disputes may occur as to matters of fact and/or law. In most tax jurisdictions, the passage of time without examination will result in the expiration of applicable statutes of limitations, thereby precluding the taxing authority from examining the relevant tax period(s). We believe that we have adequately provided for our tax liabilities.

Impairment of Long-Lived Assets and Goodwill

Long-lived assets, such as property, plant, and equipment and purchased intangible assets, subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized for the amount that the carrying amount of the asset exceeds the fair value of the asset.

Goodwill is tested for impairment on an annual basis, at a minimum, and whenever events and circumstances indicate that the carrying amount may be impaired. Circumstances that may lead to impairment include unforeseen decreases in future performance or industry demand or the restructuring of our operations as a result of a change in our business strategy. We perform a qualitative assessment to determine if goodwill is potentially impaired. If the qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, or if we elect not to perform a qualitative assessment, then we would be required to perform a quantitative impairment test for goodwill. This process involves determining the fair values of the reporting units and comparing those fair values to the carrying values, including goodwill, of the reporting units. An impairment loss would be recognized to the extent that the carrying amount exceeds the fair value. For purposes of performing our goodwill impairment assessment, our reporting units are the same as our operating segments as defined in Note 13 to the consolidated financial statements in Part II, Item 8 of this Report. As of December 31, 2023 and 2022, we had \$154.0 million of goodwill related to our Americas reporting unit and \$38.1 million of goodwill related to our Asia reporting unit.

Based on our qualitative assessments of goodwill as of December 31, 2023 and 2022, we concluded that it was more likely than not that the fair value of our Americas and Asia reporting units were greater than their carrying amounts, and therefore no further testing was required.

Changes in economic and operating conditions that occur after the annual impairment analysis or an interim impairment analysis, and that impact these assumptions, may result in a future goodwill impairment charge.

Recently Enacted Accounting Principles

See Note 1(s) to the consolidated financial statements in Part II, Item 8 of this Report for a discussion of recently enacted accounting principles.

CONTRACTUAL OBLIGATIONS

We have certain contractual obligations that extend beyond 2023 under lease obligations and debt arrangements. Non-cancellable purchase commitments do not typically extend beyond normal lead-times of 4 to 20 weeks; however, some electronic component manufacturers now have lead-times in excess of 52 weeks. Most purchase orders beyond this time frame are normally cancellable; however, as a result of the recent constrained environment some manufacturers have looked to limit their liability by adding non-cancellable, non-renewable (NCNR) terms. We do not use off-balance sheet financing techniques and we have not guaranteed the obligations of any entity that is not one of our wholly owned subsidiaries.

A summary of our operating lease obligations as of December 31, 2023 can be found in Note 6 to the consolidated financial statements in Part II, Item 8 of this Report.

A summary of our long-term debt obligations as of December 31, 2023 can be found in Note 5 to the consolidated financial statements in Part II, Item 8 of this Report.

U.S. federal income tax on deemed mandatory repatriation is payable over four years pursuant to the U.S. Tax Reform. See Note 8 to the consolidated financial statements in Part II, Item 8 of this Report.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Our international sales comprise a significant portion of our business. We are exposed to risks associated with operating internationally, including:

- Foreign currency exchange risk;
- Import and export duties, taxes and regulatory changes;
- Inflationary economies or currencies; and
- Economic and political instability.

Additionally, some of our operations are in developing countries. Certain events, including natural disasters, can impact the infrastructure of a developing country more severely than they would impact the infrastructure of a developed country. A developing country can also take longer to recover from such events, which could lead to delays in our ability to resume full operations.

We transact business in various foreign countries and are subject to foreign currency fluctuation risks. We use natural hedging and forward contracts to economically hedge transactional exposure primarily associated with trade accounts receivable, other receivables and trade accounts payable that are denominated in a currency other than the functional currency of the respective operating entity. We do not use derivative financial instruments for speculative purposes. Certain forward currency exchange contracts in place as of December 31, 2023 have not been designated as accounting hedges and, therefore, changes in fair value are recorded within our consolidated statement of income in Part II, Item 8 of this Report.

The Company enters into forward currency exchange contracts designated as cash flow hedges of forecasted foreign currency expenses. Changes in the fair value of the derivatives are recorded in accumulated other comprehensive loss on the consolidated balance sheet until earnings are affected by the variability of the cash flows.

Our sales are substantially denominated in U.S. dollars. Our foreign currency cash flows are generated in certain European and Asian countries and Mexico.

We are also exposed to market risk for changes in interest rates on our financial instruments, a portion of which relates to our invested cash balances. We do not use derivative financial instruments in our investing activities. We place cash and cash equivalents and investments with various major financial institutions. We protect our invested principal funds by limiting default risk, market risk and reinvestment risk. We mitigate default risk by generally investing in investment grade securities.

We are also exposed to interest rate risk on borrowings under our Credit Agreement. As of December 31, 2023, we had \$127.1 million outstanding on the floating rate term loan facility, and we have an interest rate swap agreement with a notional amount of \$127.1 million. Under this swap agreement, we receive variable rate interest rate payments and pay fixed rate interest payments. The effect of this swap is to convert our floating rate interest expense to fixed interest rate expense. The interest rate swap is designated as a cash flow hedge.

For additional information, see Note 10 to the consolidated financial statements in Part II, Item 8 of this Report.

Item 8. Financial Statements and Supplementary Data

BENCHMARK ELECTRONICS, INC. AND SUBSIDIARIES
Consolidated Balance Sheets

	December 31,	
(in thousands, except par value)	2023	2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 277,391	\$ 207,430
Restricted cash	5,822	—
Accounts receivable, net of allowance for doubtful accounts of \$470 and \$514, respectively	449,404	491,957
Contract assets	174,979	183,613
Inventories	683,801	727,749
Prepaid expenses and other assets	44,350	41,400
Total current assets	1,635,747	1,652,149
Property, plant and equipment, net	227,698	211,478
Operating lease right-of-use assets	130,830	93,081
Goodwill	192,116	192,116
Deferred income taxes	26,943	12,235
Other assets, net	61,421	66,272
Total assets	\$ 2,274,755	\$ 2,227,331
Liabilities and Shareholders' Equity		
Current liabilities:		
Current installments of long-term debt	\$ 4,283	\$ 4,275
Accounts payable	367,480	424,272
Advance payments from customers	204,883	197,937
Income taxes payable	22,225	12,236
Accrued liabilities	114,676	110,416
Total current liabilities	713,547	749,136
Long-term debt, net of current installments	326,674	320,675
Operating lease liabilities	123,385	86,687
Other long-term liabilities	32,064	43,922
Deferred income taxes	—	495
Commitments and contingencies		
Shareholders' equity:		
Preferred stock, \$0.10 par value; 5,000 shares authorized, none issued	—	—
Common stock, \$0.10 par value; 145,000 shares authorized; issued and outstanding – 35,664 and 35,164, respectively	3,566	3,516
Additional paid-in capital	528,842	519,238
Retained earnings	560,537	519,895
Accumulated other comprehensive loss	(13,860)	(16,233)
Total shareholders' equity	1,079,085	1,026,416
Total liabilities and shareholders' equity	\$ 2,274,755	\$ 2,227,331

See accompanying notes to the consolidated financial statements.

BENCHMARK ELECTRONICS, INC. AND SUBSIDIARIES
Consolidated Statements of Income

(in thousands, except per share data)	Year Ended December 31,		
	2023	2022	2021
Sales	\$ 2,838,976	\$ 2,886,331	\$ 2,255,319
Cost of sales	2,567,906	2,631,096	2,049,418
Gross profit	271,070	255,235	205,901
Selling, general and administrative expenses	147,025	150,215	136,700
Amortization of intangible assets	5,979	6,384	6,384
Restructuring charges and other costs	8,402	8,567	13,699
Ransomware related incident recoveries	—	—	(3,944)
Income from operations	109,664	90,069	53,062
Interest expense	(31,875)	(12,894)	(8,472)
Interest income	6,256	1,730	540
Other (expense) income, net	(2,825)	5,437	277
Income before income taxes	81,220	84,342	45,407
Income tax expense	16,905	16,113	9,637
Net income	\$ 64,315	\$ 68,229	\$ 35,770
Earnings per share:			
Basic	\$ 1.81	\$ 1.94	\$ 1.00
Diluted	\$ 1.79	\$ 1.91	\$ 0.99
Weighted-average number of shares outstanding:			
Basic	35,566	35,179	35,655
Diluted	35,973	35,718	36,101

See accompanying notes to the consolidated financial statements.

BENCHMARK ELECTRONICS, INC. AND SUBSIDIARIES
Consolidated Statements of Comprehensive Income

(in thousands)	Year Ended December 31,		
	2023	2022	2021
Net income	\$ 64,315	\$ 68,229	\$ 35,770
Other comprehensive income (loss):			
Foreign currency translation adjustments	2,964	(3,148)	(4,354)
Unrealized gain (loss) on derivatives, net of tax	(628)	4,160	3,370
Other	37	(87)	477
Total other comprehensive income (loss)	2,373	925	(507)
Comprehensive income	\$ 66,688	\$ 69,154	\$ 35,263

See accompanying notes to the consolidated financial statements.

BENCHMARK ELECTRONICS, INC. AND SUBSIDIARIES
Consolidated Statements of Shareholders' Equity

(in thousands)	Shares	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
Balances, December 31, 2020	36,295	\$ 3,629	\$ 510,405	\$ 492,205	\$ (16,651)	\$ 989,588
Net income	—	—	—	35,770	—	35,770
Other comprehensive loss	—	—	—	—	(507)	(507)
Dividends declared	—	—	—	(23,267)	—	(23,267)
Stock-based compensation expense	—	—	15,262	—	—	15,262
Shares repurchased and retired	(1,380)	(138)	(15,362)	(24,716)	—	(40,216)
Stock options exercised	30	3	343	—	—	346
Vesting of restricted stock units	377	38	(38)	—	—	—
Shares withheld for taxes	(109)	(11)	(3,163)	—	—	(3,174)
Balances, December 31, 2021	35,213	\$ 3,521	\$ 507,447	\$ 479,992	\$ (17,158)	\$ 973,802
Net income	—	—	—	68,229	—	68,229
Other comprehensive income	—	—	—	—	925	925
Dividends declared	—	—	—	(23,149)	—	(23,149)
Stock-based compensation expense	—	—	18,485	—	—	18,485
Shares repurchased and retired	(376)	(37)	(4,177)	(5,177)	—	(9,391)
Stock options exercised	45	4	712	—	—	716
Vesting of restricted stock units	407	41	(41)	—	—	—
Shares withheld for taxes	(125)	(13)	(3,188)	—	—	(3,201)
Balances, December 31, 2022	35,164	\$ 3,516	\$ 519,238	\$ 519,895	\$ (16,233)	\$ 1,026,416
Net income	—	—	—	64,315	—	64,315
Other comprehensive income	—	—	—	—	2,373	2,373
Dividends declared	—	—	—	(23,673)	—	(23,673)
Stock-based compensation expense	—	—	15,286	—	—	15,286
Shares repurchased and retired	—	—	—	—	—	—
Stock options exercised	8	1	128	—	—	129
Vesting of restricted stock units	732	73	(73)	—	—	—
Shares withheld for taxes	(240)	(24)	(5,737)	—	—	(5,761)
Balances, December 31, 2023	<u>35,664</u>	<u>\$ 3,566</u>	<u>\$ 528,842</u>	<u>\$ 560,537</u>	<u>\$ (13,860)</u>	<u>\$ 1,079,085</u>

See accompanying notes to the consolidated financial statements.

BENCHMARK ELECTRONICS, INC. AND SUBSIDIARIES
Consolidated Statements of Cash Flows

(in thousands)	Year Ended December 31,		
	2023	2022	2021
Cash flows from operating activities:			
Net income	\$ 64,315	\$ 68,229	\$ 35,770
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Depreciation	34,368	33,339	35,003
Amortization	11,042	10,913	9,149
Provision for doubtful accounts	1,321	489	—
Deferred income taxes	(14,992)	(7,248)	(6,883)
Asset impairments	1,075	—	4,357
(Gain) loss on the sale of property, plant and equipment	(101)	(289)	148
Gain on assets held for sale	—	(393)	—
Stock-based compensation expense	15,286	18,485	15,262
Changes in operating assets and liabilities:			
Accounts receivable	42,050	(136,455)	(46,967)
Contract assets	8,634	(28,370)	(12,464)
Inventories	45,071	(206,247)	(197,867)
Prepaid expenses and other assets	(4,648)	(6,467)	(12,201)
Accounts payable	(35,320)	(16,656)	139,952
Advance payments from customers	6,946	79,813	34,002
Accrued liabilities	(13,093)	6,303	(508)
Operating leases	2,414	441	(167)
Income taxes	9,926	6,646	792
Net cash provided by (used in) operating activities	174,294	(177,467)	(2,622)
Cash flows from investing activities:			
Additions to property, plant and equipment	(73,479)	(43,357)	(38,794)
Additions to capitalized purchased software	(4,260)	(3,417)	(3,383)
Proceeds from the sale of property, plant and equipment	649	321	239
Proceeds from the sale of assets held for sale	—	5,372	—
Other, net	(48)	(93)	63
Net cash used in investing activities	(77,138)	(41,174)	(41,875)
Cash flows from financing activities:			
Borrowings under credit agreement	749,500	828,000	150,000
Principal payments on credit agreement	(743,602)	(633,000)	(155,625)
Dividends paid	(23,455)	(23,156)	(23,260)
Employee taxes paid with shares withheld	(5,761)	(3,201)	(3,174)
Proceeds from stock options exercised	129	716	346
Debt issuance costs	(216)	(574)	(1,150)
Principal payments on finance leases	(173)	(165)	(873)
Share repurchases	—	(9,391)	(40,216)
Net cash provided by (used in) financing activities	(23,578)	159,229	(73,952)
Effect of exchange rate changes on cash, cash equivalents and restricted cash			
	2,205	(4,907)	(5,792)
Net increase (decrease) in cash, cash equivalents and restricted cash	75,783	(64,319)	(124,241)
Cash, cash equivalents and restricted cash at the beginning of the year	207,430	271,749	395,990
Cash, cash equivalents and restricted cash at the end of the year	\$ 283,213	\$ 207,430	\$ 271,749

See accompanying notes to the consolidated financial statements.

BENCHMARK ELECTRONICS, INC.
Notes to the Consolidated Financial Statements
(Amounts in thousands, except per share data, unless otherwise noted)

Note 1—Summary of Significant Accounting Policies

(a) Business

Benchmark Electronics, Inc. (the Company) is a Texas corporation that provides advanced manufacturing services, which include design and engineering services and technology solutions. From initial product concept to volume production, including direct order fulfillment and aftermarket services, the Company has been providing integrated services and solutions to original equipment manufacturers (OEMs) since 1979. The Company serves the following market sectors: complex industrials, aerospace and defense (A&D), medical technologies, semiconductor capital equipment (semi-cap), advanced computing and next-generation communications. The Company has manufacturing operations located in the United States and Mexico (the Americas), Asia and Europe.

(b) Principles of Consolidation

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP) and include the financial statements of Benchmark Electronics, Inc. and its wholly owned and majority owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

(c) Cash, Cash Equivalents and Restricted Cash

The Company considers all highly liquid debt instruments with an original maturity at the date of purchase of three months or less to be cash equivalents. Cash equivalents of \$121.2 million and \$88.9 million at December 31, 2023 and 2022, respectively, consisted primarily of money-market funds and time deposits with an initial term of less than three months. Restricted cash represents cash received from customers to settle invoices sold under trade accounts receivable sale program purchase agreements that is contractually required to be set aside until the cash is remitted to the purchaser.

(d) Allowance for Doubtful Accounts

Accounts receivable are recorded net of allowances for amounts not expected to be collected. In estimating the allowance, management considers a specific customer's financial condition, payment history, current conditions, and various information or disclosures by the customer or other publicly available information. Accounts receivable are charged against the allowance after all reasonable efforts to collect the full amount (including litigation, where appropriate) have been exhausted.

The following table summarizes the activity of the Company's allowance for doubtful accounts:

(in thousands)	Balance as of the Beginning of the Year	Charges to Operations	Deductions	Balance as of the End of the Year
Year ended December 31, 2023:				
Allowance for doubtful accounts ⁽¹⁾	\$ 514	\$ 1,321	\$ (1,365)	\$ 470
Year ended December 31, 2022:				
Allowance for doubtful accounts ⁽¹⁾	788	489	(763)	514
Year ended December 31, 2021:				
Allowance for doubtful accounts ⁽¹⁾	1,371	—	(583)	788

⁽¹⁾ Deductions in the allowance for doubtful accounts represent write-offs, net of recoveries, of amounts determined to be uncollectible.

(e) Inventories

Inventories are stated at the lower of cost (first-in, first-out method) and net realizable value. Costs included in inventories consist of materials, labor and overhead. The carrying amounts of inventories are adjusted for excess and obsolete inventory. Evaluation of excess inventory includes considering factors such as anticipated usage, inventory turnover, inventory levels and product demand levels. Evaluation for obsolete inventory includes considering factors such as the age of on-hand inventory, reduction in value due to damage and design changes. The Company also takes into consideration whether customer agreements specify for the customer to pay for such inventory.

(f) Property, Plant and Equipment

Property, plant and equipment are stated at cost. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets, which include 5 to 40 years for buildings and building improvements, 2 to 15 years for machinery and equipment, 2 to 12 years for furniture and fixtures and 2 to 8 years for vehicles. Leasehold improvements are amortized using the straight-line method over the shorter of the useful life of the improvement or the remainder of the lease term.

(g) Leases

Lease assets and liabilities are initially recognized based on the present value of lease payments over the lease term calculated using the Company's incremental borrowing rate unless the implicit rate is readily determinable. Our incremental borrowing rate represents the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term in a similar economic environment. Lease assets also include any upfront lease payments made and exclude lease incentives. Lease terms include options to extend or terminate the lease when it is reasonably certain that those options will be exercised. Leases are classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the consolidated statement of income. Management elected the short-term lease recognition exemption for all of the Company's leases that qualify, in addition to the practical expedient to not separate lease and non-lease components.

(h) Goodwill and Other Intangible Assets

Goodwill represents the excess of purchase price over fair value of net assets acquired. Goodwill and intangible assets acquired in a business combination and determined to have an indefinite useful life are not amortized, but instead assessed for impairment at least annually.

Other assets, net, primarily consist of acquired identifiable intangible assets and capitalized purchased software costs. Intangible assets, including those acquired in a business combination, with estimable useful lives are amortized over their respective estimated useful lives to their estimated residual values. Customer relationships are amortized on a straight-line basis over a period of 10 to 14 years. Capitalized purchased software costs are amortized on a straight-line basis over the estimated useful life of the related software, which ranges from 2 to 14 years. Technology licenses are amortized over their estimated useful lives in proportion to the economic benefits consumed.

(i) Impairment of Long-Lived Assets and Goodwill

Long-lived assets, such as property, plant, and equipment, and purchased intangibles subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is evaluated by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized for the amount by which the carrying amount of the asset exceeds the estimated fair value of the asset. Assets to be disposed of are reported at the lower of the carrying amount or estimated fair value less costs to sell and are no longer depreciated.

The Company evaluates goodwill for impairment on an annual basis, during the fourth quarter, and whenever events and changes in circumstances suggest that the carrying amount may be impaired. Circumstances that may lead to the impairment of goodwill include unforeseen decreases in future performance or industry demand or the restructuring of our operations as a result of a change in our business strategy. A qualitative assessment is allowed to determine if goodwill is potentially impaired. Based on this qualitative assessment, if the Company determines that it is more likely than not that the reporting unit's fair value is less than its carrying value, then it performs a quantitative assessment, otherwise no further analysis is required. In connection with its annual qualitative goodwill impairment assessments as of December 31, 2023 and 2022, the Company concluded that goodwill was not impaired.

(j) Earnings Per Share

Basic earnings per share is computed using the weighted-average number of common shares outstanding. Diluted earnings per share is computed using the weighted-average number of shares outstanding adjusted for the incremental shares attributed to outstanding stock equivalents. Stock equivalents include common shares issuable upon the exercise of stock options and other equity instruments and are computed using the treasury stock method. Under the treasury stock method, the exercise price of a share and the amount of compensation cost, if any, for future service that the Company has not yet recognized are assumed to be used to repurchase shares in the current period.

The following table sets forth the calculation of basic and diluted earnings per share:

(in thousands, except per share data)	Year Ended December 31,		
	2023	2022	2021
Net income	\$ 64,315	\$ 68,229	\$ 35,770
Denominator for basic earnings per share	35,566	35,179	35,655
Incremental common shares attributable to outstanding restricted stock units	403	522	407
Incremental common shares attributable to exercise of dilutive options	4	17	39
Denominator for diluted earnings per share	<u>35,973</u>	<u>35,718</u>	<u>36,101</u>
Earnings per share:			
Basic	\$ 1.81	\$ 1.94	\$ 1.00
Diluted	<u>\$ 1.79</u>	<u>\$ 1.91</u>	<u>\$ 0.99</u>

There were no anti-dilutive stock options excluded from the computation of diluted earnings per share in 2023, 2022 and 2021. Restricted stock units totaling less than 0.1 million common share equivalents for 2023 and 2021 were excluded from the computation of diluted earnings per share because their effect would have been anti-dilutive. There were no anti-dilutive restricted stock units in 2022.

(k) Revenue Recognition

The Company recognizes revenue as the customer takes control of the manufactured products built to customer specifications. Under the majority of the Company's manufacturing contracts with customers, the customer controls all of the work-in-progress as products are being built. Revenue under these contracts is recognized progressively based on the cost-to-cost method. For other manufacturing contracts, the customer does not take control of the product until it is completed. Under these contracts, the Company recognizes revenue upon transfer of control of the product to the customer, which is generally when the goods are shipped. Revenue from design, development and engineering services is generally recognized over time as the services are performed.

The Company's performance obligations generally have an expected duration of one year or less. The Company applies the practical expedient related to short-term performance obligations and does not disclose information about remaining performance obligations that have original expected durations of one year or less or any significant financing components in the contracts.

The Company recognizes the incremental costs, if any, of obtaining contracts as an expense when incurred since the amortization period of the assets that the Company otherwise would have recognized is one year or less.

(l) Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred income taxes are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date. The Company records a valuation allowance to reduce its deferred tax assets to the amounts that are more likely than not to be realized in the future. The Company considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in assessing the need for a valuation allowance.

(m) Stock-Based Compensation

All share-based payments to employees of the Company, including grants of employee stock options (last awarded in 2015), are recognized in the consolidated financial statements based on their grant date fair values. The total compensation costs recognized for stock-based awards were \$15.3 million, \$18.5 million and \$15.3 million for 2023, 2022 and 2021, respectively. The future tax benefit of these stock-based awards as of the grant date was \$3.5 million, \$4.4 million and \$3.6 million for 2023, 2022 and 2021, respectively. The fair value of stock option grants is estimated on the date of grant using the Black-Scholes option pricing model. The fair values of restricted stock units and performance-based restricted stock units are determined based on the closing market price of the Company's common stock on the date of grant. For performance-based restricted stock units, compensation cost is calculated taking into consideration the probability that the underlying performance goals will be achieved, which is monitored by management throughout the requisite service period. When it becomes probable, based on management's expectation of the Company's performance during the measurement period, that more or less than the previous estimate of the awarded shares will vest, an adjustment to compensation cost is recognized as a change in accounting estimate in the period the change is determined.

As of December 31, 2023, the unrecognized compensation costs and remaining weighted-average amortization periods related to stock-based awards were as follows:

(in thousands)	Restricted Stock Units	Performance- Based Stock Units
Unrecognized compensation cost	\$ 21,869	\$ 4,813
Remaining weighted-average amortization period	2.5 years	1.8 years

⁽¹⁾ Based on the probable achievement of the performance goals identified in each award.

The total cash received as a result of stock option exercises in 2023, 2022 and 2021 was \$0.1 million, \$0.7 million and \$0.3 million, respectively. The actual tax benefit realized as a result of stock option exercises and the vesting of other share-based awards during 2023, 2022 and 2021 was \$2.7 million, \$2.5 million and \$2.7 million, respectively. For 2023, 2022 and 2021, the total intrinsic value of stock options exercised was \$0.1 million, \$0.5 million and \$0.5 million, respectively.

The Company awarded performance-based restricted stock units to employees during 2023, 2022 and 2021. The number of performance-based restricted stock units that will ultimately be earned will not be determined until the end of the corresponding performance periods and may vary from as low as zero to as high as 2.5 times the target number depending on the level of achievement of certain performance goals. The level of achievement of these goals is based upon the financial results of the Company for the last full calendar year within the performance period. The performance goals consist of certain levels of achievement using the following financial metrics: revenue, operating income margin, and return on invested capital. If the performance goals are not met based on the Company's financial results, the applicable performance-based restricted stock units will not vest and will be forfeited. Shares subject to forfeited performance-based restricted stock units will become available for issuance under the Company's 2019 Omnibus Incentive Compensation Plan (the 2019 Plan).

(n) Use of Estimates

Management of the Company has made a number of estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities to prepare these consolidated financial statements in accordance with U.S. GAAP. However, actual results could differ materially from these estimates. On an ongoing basis, management evaluates these estimates, including those related to accounts receivable, inventories, income taxes, long-lived assets, leases, goodwill, stock-based compensation expense, contingencies and litigation. Actual results could differ from those estimates.

(o) Fair Values of Financial Instruments

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

A three-tier fair value hierarchy of inputs is employed to determine fair value measurements as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2 inputs are observable prices that are not quoted on active exchanges, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; and model-derived valuations in which inputs are observable or in which significant value drivers are observable; and
- Level 3 inputs are unobservable inputs employed for measuring the fair value of assets or liabilities.

This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value.

The Company's financial instruments include cash equivalents, accounts receivable, other receivables, accounts payable, accrued liabilities, long-term debt, interest rate swaps and foreign currency hedges. For cash equivalents, accounts receivable, other receivables, accounts payable and accrued liabilities, the Company believes that the carrying values of its financial instruments approximate the fair values because of their short-term nature. For borrowings under the credit facility in long-term debt, the Company believes that the fair value approximates the carrying value because the interest rates are variable. As of December 31, 2023, the fair value estimates for the Company's interest rate swap agreement and were based on Level 2 inputs of the fair value hierarchy. See Note 10.

(p) Foreign Currency

For foreign subsidiaries of the Company using the local currency as their functional currency, assets and liabilities are translated at exchange rates in effect at the balance sheet date and income and expenses are translated at average exchange rates. The effects of these translation adjustments are recognized in other comprehensive income (loss). Exchange gains and losses arising from transactions denominated in a currency other than the functional currency of the entity involved are included in other (expense) income, net. For 2023, 2022 and 2021, the Company recognized a loss of \$3.4 million, a gain of \$0.6 million and a loss of \$0.3 million, respectively. These amounts include the gain (loss) recognized due to forward currency exchange contracts.

(q) Derivative Instruments

All derivative instruments are recorded on the balance sheet at fair value. The Company uses derivative instruments to manage the variability of foreign currency obligations and interest rates. The Company does not enter into derivative arrangements for speculative purposes. Generally, if a derivative instrument is designated as a cash flow hedge, the change in fair value of the derivative is recognized in other comprehensive income (loss) to the extent the derivative is effective and recognized in the consolidated statement of income when the hedged item affects earnings. Changes in the fair value of derivatives that are not designated as cash flow hedges are recognized in the consolidated statement of income. Cash receipts and cash payments related to derivative instruments are recorded in the same category as the cash flows from the items being hedged on the consolidated statement of cash flows.

(r) Government Assistance Programs and Incentives

The operation of our business is impacted by various government programs, incentives, and other arrangements. Government incentives are recorded in our consolidated financial statements in accordance with their purpose as a reduction of expense or an offset to the related capital asset. The benefit is generally recognized when all conditions attached to the incentive have been met or are expected to be met and there is reasonable assurance of their receipt. For 2023, 2022 and 2021, the Company recognized government incentives of \$1.7 million, \$0.9 million and \$0.5 million. These amounts are included in cost of sales and selling, general and administrative expense in the consolidated statement of income.

As of December 31, 2023, the Company had government incentives of \$0.9 million recognized in prepaid expenses and other assets. There were no unpaid government incentives as of December 31, 2022.

(s) New Accounting Pronouncements

In September 2022, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2022-04: Disclosure of Supplier Finance Program Obligations (Subtopic 405-50), which requires a buyer in a supplier finance program to disclose sufficient information about the program to allow a user of financial statements to understand the program's nature, activity during the period, changes from period to period, and potential magnitude. This update is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, except for the amendment on rollforward information, which is effective for fiscal years beginning after December 15, 2023. Early adoption is permitted. The adoption of ASU 2022-04 did not have a material impact on our consolidated financial statements.

The Company has determined that other recently issued accounting standards will either not have a material impact on its consolidated financial position, results of operations or cash flows, or will not apply to its operations.

Not Yet Adopted

In December 2023, the FASB issued ASU 2023-09, Improvements to Income Tax Disclosures (Topic 740) (ASU 2023-09), which improves the transparency of income tax disclosures by requiring consistent categories and greater disaggregation of information in the rate reconciliation and income taxes paid disaggregated by jurisdiction. The ASU is effective for annual periods beginning after December 15, 2024. Early adoption is permitted. The Company is currently evaluating the guidance and its impact to the financial statements.

In November 2023, the FASB issued ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures (ASU 2023-07), which requires public entities to disclose information about their reportable segments' oversight and significant expenses on an interim and annual basis. The ASU is effective for fiscal years beginning after December 15, 2023 and interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. The Company is currently evaluating the guidance and its impact to the financial statements.

In October 2023, the FASB issued ASU 2023-06, Disclosure Improvements: Codification Amendments in Response to SEC's Disclosure Update and Simplification Initiative (ASU 2023-06), which amends a variety of disclosure requirements in the Accounting Standards Codification. The effective date for each amendment will be the date on with the SEC's removal of that related disclosure from Regulation S-X or Regulation S-K becomes effective. Early adoption is prohibited. Upon adoption, this ASU is not expected to have a material impact to the Company's financial statements and related disclosures.

Note 2—Inventories

Inventory costs are summarized as follows:

(in thousands)	December 31,	
	2023	2022
Raw materials	\$ 659,210	\$ 710,494
Work in process	22,088	15,546
Finished goods	2,503	1,709
Total inventories	<u>\$ 683,801</u>	<u>\$ 727,749</u>

Note 3—Property, Plant and Equipment

Property, plant and equipment consists of the following:

(in thousands)	December 31,	
	2023	2022
Land	\$ 5,867	\$ 5,867
Buildings and building improvements	81,282	79,178
Machinery and equipment	553,468	542,034
Furniture and fixtures	12,897	11,430
Vehicles	1,115	1,099
Leasehold improvements	54,754	54,272
Construction in progress	24,658	3,147
Total property and equipment, at cost	<u>734,041</u>	<u>697,027</u>
Less: Accumulated depreciation	(506,343)	(485,549)
Total property, plant and equipment, net	<u>\$ 227,698</u>	<u>\$ 211,478</u>

Note 4—Goodwill and Other Intangible Assets

Goodwill allocated to the Company's reportable operating segments follows:

(in thousands)	Americas	Asia	Total
Goodwill as of December 31, 2023 and 2022	\$ 154,014	\$ 38,102	\$ 192,116

A summary of the Company's acquired identifiable intangible assets and capitalized purchased software costs follows:

(in thousands)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	\$ 100,105	\$ (71,947)	\$ 28,158
Capitalized purchased software costs	45,062	(30,463)	14,599
Technology licenses	15,500	(15,500)	—
Trade names and trademarks	7,800	—	7,800
Other	869	(404)	465
Total intangible assets as of December 31, 2023	\$ 169,336	\$ (118,314)	\$ 51,022

(in thousands)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	\$ 100,072	\$ (65,958)	\$ 34,114
Capitalized purchased software costs	52,483	(36,702)	15,781
Technology licenses	15,500	(15,500)	—
Trade names and trademarks	7,800	—	7,800
Other	868	(377)	491
Total intangible assets as of December 31, 2022	\$ 176,723	\$ (118,537)	\$ 58,186

During 2023, 2022 and 2021, additions to capitalized purchased software costs were \$4.3 million, \$3.4 million and \$3.4 million, respectively.

A summary of the components of amortization expense, as presented in the consolidated statements of cash flows, follows:

(in thousands)	Year Ended December 31,		
	2023	2022	2021
Amortization of intangible assets	\$ 5,979	\$ 6,384	\$ 6,384
Amortization of capitalized purchased software costs	4,564	4,113	2,128
Amortization of debt costs	499	416	637
Total amortization expense	\$ 11,042	\$ 10,913	\$ 9,149

A summary of the future amortization expense related to the Company's intangible assets held as of December 31, 2023 for each of the next five years follows (in thousands):

Year ending December 31,	Amortization Expense
2024	\$ 4,817
2025	4,817
2026	4,817
2027	4,817
2028	4,817

Note 5—Borrowing Facilities

A summary of the Company's long-term debt outstanding follows:

(in thousands)	December 31,	
	2023	2022
Revolving credit facility	\$ 205,000	\$ 195,000
Term loan	127,148	131,250
Less: Unamortized debt issuance costs	(1,546)	(1,829)
Total long-term debt, including current installments	<u>\$ 330,602</u>	<u>\$ 324,421</u>

On July 20, 2018, the Company entered into a \$650 million credit agreement (the Prior Credit Agreement) by and among the Company, certain of its subsidiaries, the lenders party thereto and Bank of America, N.A., as Administrative Agent, Swingline Lender and a L/C Issuer. The Prior Credit Agreement was comprised of a five-year \$500 million revolving credit facility and a five-year \$151 million term loan facility, both which had a maturity date of July 20, 2023. The term loan facility proceeds were used to (i) refinance a portion of existing indebtedness and terminate all commitments under the Company's prior \$430 million credit agreement and (ii) pay the fees, costs and expenses associated with the foregoing and the negotiation, execution and delivery of the Prior Credit Agreement.

On December 21, 2021, the Company amended and restated the Prior Credit Agreement by entering into a \$381 million amended and restated credit agreement (the Amended and Restated Credit Agreement). The Amended and Restated Credit Agreement is comprised of a five-year \$250 million revolving credit facility (the Revolving Credit Facility) and a five-year \$131.3 million term loan facility (the Term Loan Facility), both extending the original revolving credit facility and term loan facility maturity dates from July 20, 2023 to December 21, 2026.

On May 20, 2022, the Company entered into Amendment No. 1 (the Amendment) to the Amended and Restated Credit Agreement (as amended, the Credit Agreement). The Amendment increased the Revolving Credit Facility commitments from \$250 million to \$450 million. The Amendment also established that the interest on outstanding borrowings starting on the next reset date and any new borrowings under the Amendment (other than swingline loans) will accrue, at the Company's option, at (a) Bloomberg Short Term Bank Yield Index (BSBY) plus the Applicable Rate (as defined in the Credit Agreement, approximately 1.00% to 2.00% per annum depending on various factors) or (b) for U.S. dollar denominated loans, the base rate (which is the highest of (i) the federal funds rate plus 0.50%, (ii) the Bank of America, N.A. prime rate, (iii) the one-month BSBY adjusted daily rate plus 1.00% and (iv) 1.00%).

On February 3, 2023, the Company entered into Amendment No. 2 to the Credit Agreement, which increased the maximum amount of trade accounts receivable that the Company may elect to sell at any one time to \$200.0 million.

On May 1, 2023, the Company entered into Amendment No. 3 to the Credit Agreement (Amendment No. 3), which increased the Revolving Credit Facility commitments from \$450 million to \$550 million. Amendment No. 3 also established that the interest on outstanding borrowings starting on the next reset date and any new borrowings under Amendment No. 3 (other than swingline loans) will accrue, at the Company's option, at (a) Term Secured Overnight Financing Rate (SOFR) plus 0.10% plus the Applicable Rate (as defined in the Credit Agreement, approximately 1.00% to 2.00% per annum depending on various factors) or (b) for U.S. dollar denominated loans, the base rate (which is the highest of (i) the federal funds rate plus 0.50%, (ii) the Bank of America, N.A. prime rate, (iii) Term SOFR plus 1.00% and (iv) 1.00%).

The Revolving Credit Facility is available for general corporate purposes. The Credit Agreement includes an accordion feature pursuant to which the Company is permitted to add one or more incremental term loans and/or increase commitments under the Revolving Credit Facility in an aggregate amount of \$100 million or a higher amount, subject to the satisfaction of certain conditions and exceptions.

The Term Loan Facility is subject to quarterly principal installments equal to 0.625% of the initial aggregate term loan advances to be paid commencing December 31, 2022 through September 30, 2024 and is subject to quarterly principal installments equal to 1.25% of the initial aggregate term loan advances to be paid from December 31, 2024 until the maturity date.

As of December 31, 2023, a portion of the \$127.1 million outstanding debt under the Credit Agreement is effectively at a fixed interest rate of 4.039% as a result of a \$127.1 million notional interest rate swap contract, which is discussed in Note 10. A commitment fee of 0.20% to 0.30% per annum (based on the debt to EBITDA ratio) on the unused portion of the Revolving Credit Facility is payable quarterly in arrears.

The Credit Agreement is generally secured by a pledge of (a) all the capital stock of the Company's domestic subsidiaries and 65% of the capital stock of its directly owned foreign subsidiaries, (b) all or substantially all other personal property of Benchmark and its domestic subsidiaries (including, but not limited to, accounts receivable, contract assets, inventory, intellectual property and fixed assets of Benchmark and its domestic subsidiaries), in each case, subject to customary exceptions and limitations, and (c) all proceeds and products of the property and assets described in (a) and (b) above.

The Credit Agreement contains certain financial covenants related to interest coverage and debt leverage, and certain customary affirmative and negative covenants, including restrictions on the Company's ability to incur additional debt and liens, pay dividends, repurchase shares, sell assets and merge or consolidate with other persons. Amounts due under the Credit Agreement could be accelerated upon specified events of default, including a failure to pay amounts due, breach of a covenant, material inaccuracy of a representation, or occurrence of bankruptcy or insolvency, subject, in some cases, to cure periods.

As of December 31, 2023, the Company had \$127.1 million in borrowings outstanding under the Term Loan Facility, \$205.0 million in borrowings outstanding under the Revolving Credit Facility and \$4.4 million in letters of credit outstanding under the Revolving Credit Facility. As of December 31, 2023, the Company had \$340.6 million available for future borrowings under the Revolving Credit Facility subject to compliance with financial covenants as to interest coverage and debt leverage, in addition to other debt covenant restrictions.

As of December 31, 2023, the Company's long-term debt matures as follows: \$4.1 million in 2024, \$6.6 million in 2025 and \$321.5 million in 2026. The Company has no maturities after 2026.

Note 6 – Leases

The Company determines if a contract is or contains a lease at inception. The Company leases certain facilities, vehicles and other equipment. The Company's leases primarily consist of operating leases which expire at various dates through 2036. Variable lease payments are generally expensed as incurred and primarily include certain index-based changes in rent and certain non-lease components, such as maintenance and other services provided by the lessor.

The components of lease expense were as follows:

(in thousands)	Year Ended December 31,		
	2023	2022	2021
Finance lease costs:			
Amortization of right-of-use assets (included in depreciation expense)	\$ 48	\$ 96	\$ 444
Interest on lease liabilities	21	29	192
Operating lease costs	19,280	17,485	16,155
Short-term lease costs	618	307	339
Variable lease costs	1,770	1,892	1,737
Total lease costs	\$ 21,737	\$ 19,809	\$ 18,867

A summary of cash flow information related to leases follows:

(in thousands)	Year Ended December 31,		
	2023	2022	2021
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows used for operating leases	\$ 17,702	\$ 17,277	\$ 16,721
Operating cash flows used for finance leases	21	29	212
Financing cash flows used for finance leases	173	165	873
Right-of-use assets obtained in exchange for new operating lease liabilities	56,834	11,694	32,811

A summary of other information about our leases follows:

(dollars in thousands)	December 31,	
	2023	2022
Finance lease right-of-use assets (included in other assets, net)	\$ —	\$ 664
Operating lease right-of-use assets	\$ 130,830	\$ 93,081
Finance lease liabilities, current (included in current installments of long-term debt)	\$ 181	\$ 173
Finance lease liabilities, noncurrent (included in long-term debt)	\$ 174	\$ 355
Operating lease liabilities, current (included in accrued liabilities)	\$ 15,486	\$ 12,020
Operating lease liabilities, noncurrent	\$ 123,385	\$ 86,687
Weighted average remaining lease term – finance leases	1.9 years	2.9 years
Weighted average remaining lease term – operating leases	9.7 years	9.8 years
Weighted average discount rate – finance leases	4.8 %	4.8 %
Weighted average discount rate – operating leases	4.5 %	4.1 %

A summary of the Company's future annual minimum lease payments as of December 31, 2023 follows (in thousands):

Year ending December 31,	Operating Leases	Finance Leases
2024	\$ 20,741	\$ 194
2025	20,025	178
2026	16,613	—
2027	15,467	—
2028	14,719	—
2029 and thereafter	85,385	—
Total minimum lease payments	172,950	372
Less: imputed interest	(34,079)	(17)
Total present value of lease liabilities	<u>\$ 138,871</u>	<u>\$ 355</u>

As of December 31, 2023, the Company had no significant lease commitments that had not yet commenced.

Note 7—Common Stock and Stock-Based Awards

Dividends

The Company began declaring and paying quarterly dividends during the first quarter of 2018. During 2023, 2022 and 2021, cash dividends paid totaled \$23.5 million, \$23.2 million and \$23.3 million, respectively. In February 2020, the Board of Directors approved a quarterly dividend increase, raising the quarterly dividend from \$0.15 to \$0.16 per common share. In May 2021, the Board of Directors approved another quarterly dividend increase, raising the quarterly dividend from \$0.16 to \$0.165 per common share. On December 13, 2023, the Company declared a quarterly cash dividend of \$0.165 per share of the Company's common stock to shareholders of record as of December 29, 2023. The dividend of \$5.9 million was paid on January 12, 2024. The Board of Directors currently intends to continue paying quarterly dividends. However, the Company's future dividend policy is subject to the Company's compliance with applicable laws, and depends on, among other things, the Company's results of operations, financial condition, level of indebtedness, capital requirements, contractual restrictions, restrictions in the Company's debt agreements, and other factors that the Board of Directors may deem relevant. Dividend payments are not mandatory or guaranteed and no assurance is made that the Company will continue to pay a dividend in the future.

Share Repurchase Authorization

On March 6, 2018, the Board of Directors approved an expanded share repurchase authorization granting the Company authority to repurchase up to \$250 million in common stock in addition to the \$100 million previously approved on December 7, 2015. On October 26, 2018 and February 19, 2020, the Board of Directors authorized the repurchase of an additional \$100 million and \$150 million of the Company's common stock, respectively.

Share purchases may be made in the open market, in privately negotiated transactions or block transactions, at the discretion of the Company's management and as market conditions warrant. Purchases will be funded from available cash and may be commenced, suspended or discontinued at any time without prior notice. Shares repurchased under the program are retired. The Company did not repurchase shares in 2023. During 2022, the Company repurchased a total of 0.4 million common shares for an aggregate of \$9.4 million at an average price of \$24.96 per share. During 2021, the Company repurchased a total of 1.4 million common shares for an aggregate of \$40.2 million at an average price of \$29.11 per share. As of December 31, 2023, the Company had \$154.6 million remaining under the share repurchase authorization.

Stock-Based Compensation

Under the 2019 Plan, the Company, upon approval of the Compensation Committee of the Board of Directors, may grant stock options, restricted shares, restricted stock units (both time-based and performance-based) and certain other forms of equity awards, or any combination thereof, to any director, officer, employee or consultant (including any prospective director, officer, employee or consultant) of the Company. Stock options (which have not been awarded since 2015) are granted to employees with an exercise price equal to the market price of the Company's common stock on the date of grant, generally vest over a four-year period from the date of grant and typically have a term of 10 years. Time-based restricted stock units granted to employees generally vest over a four-year period from the date of grant and are subject to continued employment with the Company. Performance-based restricted stock units generally vest over a three-year performance cycle, which includes the year of the grant, and are based upon the Company's achievement of specified performance metrics. Awards under the 2019 Plan to non-employee directors have historically been in the form of restricted stock units, which vest annually, starting on the grant date. As of December 31, 2023 the Company had 1.7 million common shares available for issuance under the 2019 Plan.

The following table summarizes the activities related to the Company's stock options:

(in thousands, except per share data and years)	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding as of December 31, 2020	188	\$ 19.98		
Exercised	(54)	19.77		
Forfeited or expired	(2)	20.16		
Outstanding as of December 31, 2021	132	\$ 20.06		
Exercised	(53)	17.16		
Forfeited or expired	(22)	22.36		
Outstanding as of December 31, 2022	57	\$ 21.85		
Exercised	(17)	19.52		
Forfeited or expired	(3)	20.11		
Outstanding and exercisable as of December 31, 2023	37	\$ 23.07	0.7	\$ 169

The aggregate intrinsic value, as presented in the table above, is calculated before income taxes and is the difference between the exercise price of the underlying stock options and the Company's closing stock price as of the last business day of 2023 for outstanding stock options that had exercise prices below the closing stock price.

The following table summarizes the activities related to the Company's time-based restricted stock units:

(in thousands, except per share data)	Number of Units	Weighted-Average Grant Date Fair Value
Non-vested awards outstanding as of December 31, 2020	1,026	\$ 27.35
Granted	503	28.52
Vested	(377)	26.77
Forfeited	(95)	28.47
Non-vested awards outstanding as of December 31, 2021	1,057	\$ 28.02
Granted	616	25.90
Vested	(407)	28.08
Forfeited	(81)	27.44
Non-vested awards outstanding as of December 31, 2022	1,185	\$ 26.93
Granted	724	24.13
Vested	(490)	26.92
Forfeited	(173)	25.91
Non-vested awards outstanding as of December 31, 2023	<u>1,246</u>	<u>\$ 25.43</u>

The following table summarizes the activities related to the Company's performance-based restricted stock units:

(in thousands, except per share data)	Number of Units	Weighted-Average Grant Date Fair Value
Non-vested awards outstanding as of December 31, 2020	368	\$ 27.93
Granted ⁽¹⁾	234	28.60
Forfeited	(60)	29.38
Non-vested awards outstanding as of December 31, 2021	542	\$ 28.06
Granted ⁽¹⁾	177	25.97
Forfeited	(174)	27.29
Non-vested awards outstanding as of December 31, 2022	545	\$ 27.62
Granted ⁽¹⁾	244	25.30
Vested	(242)	28.30
Forfeited	(105)	26.98
Non-vested awards outstanding as of December 31, 2023	<u>442</u>	<u>\$ 26.12</u>

⁽¹⁾ Represents target number of awards that can vest based on the achievement of the performance goals.

Note 8—Income Taxes

Income tax expense (benefit) consisted of the following:

(in thousands)	Year Ended December 31,		
	2023	2022	2021
Current:			
U.S. Federal	\$ 2,989	\$ 903	\$ 6
State and local	587	107	1,702
Foreign	28,321	22,351	14,812
Total current taxes	<u>31,897</u>	<u>23,361</u>	<u>16,520</u>
Deferred:			
U.S. Federal	(6,206)	(6,544)	(6,179)
State and local	(1,612)	(1,734)	(1,380)
Foreign	(7,174)	1,030	676
Total deferred taxes	<u>(14,992)</u>	<u>(7,248)</u>	<u>(6,883)</u>
Total income tax expense	<u>\$ 16,905</u>	<u>\$ 16,113</u>	<u>\$ 9,637</u>

Income (loss) before income taxes consisted of the following:

(in thousands)	Year Ended December 31,		
	2023	2022	2021
United States	\$ (31,534)	\$ (45,390)	\$ (34,930)
Foreign	112,754	129,732	80,337
Total income before income taxes	\$ 81,220	\$ 84,342	\$ 45,407

Income tax expense differed from the amounts computed by applying the U.S. Federal statutory income tax rate to income (loss) before income taxes as follows:

(in thousands)	Year Ended December 31,		
	2023	2022	2021
Tax at statutory rate	\$ 17,056	\$ 17,713	\$ 9,536
State taxes, net of federal tax effect	(809)	(1,285)	(36)
Effect of foreign operations and tax incentives	(909)	(3,907)	(4,048)
Change in valuation allowance	(241)	41	(336)
Stock-based compensation	623	447	(69)
GILTI	(450)	1,768	2,104
Foreign tax refund benefit	—	—	(7,285)
Losses in foreign jurisdictions for which no benefit has been provided	6	3	2,608
Change in uncertain tax benefit reserve	370	40	8,858
Other	1,259	1,293	(1,695)
Total income tax expense	\$ 16,905	\$ 16,113	\$ 9,637

The U.S. Tax Cuts and Jobs Act (U.S. Tax Reform), which was signed into law on December 22, 2017, significantly changed U.S. tax law by, among other things, lowering corporate income tax rates, implementing a territorial tax system, adding a global intangible taxation regime and imposing a transition tax (Transition Tax) on deemed repatriated cumulative earnings of foreign subsidiaries. The U.S. Tax Reform reduced the U.S. corporate income tax rate from a maximum of 35% to a flat 21% rate which became effective on January 1, 2018. The Company recorded the effects of the changes in the corporate income tax rate in the Company's deferred tax assets and liabilities as of December 31, 2017.

To minimize tax base erosion with a territorial tax system, the U.S. Tax Reform enacted a new global intangible low-taxed income (GILTI) provision that requires the Company to include in its U.S. income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiaries' tangible assets. The taxable earnings can be offset by a limited deemed paid foreign tax credit with no carrybacks or carryforwards available. The Company is subject to the GILTI provisions. The Company elected to account for the GILTI as a period cost and include the effect in the period in which it is incurred and not include it as a factor in the determination of deferred taxes.

The Company incurred a total Transition Tax liability of \$80.5 million after reduction for net operating loss carryforwards, U.S. tax credit carryforwards and foreign tax credit carryforwards that were allowed to be utilized against its total tax liability as of December 31, 2017. The Company made an election to pay the net tax liability in installments. The Company has a total Transition Tax liability as of December 31, 2023 of \$36.2 million. The Company intends to pay this liability over the remaining two-year payment period as prescribed by the U.S. Tax Reform and regulatory guidance issued by the Internal Revenue Service (IRS). As of December 31, 2023, \$20.1 million of the Transition Tax liability is included in other long-term liabilities on the consolidated balance sheet. The Company expects its payments for years subsequent to December 31, 2023 will be \$16.1 million in 2024 and \$20.1 million in 2025.

During 2023, 2022 and 2021, the Company repatriated \$70.0 million, \$20.0 million and \$35.0 million, respectively, of foreign earnings to the United States. As of December 31, 2023, the Company has approximately \$477.2 million in cumulative undistributed foreign earnings related to its foreign subsidiaries. These earnings would not be subject to U.S. federal income tax if distributed to the Company. The Company changed its assertion during 2018 on its foreign subsidiaries earnings that are permanently reinvested. A certain amount of earnings from specific foreign subsidiaries are permanently reinvested, and certain foreign earnings from other specific foreign subsidiaries are considered to be non-permanently reinvested and are available for immediate distribution to the Company. Income taxes have been accrued on the non-permanently reinvested foreign earnings, including the 2017 Transition Tax, the U.S. tax on GILTI and any applicable foreign or local withholding taxes. The Company estimates that it has approximately \$9.1 million of unrecognized deferred tax liabilities related to any remaining undistributed permanently reinvested foreign earnings that have not already been subject to the 2017 Transition Tax, the U.S. tax on GILTI, and any applicable foreign income tax or local withholding tax on cash distributions.

During 2021, the Company recorded a deferred tax asset of \$7.3 million with respect to a refund claim of foreign cash taxes of \$16.5 million that was filed in 2021. Previously in 2018, the Company recorded \$9.2 million of this total refund claim.

The tax effects of temporary differences that give rise to significant portions of the Company's deferred tax assets and liabilities were as follows:

(in thousands)	December 31,	
	2023	2022
Deferred tax assets:		
Carrying value of inventories	\$ 5,782	\$ 4,809
Accrued liabilities and allowances deductible for tax purposes on a cash basis	10,213	7,811
Goodwill	554	937
Stock-based compensation	5,853	5,032
Operating lease liabilities	33,260	23,252
Net operating loss carryforwards	12,662	16,848
Tax credit carryforwards	7,372	5,805
Research and experimentation	15,861	10,691
Other	8,540	4,086
Total gross deferred tax assets	<u>100,097</u>	<u>79,271</u>
Less: valuation allowance	(18,502)	(18,743)
Total net deferred tax assets	<u>81,595</u>	<u>60,528</u>
Deferred tax liabilities:		
Plant and equipment, due to differences in depreciation	(10,652)	(7,957)
Operating lease right-of-use assets	(32,999)	(22,991)
Intangible assets, due to differences in amortization	(8,946)	(10,502)
Foreign withholding tax	(898)	(4,902)
Interest rate swap	(52)	(263)
Other	(1,105)	(2,173)
Total gross deferred tax liabilities	<u>(54,652)</u>	<u>(48,788)</u>
Total net deferred tax assets	<u>\$ 26,943</u>	<u>\$ 11,740</u>
The net deferred tax assets are classified as follows:		
Long-term assets	\$ 26,943	\$ 12,235
Long-term liabilities	—	(495)
Total net deferred tax assets	<u>\$ 26,943</u>	<u>\$ 11,740</u>

All of the Company's deferred tax assets and liabilities are classified as long-term on the consolidated balance sheets as of December 31, 2023 and 2022. Deferred tax assets and liabilities are offset for each tax jurisdiction and presented as a single net long-term amount on the consolidated balance sheet.

During 2023 and 2022, the Company incurred and capitalized certain research and experimentation expenses that are required to be capitalized as an amortizable asset under Internal Revenue Code (IRC) Section 174 and to be amortized over a period of five years. This requirement is based on the implementation of the U.S. Tax Reform Act of 2017 and became effective on January 1, 2022. As of December 31, 2023, the Company's net deferred tax asset from capitalized research and experimentation expenses was \$15.9 million.

The net change in the Company's valuation allowance for 2023, 2022 and 2021 was a \$0.2 million decrease, a less than \$0.1 million increase and a \$0.3 million decrease, respectively. 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 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 become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. As of December 31, 2023, based upon the level of historical taxable income and projections for future taxable income over the periods which the deferred tax assets are deductible, management believes it is more likely than not the Company will realize the benefits of these deductible differences, net of the existing valuation allowances.

As of December 31, 2023, the Company had no remaining U.S. federal operating loss carryforwards as the final balance was utilized in 2022. The Company has U.S. state operating loss carryforwards of approximately \$18.7 million which will expire from 2037 to 2043; foreign operating loss carryforwards of approximately \$11.7 million with indefinite carryforward periods; and foreign operating loss carryforwards of approximately \$33.0 million which will expire at varying dates through 2031. The utilization of these net operating loss carryforwards is limited to the future operations of the Company in the tax jurisdictions in which such carryforwards arose. The Company has state tax credit carryforwards of \$1.6 million which will expire at varying dates through 2026. The Company also has U.S. research and development tax credit carryforwards of \$5.7 million which will expire from 2038 through 2043.

The Company has been granted certain tax incentives, including tax holidays, for its subsidiaries in Thailand, China and Malaysia that expire at various dates, unless extended or otherwise renegotiated and are subject to certain conditions with which the Company expects to comply. The tax incentives in Thailand will expire on December 31, 2030. The tax incentives in China expired on December 31, 2023 and the tax incentives in Malaysia expired on March 31, 2021. The Company has applied for a continuation of the Malaysia tax holiday, which will extend the tax incentive period for five to ten years if approved. The Company will also apply for a China tax holiday in 2024. There is no guarantee of being awarded these tax incentives in the future. The net impact of the current tax incentives was to lower income tax expense for 2023, 2022, and 2021 by approximately \$6.3 million (approximately \$0.17 per diluted share), \$9.0 million (approximately \$0.25 per diluted share) and \$7.7 million (approximately \$0.21 per diluted share), respectively, as follows:

(in thousands)	Year Ended December 31,		
	2023	2022	2021
Thailand	\$ 4,923	\$ 8,362	\$ 5,360
China	1,338	643	443
Malaysia	—	—	1,946
Total tax incentives	<u>\$ 6,261</u>	<u>\$ 9,005</u>	<u>\$ 7,749</u>

The Company must determine whether it is "more-likely-than-not" that a tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. Once it is determined that a position meets the more-likely-than-not recognition threshold, the position is measured to determine the amount of benefit to recognize in the consolidated financial statements. As of December 31, 2023, the total amount of the reserve for uncertain tax benefits, including interest and penalties, was \$9.9 million.

A reconciliation of the beginning and ending amount of unrecognized tax benefits, excluding interest and penalties, is as follows:

(in thousands)	December 31,		
	2023	2022	2021
Balances as of the beginning of the year	\$ 9,061	\$ 9,121	\$ 499
Additions related to current year tax positions	—	—	7,424
Additions related to prior year tax positions	—	—	1,575
Decreases related to prior year tax positions	—	—	(138)
Decreases related to lapse of statutes	—	(60)	(239)
Balances as of the end of the year	<u>\$ 9,061</u>	<u>\$ 9,061</u>	<u>\$ 9,121</u>

During 2023, there were no uncertain tax position changes. During 2022, the Company released less than \$0.1 million of uncertain tax benefits related to lapse of statutes. During 2021, the Company recorded additional uncertain tax benefits related to the prior year and current tax positions of \$1.6 million and \$7.4 million, respectively.

The reserve is classified as a current or long-term liability on the consolidated balance sheet based on the Company's expectation of when the items will be settled. The Company records interest expense and penalties accrued in relation to uncertain tax benefits as a component of current income tax expense. As of December 31, 2023, the amount of accrued potential interest on unrecognized tax benefits included in the reserve was \$0.8 million.

The Company and its subsidiaries in Brazil, China, Ireland, Malaysia, Mexico, Netherlands, Romania, Singapore, Thailand and the United States remain open to examination by the various local taxing authorities, in total or in part, for fiscal years 2015 to 2023. During the course of such income tax examinations, disputes may occur as to matters of fact or law. Also, in most tax jurisdictions, the passage of time without examination will result in the expiration of applicable statutes of limitations thereby precluding examination of the tax period(s) for which such statute of limitation has expired. The Company believes that it has adequately provided for its tax liabilities.

Note 9—Major Customers

The Company's customers operate in industries that are, to a varying extent, subject to rapid technological change, vigorous competition and short product life cycles. Developments adverse to the electronics industry, the Company's customers or their products could impact the Company's overall credit risk.

The Company extends credit based on evaluation of its customers' financial condition and generally does not require collateral or other security from its customers and would incur a loss equal to the carrying value of the accounts receivable if its customer failed to perform according to the terms of the credit arrangement.

Sales to the Company's ten largest customers represented 52%, 52% and 47% of our consolidated sales for 2023, 2022 and 2021, respectively. The Company had sales to the following customer that exceeded 10% of the Company's consolidated sales:

	Year Ended December 31,		
	2023	2022	2021
Applied Materials, Inc. and subsidiaries	12%	15%	16%

Sales attributable to this customer were reported in the Americas and Asia operating segments.

As of December 31, 2023 and 2022, the Company had one customer whose gross accounts receivable exceeded 10% of consolidated gross accounts receivable. This customer represented 16% and 17% of consolidated gross accounts receivable as of December 31, 2023 and 2022, respectively.

Note 10—Financial Instruments

The Company's financial instruments include cash equivalents, accounts receivable, other receivables, accounts payable, accrued liabilities, long-term debt, interest rate swaps and foreign currency hedges. For cash equivalents, accounts receivable, other receivables, accounts payable and accrued liabilities, the Company believes that the carrying values of its financial instruments approximate the fair values because of their short-term nature. For borrowings under the credit facility in long-term debt, the Company believes that the fair value approximates the carrying value because the interest rates are variable. The Company uses derivative instruments to manage the variability of foreign currency obligations and interest rates. The Company does not enter into derivatives for speculative purposes.

The Company utilizes forward currency exchange contracts to manage its foreign currency exposure. These instruments are designated as cash flow hedges and the changes in fair value of the derivatives are recorded in accumulated other comprehensive loss on the consolidated balance sheet until earnings are affected by the variability of the cash flows. During 2023, the Company recorded an unrealized gain of \$2.3 million (\$1.7 million net of tax) on the forward currency exchange contracts in other comprehensive income (loss) and transferred unrealized gains of \$3.1 million to cost of sales. During 2022, the Company recorded an unrealized gain of \$0.6 million (\$0.4 million net of tax) on the forward currency exchange contracts in other comprehensive income (loss) and transferred unrealized gains of \$0.5 million to cost of sales. During 2021, the Company recorded an unrealized loss of \$0.2 million (\$0.1 million net of tax) on the forward currency exchange contracts in other comprehensive income (loss) and transferred unrealized losses of \$0.4 million to cost of sales. The Company also has forward currency exchange contracts in place as of December 31, 2023 that have not been designated as accounting hedges and, therefore, changes in fair value are recorded in other (expense) income, net in the consolidated statements of income.

As of December 31, 2023, the fair value estimates for the Company's forward currency exchange contracts were based on Level 2 inputs of the fair value hierarchy, which includes obtaining directly or indirectly observable values from third parties active in the relevant markets. Inputs in the fair value of the foreign currency forward contracts include prevailing forward and spot prices for currencies. The Company enters into forward currency exchange contracts for its operations in Mexico, Europe and Asia.

The Company utilizes an interest rate swap agreement to hedge a portion of its interest rate exposure on outstanding borrowings under the Credit Agreement. The Company entered into a new interest rate swap agreement on July 20, 2023 and as of December 31, 2023, the notional amount of this interest rate swap agreement was \$127.1 million. Under the interest rate swap agreement, the Company receives variable rate interest payments based on the one-month SOFR rate and pays fixed rate interest payments. The fixed interest rate for the contract is 4.039%. The effect of the swap is to convert a portion of the floating rate interest expense to fixed interest rate expense. Based on the terms of the interest rate swap contract and the underlying borrowings outstanding under the Credit Agreement, the interest rate contract was determined to be highly effective, and thus qualifies and has been designated as a cash flow hedge. As such, changes in the fair value of the interest rate swap are recorded in accumulated other comprehensive loss on the consolidated balance sheet until earnings are affected by the variability of cash flows. As of December 31, 2022, the notional amount of the Company's previous interest rate swap agreement was \$121.9 million and the fixed interest rate for the contract was 2.928%.

During 2023, the Company recorded an unrealized loss of \$3.1 million (\$2.3 million net of tax) on interest rate swaps in other comprehensive income (loss). During 2022, the Company recorded an unrealized gain of \$5.0 million (\$3.7 million net of tax) on the previous interest rate swap in other comprehensive income (loss). During 2021, the Company recorded an unrealized gain of \$4.7 million (\$3.5 million net of tax) on the previous interest rate swap in other comprehensive income (loss). See Note 19.

As of December 31, 2023 and 2022, the fair value estimates for the Company's respective interest rate swap agreements were based on Level 2 inputs of the fair value hierarchy, as the Company obtained the valuation from a third party active in relevant markets. The valuation of the interest rate swap agreements is primarily measured through various pricing models and discounted cash flow analysis that incorporate observable market parameters, such as interest rate yield curves and volatility.

The fair values of the Company's derivative instruments were as follows:

(in thousands)	Balance Sheet Location	December 31,	
		2023	2022
Derivatives designated as hedging instruments:			
Forward currency exchange contracts	Other current assets	\$ 2,664	\$ 407
Interest rate swap agreement	Other long-term liabilities and other current assets, respectively	(2,458)	639

Financial instruments that subject the Company to credit risk consist of cash and cash equivalents, restricted cash and trade accounts receivable. The Company maintains cash and cash equivalents with recognized financial institutions. One of the most significant credit risks is the ultimate realization of accounts receivable. This risk is mitigated by (i) sales generally are to well established companies, (ii) performing ongoing credit evaluation of customers, and (iii) engaging in frequent contact with customers, thus enabling management to monitor current changes in their business operations and respond accordingly. Management believes its allowance for doubtful accounts is adequate as of December 31, 2023. Concentrations of credit risk related to trade accounts receivable resulting from sales to major customers are discussed in Note 9.

Note 11—Concentrations of Business Risk

Substantially all of the Company's sales are derived from manufacturing services in which the Company purchases components specified by its customers. The Company uses numerous suppliers of electronic components and other materials for its operations. Some components used by the Company have been subject to industry-wide shortages, and suppliers have been forced to allocate available quantities among their customers. The Company's inability to obtain needed components during periods of allocation could cause delays in manufacturing and could adversely affect the results of operations.

Note 12—Accounts Receivable Sale Program

As of December 31, 2023, in connection with a trade accounts receivable sale program with unaffiliated financial institutions, the Company may elect to sell, at a discount, on an ongoing basis, up to a maximum of \$200.0 million of specific accounts receivable at any one time.

During 2023, 2022 and 2021, the Company sold \$565.4 million, \$445.4 million and \$394.6 million, respectively, of accounts receivable under this program, and in exchange, the Company received cash proceeds of \$560.9 million, \$443.6 million and \$394.0 million, respectively, net of the discount. The Company's recognizes the loss on sale resulting from the discount in other (expense) income, net in its consolidated statements of income.

Note 13—Segment and Geographic Information

The Company currently has manufacturing facilities in the Americas, Asia and Europe to serve its customers. The Company is operated and managed geographically, and management evaluates performance and allocates the Company's resources on a geographic basis. Intersegment sales are generally recorded at prices that approximate arm's length transactions. Operating segments' measure of profitability is based on income from operations. Corporate and intersegment eliminations include (1) corporate expenses not allocated to the Company's three reporting segments, which are primarily general and administrative expenses such as corporate employee payroll and benefit costs and corporate facility costs, and (2) income from operations on intersegment sales between reporting segments. Corporate functions include legal, finance, tax, treasury, information technology, risk management, human resources, business development and other administrative functions. The accounting policies for the reportable operating segments are the same as for the Company taken as a whole. The Company has three reportable operating segments: Americas, Asia, and Europe.

Information about the Company's operating segments follows:

(in thousands)	Year Ended December 31,		
	2023	2022	2021
Sales:			
Americas	\$ 1,611,783	\$ 1,475,929	\$ 1,203,544
Asia	1,055,938	1,251,475	912,560
Europe	299,835	284,103	228,834
Elimination of intersegment sales	(128,580)	(125,176)	(89,619)
Total sales	<u>\$ 2,838,976</u>	<u>\$ 2,886,331</u>	<u>\$ 2,255,319</u>
Depreciation and amortization:			
Americas	\$ 20,940	\$ 19,574	\$ 20,589
Asia	9,746	10,192	10,660
Europe	3,226	3,289	2,878
Corporate	11,498	11,197	10,025
Total depreciation and amortization	<u>\$ 45,410</u>	<u>\$ 44,252</u>	<u>\$ 44,152</u>
Income from operations:			
Americas	\$ 63,484	\$ 55,202	\$ 45,807
Asia	124,279	134,649	90,725
Europe	17,380	16,889	11,054
Corporate and intersegment eliminations	(95,479)	(116,671)	(94,524)
Total income from operations	<u>\$ 109,664</u>	<u>\$ 90,069</u>	<u>\$ 53,062</u>
Interest expense	(31,875)	(12,894)	(8,472)
Interest income	6,256	1,730	540
Other (expense) income, net	(2,825)	5,437	277
Income before income taxes	<u>\$ 81,220</u>	<u>\$ 84,342</u>	<u>\$ 45,407</u>
Capital expenditures:			
Americas	\$ 38,627	\$ 30,105	\$ 28,673
Asia	25,286	10,534	4,253
Europe	7,098	4,509	6,072
Corporate	6,728	1,626	3,179
Total capital expenditures	<u>\$ 77,739</u>	<u>\$ 46,774</u>	<u>\$ 42,177</u>

(in thousands)	December 31,	
	2023	2022
Assets:		
Americas	\$ 1,064,047	\$ 1,055,533
Asia	769,744	764,164
Europe	222,591	183,443
Corporate	218,373	224,191
Total assets	<u>\$ 2,274,755</u>	<u>\$ 2,227,331</u>

Geographic sales information about the Company's sales is determined based on the destination of the product shipped. Long-lived assets information is determined based on the physical location of the assets and includes property, plant and equipment, net, operating lease right-of-use assets and other long-term assets, net.

A summary of the Company's geographic sales and long-lived assets follows:

(in thousands)	Year Ended December 31,		
	2023	2022	2021
Geographic sales:			
United States	\$ 1,737,144	\$ 1,569,232	\$ 1,328,754
Singapore	383,914	457,889	326,688
Other Asia	210,927	332,144	202,792
Europe	402,514	387,276	285,017
Other	104,477	139,790	112,068
Total sales	\$ 2,838,976	\$ 2,886,331	\$ 2,255,319

(in thousands)	December 31,	
	2023	2022
Long-lived assets:		
United States	\$ 231,740	\$ 249,409
Asia	79,203	68,283
Europe	42,934	29,338
Other	66,072	23,801
Total long-lived assets	\$ 419,949	\$ 370,831

Note 14 – Revenue

The Company's revenues are generated primarily from its manufacturing services, which entails the sale of manufactured products built to customer specifications. The Company also generates revenue from design, development and engineering services, in addition to the sale of other inventory.

Revenue is measured based on the consideration specified in a contract with a customer. The Company recognizes revenue when it satisfies a performance obligation by transferring control over a manufactured product to a customer. The Company's contracts with customers are generally short-term in nature. Customers are generally billed when the product is shipped or as services are performed. Under the majority of the Company's manufacturing contracts with customers, the customer controls all of the work-in-progress as products are being built. Revenues under these contracts are recognized progressively based on the cost-to-cost method. For other manufacturing contracts, the customer does not take control of the product until it is completed. Under these contracts, the Company recognizes revenue upon transfer of control of the product to the customer, which is generally when goods are shipped. Revenue from design, development and engineering services is recognized over time as the services are performed. The Company assumes no significant obligations after shipment as it typically warrants workmanship only. Therefore, the warranty provisions are generally not significant.

If the Company records revenue, but does not issue an invoice, a contract asset is recognized. The contract asset is transferred to trade accounts receivable when the entitlement to payment becomes unconditional.

Taxes assessed by governmental authorities that are imposed on and concurrent with a specific revenue-producing transaction and collected by the Company from a customer, are excluded from revenue.

Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are accounted for as fulfillment costs and are included in cost of sales.

Disaggregation of Revenue

The following tables provide a summary of the Company's revenue disaggregated by market sector and a reconciliation of the disaggregated revenue to the Company's revenue by reportable operating segment:

(in thousands)	Year Ended December 31, 2023				Total
	Americas	Asia	Europe		
Market sector:					
Complex Industrials	\$ 127,491	\$ 345,465	\$ 123,522	\$ 596,478	
A&D	304,932	29,153	27,446	361,531	
Medical	329,816	182,532	44,204	556,552	
Semi-Cap	262,117	283,870	100,305	646,292	
Advanced Computing	311,742	25,988	—	337,730	
Next-Generation Communications	197,889	142,448	56	340,393	
External revenue	1,533,987	1,009,456	295,533	2,838,976	
Elimination of intersegment sales	77,796	46,482	4,302	128,580	
Segment revenue	<u>\$ 1,611,783</u>	<u>\$ 1,055,938</u>	<u>\$ 299,835</u>	<u>\$ 2,967,556</u>	
Year Ended December 31, 2022					
(in thousands)	Americas				Total
	Americas	Asia	Europe		
Market sector:					
Complex Industrials	\$ 89,949	\$ 363,398	\$ 140,258	\$ 593,605	
A&D	286,230	43,701	17,654	347,585	
Medical	319,823	228,571	44,500	592,894	
Semi-Cap	286,322	357,634	78,146	722,102	
Advanced Computing	258,206	52,301	2	310,509	
Next-Generation Communications	170,424	148,772	440	319,636	
External revenue	1,410,954	1,194,377	281,000	2,886,331	
Elimination of intersegment sales	64,976	57,100	3,100	125,176	
Segment revenue	<u>\$ 1,475,930</u>	<u>\$ 1,251,477</u>	<u>\$ 284,100</u>	<u>\$ 3,011,507</u>	
Year Ended December 31, 2021					
(in thousands)	Americas				Total
	Americas	Asia	Europe		
Market sector:					
Complex Industrials	\$ 79,726	\$ 262,546	\$ 86,174	\$ 428,446	
A&D	360,030	1,692	20,009	381,731	
Medical	220,635	189,614	51,585	461,834	
Semi-Cap	215,596	266,065	67,640	549,301	
Advanced Computing	163,423	35,842	140	199,405	
Next-Generation Communications	120,739	112,684	1,179	234,602	
External revenue	1,160,149	868,443	226,727	2,255,319	
Elimination of intersegment sales	43,395	44,117	2,107	89,619	
Segment revenue	<u>\$ 1,203,544</u>	<u>\$ 912,560</u>	<u>\$ 228,834</u>	<u>\$ 2,344,938</u>	

The timing of revenue recognition, billings and cash collections result in billed accounts receivable, contract assets and advance payments from customers. During 2023, 2022 and 2021, 87.9%, 90.8% and 90.3%, respectively, of the Company's revenue was recognized as products and services were transferred over time.

Contract assets primarily relate to the Company's right to consideration for work completed but not billed to the customer as of period end. Contract asset balances are transferred to trade accounts receivable when the rights become unconditional.

A summary of activity related to the Company's contract assets follows:

(in thousands)	Year Ended December 31,	
	2023	2022
Balance as of the beginning of the year	\$ 183,613	\$ 155,243
Revenue recognized	2,495,298	2,623,585
Amounts collected or invoiced	(2,503,932)	(2,595,215)
Balance as of the end of the year	<u>\$ 174,979</u>	<u>\$ 183,613</u>

As of December 31, 2023 and 2022, the Company had \$204.9 million and \$197.9 million, respectively, in advance payments from customers. Of those amounts \$191.6 million and \$178.9 million, respectively, were related to both customer deposits and prepayments of inventory and \$13.3 million and \$18.9 million, respectively, were related to the contractual timing of payments. The advance payments are not considered a significant financing component because they are used to meet working capital demands of a contract, offset inventory risks and protect the Company from the failure of other parties to fulfill obligations under a contract.

Note 15—Employee Benefit Plans

The Company has defined contribution plans qualified under Section 401(k) of the Internal Revenue Code for the benefit of all its U.S. employees. The Company's contributions to the plans are based on employee contributions and compensation. During 2023, 2022 and 2021, the Company made contributions to the U.S. plans of approximately \$7.3 million, \$6.5 million and \$3.3 million, respectively. The Company also has defined contribution plans for certain of its international employees primarily dictated by the customs of the regions in which it operates. During 2023, 2022 and 2021, the Company made contributions to the international plans of approximately \$0.1 million each year.

Note 16—Contingencies

The Company is involved in various legal actions arising in the ordinary course of business. In the opinion of management, the ultimate disposition of these matters will not have a material adverse effect on the Company's consolidated financial position or results of operations.

Note 17—Restructuring Charges and Other Costs

The Company has undertaken initiatives to restructure its business operations to improve utilization and realize cost savings. These initiatives have included changing the number and location of production facilities, largely to align capacity and infrastructure with current and anticipated customer demand. This alignment includes transferring programs from higher cost geographies to lower cost geographies. The Company's restructuring process entails moving production between facilities, reducing staff levels, realigning business processes, reorganizing management and other activities.

During 2023, 2022 and 2021, the Company recognized \$7.3 million, \$5.7 million and \$9.3 million of restructuring charges primarily related to the previously announced closures of its sites in San Jose, California, Angleton, Texas, and Moorpark, California in the Americas, and other smaller activities involving capacity reductions and reductions in workforce in certain facilities across various regions. San Jose, California operations ceased, and all restructuring activity was complete as of March 31, 2022. Angleton, Texas operations ceased, and all restructuring activity was complete as of June 30, 2022 upon the disposition of the facility. Moorpark, California operations ceased as of March 31, 2023 with restructuring activity substantially complete by the end 2023. Accrued restructuring costs are included in accrued liabilities on the consolidated balance sheet.

The following table summarizes the 2023 activity in accrued restructuring costs:

(in thousands)	Balances as of December 31, 2022	Restructuring Charges	Cash Payments	Non-Cash Activity	Balances as of December 31, 2023
Severance	\$ 3,683	\$ 4,508	\$ (8,156)	\$ —	\$ 35
Lease facility costs	17	176	(184)	—	9
Other exit costs	81	2,643	(2,643)	—	81
Total accrued restructuring costs	<u>\$ 3,781</u>	<u>\$ 7,327</u>	<u>\$ (10,983)</u>	<u>\$ —</u>	<u>\$ 125</u>

The components of restructuring charges during 2023 were as follows:

(in thousands)	Year Ended December 31, 2023			
	Americas	Asia	Europe	Total
Severance costs	\$ 4,226	\$ —	\$ 282	\$ 4,508
Lease facility costs	176	—	—	176
Other exit costs	2,640	—	3	2,643
Total restructuring charges	<u>\$ 7,042</u>	<u>\$ —</u>	<u>\$ 285</u>	<u>\$ 7,327</u>

The following table summarizes the 2022 activity in accrued restructuring costs:

(in thousands)	Balances as of December 31, 2021	Restructuring Charges	Cash Payments	Non-Cash Activity	Balances as of December 31, 2022
Severance	\$ 3,257	\$ 2,428	\$ (1,713)	\$ (289)	\$ 3,683
Lease facility costs	17	1,261	(1,261)	—	17
Other exit costs	237	2,021	(2,056)	(121)	81
Total accrued restructuring costs	<u>\$ 3,511</u>	<u>\$ 5,710</u>	<u>\$ (5,030)</u>	<u>\$ (410)</u>	<u>\$ 3,781</u>

The components of restructuring charges during 2022 were as follows:

(in thousands)	Year Ended December 31, 2022			
	Americas	Asia	Europe	Total
Severance costs	\$ 2,298	\$ 130	\$ —	\$ 2,428
Lease facility costs	1,261	—	—	1,261
Other exit costs	2,021	—	—	2,021
Total restructuring charges	<u>\$ 5,580</u>	<u>\$ 130</u>	<u>\$ —</u>	<u>\$ 5,710</u>

The following table summarizes the 2021 activity in accrued restructuring costs:

(in thousands)	Balances as of December 31, 2020	Restructuring Charges	Cash Payments	Non-Cash Activity	Balances as of December 31, 2021
	2020				
Severance	\$ 3,996	\$ 4,130	\$ (4,685)	\$ (184)	\$ 3,257
Lease facility costs	50	2,745	(2,618)	(160)	17
Other exit costs	408	2,470	(2,252)	(389)	237
Total accrued restructuring costs	<u>\$ 4,454</u>	<u>\$ 9,345</u>	<u>\$ (9,555)</u>	<u>\$ (733)</u>	<u>\$ 3,511</u>

The components of restructuring charges during 2021 were as follows:

(in thousands)	Year Ended December 31, 2021			
	Americas	Asia	Europe	Total
Severance costs	\$ 4,084	\$ 46	\$ —	\$ 4,130
Lease facility costs	2,581	164	—	2,745
Other exit costs	2,470	—	—	2,470
Total restructuring charges	<u>\$ 9,135</u>	<u>\$ 210</u>	<u>\$ —</u>	<u>\$ 9,345</u>

During 2023, the Company made the decision to no longer continue certain manufacturing capabilities in the Americas. In connection with that decision, the Company assessed the facility and equipment assets used in those manufacturing capabilities and recorded \$1.1 million of impairment charges as a result of that assessment. The asset impairment charges are included in restructuring charges and other costs in the consolidated statement of income for 2023.

During 2021, the Company made the decision to no longer continue certain manufacturing capabilities in the Americas. In connection with that decision, the Company assessed the facility and equipment assets used in those manufacturing capabilities using valuation information from third parties and recorded \$4.4 million of impairment charges as a result of that assessment. The asset impairment charges are included in restructuring charges and other costs in the consolidated statements of income for 2021. During 2022, the Company completed the sale of the related equipment for \$1.3 million and recorded a loss on assets held for sale of \$2.0 million, which is included in restructuring charges and other costs in the consolidated statement of income. Additionally, during 2022, the Company completed the sale of a building in Angleton, Texas for \$4.3 million and recorded a gain on assets held for sale of \$2.4 million which is also included in restructuring charges and other costs. Furthermore, during 2022, the Company agreed to \$3.3 million in legal settlements that are included in restructuring charges and other costs.

Note 18—Ransomware Incident

During the fourth quarter ended December 31, 2019, some of the Company's systems were affected by a ransomware incident that encrypted information on its systems and disrupted customer and employee access to its applications and services. The Company immediately took steps to isolate the impact and implemented measures to prevent additional systems from being affected, including taking its network offline as a precaution. In connection with this incident, third party consultants and forensic experts were engaged to assist with the restoration and remediation of the Company's systems and, with the assistance of law enforcement, to investigate the incident. The Company has found no evidence that customer or employee data was exfiltrated from its network.

The Company restored connectivity and resumed operations quickly following the ransomware incident. However, fourth quarter 2019 operations were adversely affected by the inefficiencies caused by taking the network offline for a period of time. As a result, the Company's fourth quarter 2019 revenue was also adversely affected as the Company was unable to fulfill a portion of customer demand during the quarter.

The Company maintains insurance coverage, including cybersecurity insurance, and worked diligently with its insurance carriers on claims to recover costs incurred. During 2021, the Company collected \$3.9 million of insurance recoveries related to the incident described above.

Note 19—Accumulated Other Comprehensive Loss

The changes in accumulated other comprehensive loss by component were as follows:

(in thousands)	Foreign Currency Translation Adjustments	Derivative Instruments, Net of Tax	Other	Total
Balances, December 31, 2020	\$ (8,375)	\$ (6,742)	\$ (1,534)	\$ (16,651)
Other comprehensive gain (loss) before reclassifications	(4,354)	3,018	477	(859)
Amounts reclassified from accumulated other comprehensive loss	—	352	—	352
Total other comprehensive income (loss)	(4,354)	3,370	477	(507)
Balances, December 31, 2021	\$ (12,729)	\$ (3,372)	\$ (1,057)	\$ (17,158)
Other comprehensive gain (loss) before reclassifications	(3,148)	4,641	(87)	1,406
Amounts reclassified from accumulated other comprehensive loss	—	(481)	—	(481)
Total other comprehensive income (loss)	(3,148)	4,160	(87)	925
Balances, December 31, 2022	\$ (15,877)	\$ 788	\$ (1,144)	\$ (16,233)
Other comprehensive gain (loss) before reclassifications	2,119	2,444	37	4,600
Amounts reclassified from accumulated other comprehensive loss	845	(3,072)	—	(2,227)
Total other comprehensive income (loss)	2,964	(628)	37	2,373
Balances, December 31, 2023	\$ (12,913)	\$ 160	\$ (1,107)	\$ (13,860)

See Note 10 for further discussion about the Company's derivative instruments.

Note 20—Supplemental Cash Flow and Non-Cash Information

The following table includes supplemental cash flow disclosures:

(in thousands)	Year Ended December 31,		
	2023	2022	2021
Supplemental cash flow information:			
Income taxes paid, net	\$ 37,659	\$ 28,478	\$ 20,558
Interest paid	30,551	11,627	8,207
Non-cash investing activity:			
Unpaid purchases of property, plant and equipment at the end of the period	1,558	23,734	8,614

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Benchmark Electronics, Inc.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Benchmark Electronics, Inc. and subsidiaries (the Company) as of December 31, 2023 and 2022, the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above 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 years in the three-year period ended December 31, 2023, in conformity with U.S. generally accepted accounting principles. Also 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 Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, 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 Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated 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 consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated 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.

Evaluation of income tax expense

As discussed in Notes 1 and 8 to the consolidated financial statements, the Company has recorded income tax expense of \$16.9 million for the year ended December 31, 2023. The Company serves international markets and is subject to income taxes in the United States and foreign jurisdictions, which affect the Company's income tax expense. Income tax expense is an estimate based on the Company's understanding of current enacted tax laws and tax rates of each tax jurisdiction.

We identified the evaluation of income tax expense as a critical audit matter. Complex auditor judgment was required in evaluating the Company's interpretation and application of tax laws and the related impacts to income tax expense. There is complexity in the evaluation of the U.S. income tax expense due to the impact of U.S. tax reform on multinational operations such as the U.S. tax on global intangible low-taxed income (GILTI) and foreign tax credits. There is also complexity in evaluating the impact of changing foreign tax laws on income tax expense.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's income tax expense process. This included controls over the identification of changes to tax laws in the jurisdictions in which the Company operates and the Company's evaluation of the determination of GILTI and foreign tax credits. We involved tax professionals with specialized skills and knowledge who assisted in evaluating the application of the relevant tax laws and regulations in the determination of the Company's tax expense. In addition, we evaluated the Company's methodology used in the determination of GILTI and foreign tax credits.

/s/ KPMG LLP

We have served as the Company's auditor since 1986.

Phoenix, Arizona
February 26, 2024

Management's Report

Benchmark's management has prepared and is responsible for the consolidated financial statements and related financial data contained in this Report. The consolidated financial statements were prepared in accordance with U.S. generally accepted accounting principles and necessarily include certain amounts based upon management's best estimates and judgments. The financial information contained elsewhere in this Report is consistent with that in the consolidated financial statements.

The Company maintains internal accounting control systems that are adequate to prepare financial records and to provide reasonable assurance that the assets are safeguarded from loss or unauthorized use. We believe these systems are effective, and the cost of the systems does not exceed the benefits obtained.

The Audit Committee, composed exclusively of independent, outside directors, has reviewed all financial data included in this Report and recommended to the full Board the inclusion of the audited financial statements contained in the Report. The committee meets periodically with the Company's management and independent registered public accountants on financial reporting matters. The independent registered public accountants have complete access to the Audit Committee and may meet with the committee, without management present, to discuss their audit results and opinions on the quality of financial reporting.

The role of independent registered public accountants is to render a professional, independent opinion on management's financial statements to the extent required by the standards of the Public Company Accounting Oversight Board (United States). Benchmark's responsibility is to conduct its affairs according to the highest standards of personal and corporate conduct.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

As of the end of the period covered by this Report, the Company's management (with the participation of its chief executive officer and chief financial officer) conducted an evaluation pursuant to Rule 13a-15 promulgated under the Exchange Act, of the effectiveness of the design and operation of the Company's disclosure controls and procedures (as such term is defined in Rule 13a-15(e) or 15d-15(e) of the Exchange Act). Based on this evaluation, the Company's chief executive officer and chief financial officer concluded that as of the end of the period covered by this Report such disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by the Company in reports it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and include controls and procedures designed to ensure that information required to be disclosed by the Company in such reports is accumulated and communicated to the Company's management, including the Company's chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as such term is defined in Rule 13a-15(f) or Rule 15d-15(f) of the Exchange Act). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation under the framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2023.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2023 has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report included in Part II, Item 8 of this Report.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting that occurred during the last fiscal quarter covered by this Report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

We are currently upgrading our enterprise resource planning system (ERP), which is expected to occur in phases over the next several years. We have completed the implementation of the upgrades at certain of the Company's locations and have revised and updated the related controls. These changes did not materially affect our internal control over financial reporting. As we implement the upgrades of this ERP system at the remaining locations over the next several years, we will continue to assess the impact on our internal control over financial reporting.

Limitations on Effectiveness of Controls and Procedures

Our management, including our chief executive officer and chief financial officer, does not expect that our disclosure controls and internal controls will prevent all errors 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, within the company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, a control may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Item 9B. Other Information

Insider Trading Arrangement Adoptions and Modifications

During the three months ended December 31, 2023, no director or officer adopted or terminated any "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement," each as defined in Item 408 of Regulation S-K.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item can be found in the Company's Proxy Statement for the 2024 Annual Meeting of Shareholders (the 2024 Proxy Statement), to be filed with the SEC not later than 120 days after the end of the Company's fiscal year ended December 31, 2023 and is incorporated herein by reference.

Item 11. Executive Compensation

The information required by this item can be found in the 2024 Proxy Statement and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters

The following table sets forth certain information relating to our equity compensation plans as of December 31, 2023:

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance
Equity compensation plans approved by security holders	1,724,664	\$ 23.07	2,305,240
Equity compensation plans not approved by security holders	—	\$ —	—
Total	1,724,664	\$ 23.07	2,305,240

The number of securities in the table above includes 1,687,780 restricted stock units and performance-based restricted stock units. The weighted-average exercise price does not take these awards into account.

Additional information required by this item can be found in the 2024 Proxy Statement and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item can be found in the 2024 Proxy Statement and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

Our independent registered public accounting firm is KPMG LLP, Phoenix, Arizona, Auditor Firm ID: 185. The information required by this item can be found in the 2024 Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) The following documents are filed as part of this Report:

(1) Financial Statements

See Part II, Item 8 of this Report for information concerning our financial statements and Report of Independent Registered Public Accounting Firm incorporated herein by reference.

(2) Financial Statement Schedules

All schedules have been omitted because the required information is not present or not present in amounts sufficient to require submission of the schedules or because the information is included in Part II, Item 8 of this Report.

(b) Exhibits

The list of exhibits filed with this Report is set forth in the Exhibit Index following the signature page and is incorporated herein by reference.

BENCHMARK ELECTRONICS, INC.
Exhibit Index

Exhibit No.	Exhibit Description
2.1	Purchase Agreement dated October 20, 2015 (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K dated November 12, 2015 (Commission file number 1-10560)).
3.1	Restated Certificate of Formation dated May 17, 2016 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated May 17, 2016) (Commission file number 1-10560)
3.2	Amended and Restated Bylaws of the Company dated December 2, 2020 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K dated December 7, 2020 (Commission file number 1-10560))
4.1	Specimen form of certificate evidencing the Common Shares (incorporated by reference to Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014) (Commission file number 1-10560)
4.2	Description of Company's securities (incorporated by reference to Exhibit 4.2 to the Company's Annual Report on Form 10-K for the year ended December 31, 2019 (Commission file number 1-10560))
10.1 ⁽¹⁾	Form of Indemnity Agreement between the Company and its directors and senior officers (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed for the quarter ended June 30, 2017 (Commission file number 1-10560))
10.2 ⁽¹⁾	Benchmark Electronics, Inc. 2000 Stock Awards Plan (2000 Plan) (incorporated by reference to Exhibit 4.8 to the Company's Registration Statement on Form S-8 (Registration Number 333-54186))
10.3 ⁽¹⁾	Form of nonqualified stock option agreement for use under the 2000 Plan (incorporated by reference to Exhibit 10.10 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008 (Commission file number 1-10560))
10.4 ⁽¹⁾	Benchmark Electronics, Inc. 2002 Stock Option Plan for Non-Employee Directors (2002 Plan) (incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A filed April 15, 2002 (Commission file number 1-10560))
10.5 ⁽¹⁾	Amendment No. 1 to the 2002 Plan (incorporated by reference to Exhibit 99.3 to the Company's Current Report on Form 8-K dated May 19, 2006 (Commission file number 1-10560))
10.6 ⁽¹⁾	Benchmark Electronics, Inc. 2010 Omnibus Incentive Compensation Plan (2010 Plan) (incorporated by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8 (Registration Number 333-168427))
10.7 ⁽¹⁾	First Amendment to the 2010 Plan (incorporated by reference to Annex A to the Company's Definitive Proxy Statement on Schedule 14A filed March 28, 2014 (Commission file number 1-10560))
10.8 ⁽¹⁾	Form of option award agreement for use under the 2010 Plan (incorporated by reference to Exhibit 4.10 to the Company's Registration Statement on Form S-8 (Registration Number 333-168427))
10.9 ⁽¹⁾	Form of restricted share award agreement for use under the 2010 Plan (incorporated by reference to Exhibit 4.11 to the Company's Registration Statement on Form S-8 (Registration Number 333-168427))
10.10 ⁽¹⁾	Form of restricted stock unit award agreement for use under the 2010 Plan (incorporated by reference to Exhibit 4.12 to the Company's Registration Statement on Form S-8 (Registration Number 333-168427))
10.11 ⁽¹⁾	Amended form of restricted stock unit award agreement for use under the 2010 Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017 (Commission file number 1-10560))
10.12 ⁽¹⁾	Form of performance-based restricted stock unit award agreement for use under the 2010 Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 10, 2016 (Commission file number 1-10560))
10.13 ⁽¹⁾	Amended form of performance-based restricted stock unit award agreement for use under the 2010 Plan (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017 (Commission file number 1-10560))

Exhibit No.	Exhibit Description
10.14 ⁽¹⁾	Benchmark Electronics, Inc. Deferred Compensation Plan dated as of December 16, 2008 (incorporated by reference to Exhibit 99.1 to the Company's Form S-8 (Registration Number 333-156202))
10.15 ⁽¹⁾	Form of Executive Severance Agreement (incorporated by referent to Exhibit 10.15 to the Company's Annual Report on Form 10-K for the year ended December 31, 2015 (Commission file number 1-10560))
10.16 ⁽⁴⁾	Amended and Restated Credit Agreement, dated December 31, 2021, by and among Benchmark Electronics, Inc., certain of its subsidiaries, the lenders party thereto and Bank of America, N.A. as Administrative Agent, Swingline Lender and L/C Issuer (incorporated by reference to Exhibit 10.1 to the Company's Current Report of Form 8-dated December 28, 2021 (Commission file number 1-10560))
10.16.1 ⁽⁴⁾	Amendment No. 1 to Amended and Restated Credit Agreement, dated May 20, 2022, by and among Benchmark Electronics, Inc., certain of its subsidiaries, the lenders party thereto and Bank of America, N.A. as Administrative Agent, Swingline Lender and L/C Issuer (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated May 24, 2022 (Commission file number 1-10560))
10.16.2	Amendment No. 2 to Amended and Restated Credit Agreement, dated February 3, 2023, by and among Benchmark Electronics, Inc., certain of its subsidiaries, the lenders party thereto and Bank of America, N.A. as Administrative Agent, Swingline Lender and L/C Issuer (incorporated by reference to Exhibit 10.16.2 to the Company's Annual Report on Form 10-K for year ended December 31, 2022 (Commission file number 1-10560))
10.16.3 ⁽⁴⁾	Amendment No. 3 to Amended and Restated Credit Agreement, dated May 1, 2023, by and among Benchmark Electronics, Inc., certain of its subsidiaries, the lenders party thereto and Bank of America, N.A. as Administrative Agent, Swingline Lender and L/C Issuer (incorporated by reference to Exhibit 10.1 to the Company's Current Report of Form 8-K dated May 3, 2023 (Commission file number 1-10560))
10.18 ⁽¹⁾	Form of Key Management Severance Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated December 11, 2017 (Commission file number 1-10560))
10.19 ⁽¹⁾	Employment Agreement, dated February 26, 2019, between the Company and Jeffrey W. Benck (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated February 28, 2019 (Commission file number 1-10560))
10.20 ⁽¹⁾	Benchmark Electronics, Inc. 2019 Omnibus Incentive Compensation Plan (incorporated by reference to Annex A to the Company's Definitive Proxy Statement on Schedule 14A filed April 5, 2019) (Commission file number 1-10560)
10.20.1 ⁽¹⁾	First Amendment to the Benchmark Electronics, Inc. 2019 Omnibus Incentive Compensation Plan (incorporated herein by reference to Annex A to the Company's Revised Definitive Proxy Statement on Schedule 14A filed on April 15, 2022 (Commission file number 1-10560))
10.21 ⁽¹⁾	Form of restricted stock unit award agreement for use under the 2019 Plan (incorporated by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K for the year ended December 31, 2020 (Commission file number 1-10560))
10.22 ⁽¹⁾	Form of performance-based restricted stock unit award agreement for use under the 2019 Plan (incorporated by reference to Exhibit 10.24 to the Company's Annual Report on Form 10-K for the year ended December 31, 2020 (Commission file number 1-10560))
14.1	Code of Conduct (incorporated by reference to Exhibit 10.20 to the Company's Annual Report on Form 10-K for the year ended December 31, 2009 (Commission file number 1-10560))
21.1 ⁽²⁾	Subsidiaries of Benchmark Electronics, Inc.
23.1 ⁽²⁾	Consent of Independent Registered Public Accounting Firm
31.1 ⁽²⁾	Section 302 Certification of Chief Executive Officer
31.2 ⁽²⁾	Section 302 Certification of Chief Financial Officer
32.1 ⁽³⁾	Section 1350 Certification of Chief Executive Officer
32.2 ⁽³⁾	Section 1350 Certification of Chief Financial Officer
97.1 ⁽²⁾	Benchmark Electronics, Inc. Clawback Policy

Exhibit No.	Exhibit Description
101.INS ⁽²⁾	Inline 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 ⁽²⁾	Inline XBRL Taxonomy Extension Schema Document
101.CAL ⁽²⁾	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF ⁽²⁾	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB ⁽²⁾	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE ⁽²⁾	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104 ⁽²⁾	Cover Page Interactive Data File - formatted in Inline XBRL and contained in Exhibit 101

(1) Indicates management contract or compensatory plan or arrangement

(2) Filed herewith

(3) Furnished herewith

(4) Certain exhibits and schedules have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company will furnish supplementally to the SEC a copy of any omitted exhibits or schedules upon request.

Item 16. Form 10-K Summary

None.

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.

BENCHMARK ELECTRONICS, INC.

By: /s/ Jeffrey W. Benck

Jeffrey W. Benck

President and Chief Executive Officer

Date: February 26, 2024

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, in the capacities and on the dates indicated.

Name	Position	Date
/s/ David W. Scheible David W. Scheible	Chairman of the Board	February 26, 2024
/s/ Jeffrey W. Benck Jeffrey W. Benck	President, Chief Executive Officer and Director (principal executive officer)	February 26, 2024
/s/ Roop K. Lakkaraju Roop K. Lakkaraju	Chief Financial Officer (principal financial and accounting officer)	February 26, 2024
/s/ Douglas Britt Douglas Britt	Director	February 26, 2024
/s/ Anne De Greef-Safft Anne De Greef-Safft	Director	February 26, 2024
/s/ Robert K. Gifford Robert K. Gifford	Director	February 26, 2024
/s/ Ramesh Gopalakrishnan Ramesh Gopalakrishnan	Director	February 26, 2024
/s/ Kenneth T. Lamneck Kenneth T. Lamneck	Director	February 26, 2024
/s/ Jeffrey S. McCreary Jeffrey S. McCreary	Director	February 26, 2024
/s/ Lynn A. Wentworth Lynn A. Wentworth	Director	February 26, 2024

Subsidiaries of Benchmark Electronics, Inc.

<u>Name of Subsidiary</u>	<u>Jurisdiction of Organization</u>
AVEX Constitution, Inc.	United States, Delaware
AVEX Liberty, Inc.	United States, Delaware
BE Group Holdings B.V.	The Netherlands
BEI Electronics Ireland Ltd.	Ireland
Benchmark BV Holdings, Inc.	United States, Delaware
Benchmark Electronics (M) Sdn. Bhd.	Malaysia
Benchmark Electronics (Suzhou) Co., Ltd.	China
Benchmark Electronics (Thailand) Public Company Limited ⁽¹⁾	Thailand
Benchmark Electronics B.V.	The Netherlands
Benchmark Electronics de Mexico, S. de R.L. de C.V.	Mexico
Benchmark Electronics Delaware Corp.	United States, Delaware
Benchmark Electronics GmbH	Germany
Benchmark Electronics Huntsville, Inc.	United States, Alabama
Benchmark Electronics International Holdings B.V.	The Netherlands
Benchmark Electronics Ltda.	Brazil
Benchmark Electronics Manufacturing Solutions (Moorpark), Inc.	United States, California
Benchmark Electronics Manufacturing Solutions, Inc.	United States, Delaware
Benchmark Electronics Matamoros, S. de R.L. de C.V.	Mexico
Benchmark Electronics Netherlands Holding B.V.	The Netherlands
Benchmark Electronics Phoenix, Inc.	United States, Delaware
Benchmark Electronics Romania Holding BV	The Netherlands
Benchmark Electronics Romania Srl.	Romania
Benchmark Electronics Servicios, S. de R.L. de C.V.	Mexico
Benchmark Electronics Singapore IPO Pte. Ltd.	Singapore
Benchmark Electronics Tijuana S. de R.L. de C.V.	Mexico
Current Electronics, Inc.	United States, Delaware
Dacia Company Limited	British Virgin Islands
EFTC Operating Corp.	United States, Delaware
Filtros Electronicos, S.A. de C.V.	Mexico
K*Tec Operating Corp.	United States, Delaware
Lark Engineering Company (dba Lark RF Technology)	United States, California
Pemstar (Beihai) Enterprise Co. Ltd.	China
RM Electronics, Inc.	United States, New Hampshire
SCS Holdings, Inc.	United States, Delaware
SCS Secure Holdings LLC	United States, Delaware
ScioMed, Inc. (dba ScioMed Technology)	United States, Delaware
Secure Communication Systems, Inc. (dba Secure Technology)	United States, Delaware
Tactical Micro, Inc.	United States, Virginia

⁽¹⁾ Benchmark Electronics, Inc. effectively owns 99.78% of Benchmark Electronics (Thailand) Public Company Limited.

Unless otherwise noted, all subsidiaries are wholly owned, directly or indirectly, by Benchmark Electronics, Inc.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (Nos. 333-156202, 333-168427, 333-198404, 333-231524 and 333-265305) on Form S-8 of our report dated February 26, 2024, with respect to the consolidated financial statements of Benchmark Electronics, Inc. and subsidiaries and the effectiveness of internal control over financial reporting.

/s/ KPMG LLP

Phoenix, Arizona
February 26, 2024

Section 302 Certification of Chief Executive Officer

I, Jeffrey W. Benck, certify that:

1. I have reviewed this annual report on Form 10-K of Benchmark Electronics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2024

By: /s/ Jeffrey W. Benck

Jeffrey W. Benck

President and Chief Executive Officer
(principal executive officer)

Section 302 Certification of Chief Financial Officer

I, Roop K. Lakkaraju, certify that:

1. I have reviewed this annual report on Form 10-K of Benchmark Electronics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2024

By: /s/ Roop K. Lakkaraju

Roop K. Lakkaraju
Chief Financial Officer
(principal financial and accounting officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
(Section 906 of the Sarbanes-Oxley Act of 2002)**

In connection with the Annual Report of Benchmark Electronics, Inc. (the Company) on Form 10-K for the fiscal year ended December 31, 2023 (the Report), I certify to the best of my knowledge that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 26, 2024

By: /s/ Jeffrey W. Benck

Jeffrey W. Benck
President and Chief Executive Officer
(principal executive officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
(Section 906 of the Sarbanes-Oxley Act of 2002)**

In connection with the Annual Report of Benchmark Electronics, Inc. (the Company) on Form 10-K for the fiscal year ended December 31, 2023 (the Report), I certify to the best of my knowledge that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 26, 2024

By: /s/ Roop K. Lakkaraju

Roop K. Lakkaraju
Chief Financial Officer
(principal financial and accounting officer)

BENCHMARK ELECTRONICS, INC.

CLAWBACK POLICY

The Board of Directors of Benchmark Electronics, Inc. (the “Board”) has determined that it is in the best interests of Benchmark Electronics, Inc. (the “Company”) and its shareholders to adopt this Clawback Policy (the “Policy”). In addition to any amounts that are to be recovered on behalf of the Company by the Securities and Exchange Commission pursuant to Section 304 of the Sarbanes-Oxley Act, this Policy enables the Company to recover the amount of Incentive Compensation (as defined below) paid to certain Covered Individuals (as defined below) in the instances described below. This Policy is effective as of August 15, 2023 (the “Effective Date”) and shall supersede and replace any prior similar clawback or recoupment policies adopted by the Company. Each Covered Individual shall be required to execute the acknowledgement in Appendix A of this Policy as soon as practicable after the later of (i) the Effective Date and (ii) the date on which the employee is designated as an Covered Individual; provided, however, that failure to execute such acknowledgement shall have no impact on the enforceability of this Policy.

1. Administration; Interpretation. The Human Capital and Compensation Committee of the Board (“HCCC”) shall have sole and express authority to interpret and administer this Policy. All determinations made by the HCCC, in the good faith exercise of its discretion, shall be final and binding on all affected Covered Individuals (as defined below). This Policy is intended to comply with Section 10D of the Securities Exchange Act of 1934 (the “Exchange Act”), the rules of the Securities and Exchange Commission (“SEC”), and Section 303A.14 of the NYSE Listed Company Manual (the “NYSE Clawback Rules”) and this Policy shall be interpreted, to the greatest extent possible, consistent with such intent. To the extent that any provision of this Policy is inconsistent with applicable law or the attendant regulations, in each case as then in effect, the HCCC shall administer this Policy to comply with the law or regulations then in effect.

2. Covered Individual. A “Covered Individual” means any individual who is currently or was formerly considered by the Company to be: (i) a Section 16 officer of the Company within the meaning of Section 16 of the Exchange Act and Rule 16a-1(f) promulgated thereunder; (ii) the Company’s president, principal financial officer, principal accounting officer (or if there is no such person, the controller), any vice-president in charge of a principal business unit, division, or function, or any other officer who performs a policy making function for the Company; and (iii) any other individual who may from time to time be designated in writing to be subject to this Policy by the HCCC. An individual shall be considered a Covered Individual without regard to whether the individual was an employee of the Company at the time of the act or event that triggered a recovery under this Policy.

3. Incentive Compensation. “Incentive Compensation” means and includes, but is not limited to, annual bonuses and other short-term and long-term cash incentives (including commissions), stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares, performance units or any other equity-based compensation or synthetic equity-based compensation, provided, that in each case such compensation is granted, earned or vested based wholly or in part on the attainment of a Financial Reporting Measure (as defined below). Incentive Compensation also shall include any other plan, program or agreement that expressly incorporates or references the provisions of this Policy. For the avoidance of doubt, Incentive Compensation only includes amounts received after an individual becomes a Covered Individual.

“Financial Reporting Measures” are measures that are determined and presented in accordance with the accounting principles used in preparing the Company’s financial statements, and any measures that are derived wholly or in part from such measures. Stock price and total shareholder return are also financial reporting measures. A financial reporting measure need not be presented within the financial statements or included in a filing with the SEC.

4. Recovery of Erroneously Awarded Incentive Compensation. The Company is required to recover Incentive Compensation from any Covered Individual in the following instances (except where the HCCC determines that recovery would be impracticable):

(a) If the Company is required to prepare an accounting restatement of its financial statements due to material noncompliance of the Company with any financial reporting requirements under the securities laws. This includes any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period. For this purpose, the date that the Company is required to prepare an accounting restatement is the first to occur of: (i) the date the Company’s HCCC concludes, or reasonably should have concluded, that the Company is required to prepare an accounting restatement (or if HCCC action is not required, the date the Company’s officers conclude, or reasonably should have concluded, the Company is required to prepare an accounting restatement); or (ii) the date a court, regulator or other legally authorized body directs the Company to prepare an accounting restatement.

5. Amount of Recovery. The amount of Incentive Compensation that is to be recovered pursuant to this Policy shall be determined by reference to the following:

(a) With respect to an occurrence satisfying the requirements set out in Section 4(a) of this Policy, the amount subject to recovery ("Erroneously Awarded Compensation") is the amount of Incentive Compensation received during the three (3) completed fiscal years immediately preceding the date on which the Company is required to prepare an accounting restatement that exceeds the amount of Incentive Compensation that otherwise would have been received had it been determined based on the restated amounts (and such amount must be calculated without regard to any taxes paid). If the Erroneously Awarded Compensation amount cannot be determined based on a calculation directly from the information in the accounting restatement, then the Erroneously Awarded Compensation amount must be based on a reasonable estimate of the effect of the accounting restatement on the stock price or total shareholder return upon which the Incentive Compensation was received and the Company must document and maintain its determination of that reasonable estimate and provide such documentation to the NYSE.

6. Method of Recovery. The HCCC will determine, in its sole discretion, the method for recovering Incentive Compensation pursuant to the terms of this Policy, which may include, without limitation:

(a) requiring reimbursement of cash Incentive Compensation previously paid;

(b) seeking recovery of any gain realized on the vesting, exercise, settlement, sale, transfer or other disposition of any equity-based awards (including, without limitation, requiring the return of common stock);

(c) offsetting the amount to be recovered against any Incentive Compensation otherwise owed by the Company to the Covered Individual, except to the extent that such an offset violates the provisions of Section 409A of the Internal Revenue Code of 1986, as amended, or applicable regulations;

(d) cancelling outstanding vested or unvested equity awards; and/or

(e) taking any other remedial and recovery action permitted by law, as determined by the HCCC.

7. No Indemnification. The Company shall not indemnify or provide indemnification insurance to any Covered Individual against the clawback of any Incentive Compensation recovered pursuant to the terms of this Policy.

8. Successors. This Policy shall be binding and enforceable against all Covered Individuals and their beneficiaries, heirs, executors, administrators or other legal representatives.

10. Other Remedies. This Policy shall not restrict the rights of the Company or of the HCCC to take any other actions or to pursue any other remedies deemed appropriate under the circumstances and pursuant to applicable law.

11. Amendment and Termination. The HCCC may amend this Policy in its sole discretion from time to time and for any reason, including to comply with the requirements of any applicable law, rule, or regulation including the NYSE Clawback Rules. The HCCC may terminate this Policy at any time, as permitted by law and NYSE rules.

12. Other Recovery Rights. The HCCC intends that this Policy will be applied to the fullest extent of the law. The HCCC may require that any employment agreement, equity award agreement, or similar agreement entered into on or after the Effective Date shall, as a condition to the grant of any benefit thereunder, require a Covered Executive to agree to abide by the terms of this Policy. Any right of recoupment under this Policy is in addition to, and not in lieu of, any other remedies or rights of recoupment that may be available to the Company pursuant to the terms of any similar policy, in any employment agreement, equity award agreement, or similar agreement and any other legal remedies available to the Company.

13. Disclosure. The Company will comply with all applicable securities laws, rules and regulations, including SEC and NYSE Clawback Rules disclosure requirements regarding executive compensation. The Company may also, but is not obligated to, provide additional disclosure beyond that required by applicable law when the Company deems it to be appropriate and determines that such disclosure is in the best interests of the Company and its stockholders. This Policy shall be filed as an exhibit to the Company's Annual Report on Form 10-K.

APPENDIX A
ACKNOWLEDGMENT

The undersigned acknowledges and agrees that the undersigned (i) is, and will be, subject to the Policy to which this acknowledgement is appended, and (ii) will abide by the terms of this Policy, including by returning Erroneously Awarded Compensation pursuant to whatever method the HCCC determines is advisable to achieve reasonably prompt recovery of such Erroneously Awarded Compensation, as prescribed under the Policy.

Name: _____

Date _____

Signature _____

