2021 Annual Report

Jeff Benck

Dear shareholders,

For more than 40 years and since the early days of the electronics industry, Benchmark has been a pioneer in advanced manufacturing across a broad range of industries and leading technology customers. Our mission and vision have expanded over the years, along with our capabilities, enabling us to positively impact lives by solving complex challenges with our customers, creating innovative products that no one imagined were possible. Today, customers turn to Benchmark for comprehensive solutions across entire product life cycles with world-class technology, engineering, design, and manufacturing services. I am extremely proud of the services we provide and the lasting customer connections we continue to make in support of our mission.

In 2021, we continued to adapt and evolve in a dynamic environment while we advanced progress on our strategic initiatives. The pandemic continued to pose challenges across our global operations and our teams responded with a safety-first mindset to protect our employees while delivering high quality design, engineering, and manufacturing services for our customers. At the same time, we navigated the pressures of an unprecedented supply chain environment where our operations and supply chain teams continued to rally to meet the elevated demand for products against a backdrop of limited supply. I am truly grateful for the efforts of our team, who represent the greatest strengths within our company and continue to drive positive results across the entire Benchmark organization.

Despite the challenges in the past year, we made significant progress on our 2021 strategic initiatives to: (1) grow revenue, (2) invest in a sustainable infrastructure and our talent, and (3) grow earnings faster than revenue.

As we look back on 2021, we made progress on our top priority of "Growing Revenue" where we posted revenue growth of 10% as compared to 2020. In fact, four of the six market sectors we serve achieved annual revenue growth, led by our Semi-Cap sector at 49%. We continue to make incremental investments in our Semi-Cap sector to support surging demand from our industry leading customers. Our 2021 growth was also supported by improving demand from existing customers, incremental product ramps from new customer wins, and increased engineering services attach rates to our manufacturing services bookings.

We appreciate that developing, rewarding, and retaining our talent is critical to our long-term sustainable growth. This is a key focus of our initiatives around investing in "Sustainable Infrastructure and Talent". During the complex and volatile business environment in 2021, we asked a great deal from our teams, and I am pleased to report that they delivered. Throughout the year, we made investments in our human capital systems, talent programs, and cybersecurity as part of our One Benchmark shared infrastructure system, while effectively managing our SG&A expenses. These investments have helped strengthen the foundation needed to scale our business, fulfill our mission, and achieve our financial targets.

In parallel, we made meaningful progress last year on our sustainability initiatives, which are profiled in Benchmark's first ever Sustainability Report that was recently released. This comprehensive report does a great job of describing who we are and what we care about across the continuum of Environmental, Social, and Governance (ESG) topic areas.

We have further enhanced the quality of our sustainability disclosures by incorporating additional ESG reporting frameworks and highlighting the key initiatives we have underway. Our Sustainability Report also includes baseline measures for greenhouse gas emissions, energy and water usage, and human resources metrics. The report also places important emphasis and expanded focus on our Diversity, Equity, and Inclusion (DEI) strategy and programs. We recently launched our first global Inclusion Council, and we will listen to these important voices to further guide our efforts to build a more inclusive culture for all employees. Our comprehensive approach to sustainability and ESG initiatives remains a strategic imperative at Benchmark.

Finally, we shared that our third initiative was to "Grow Earnings Faster than Revenue". We achieved 9.1% non-GAAP gross margins and 42% year-over-year non-GAAP earnings per share growth enabled by our strong revenue performance across the right sector mix, focus on operational excellence, and actions on cost recovery and productivity gains that enabled us to offset inflationary factors. In parallel, we remained committed to our capital allocation framework. While investments in components due to global supply chain shortages drove higher inventories, we have maintained a strong balance sheet with appropriate liquidity through our debt structure. We increased our dividend during 2021 and repurchased shares to more than offset our annual equity dilution.

In parallel, we remained committed to our capital allocation framework. While inventories were higher, we have maintained a strong balance sheet and efficient working capital and debt structure.

As we look ahead to the remainder of 2022, the playbook we have built over the last several years is working and remains largely unchanged. We remain confident in our strategy, mission, and goals and we expect to grow revenue this year in the high single digits and grow earnings faster. We are also targeting to expand both margins and earnings per share aligned to our mid-term model.

I remain greatly appreciative of our employees, customers, suppliers, and partners and I look forward to working together to achieve Benchmark's full potential to drive long-term value for our shareholders and all of our constituents.

Jeff Benck
President and
Chief Executive Officer

Non-GAAP Financial Measures

This shareholder letter includes certain financial measures that exclude items and therefore are not in accordance with U.S. generally accepted accounting principles ("GAAP"). A detailed reconciliation between GAAP results and results excluding items ("non-GAAP") is included below. Management discloses non-GAAP information to provide investors with additional information to analyze the Company's performance and underlying trends. Management uses non-GAAP measures that exclude certain items in order to better assess operating performance and help investors compare results with our previous guidance. The Company's non-GAAP information is not necessarily comparable to the non-GAAP information used by other companies. Non-GAAP information should not be viewed as a substitute for, or superior to, net income or other data prepared in accordance with GAAP as a measure of the Company's profitability or liquidity. Readers should consider the types of events and transactions for which adjustments have been made.

Reconciliation of GAAP to Non-GAAP Financial Results (In Thousands)

	Year Ended December 31,	
	2021	2020
Sales	$ 2,255,319	$ 2,053,131
Gross Profit (GAAP)	$ 205,901	$ 175,048
Customer insolvency (recovery)	(425)	(1,702)
Non-GAAP gross profit	$ 205,476	$ 173,346
GAAP gross margin	9.1%	8.5%
Non-GAAP gross margin	9.1%	8.4%
Net income (GAAP)	$ 35,770	$ 14,055
Amortization of intangible assets	6,384	9,099
Restructuring charges and other costs	9,341	13,227
Impairment	4,358	6,743
Ransomware incident related costs (recovery), net	(3,944)	(1,350)
Customer insolvency (recovery)	(425)	(1,702)
Refinancing of Credit Facilities	276	—
Income tax adjustments [1]	(3,178)	(5,157)
Non-GAAP net income	$ 48,582	$ 34,915
Diluted earnings per share:		
Diluted (GAAP)	$ 0.99	$ 0.38
Diluted (Non-GAAP)	$ 1.35	$ 0.95
Weighted-average number of shares used in calculating diluted earnings per share:		
Diluted (GAAP)	36,101	36,817
Diluted (Non-GAAP)	36,101	36,817

[1] This amount represents the tax impact of the non-GAAP adjustments using the applicable effective tax rates.

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, 2021

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	**74-2211011**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

56 South Rockford Drive
Tempe, Arizona 85281
(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 during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

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

Large accelerated filer	☑	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☑

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, 2021, the number of outstanding common shares was 35,565,789. 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 $1.0 billion.

As of February 23, 2022, there were 35,198,317 common shares of Benchmark Electronics, Inc., par value $0.10 per share, outstanding.

Documents Incorporated by Reference:

Portions of the registrant's Proxy Statement for the 2022 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, 2021, are incorporated herein by reference (Part III, Items 10-14 of this Annual Report on Form 10-K).

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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 or the negative or other variations thereof. In particular, statements, express or implied, concerning the estimated financial impact of the COVID-19 (COVID) pandemic, the company's anticipated plans and responses to the COVID pandemic, the company's expectations relating to current supply chain and labor constraints, 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 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 Report and in any of the company's subsequent reports filed with the Securities and Exchange Commission (SEC). In particular, these statements also depend on the duration, severity and evolution of the COVID pandemic and related risks, including the emergence and severity of its variants, the availability of vaccines and potential hesitancy to utilize them, government and other third-party responses to the crisis and the consequences for the global economy, the company's business and the businesses of its suppliers and customers. Events relating to or resulting from the COVID pandemic, including the possibility of customer demand fluctuations, supply chain constraints, or the ability to utilize the company's manufacturing facilities at sufficient levels to cover its fixed operating costs, 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 to respond to the COVID pandemic. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual outcomes, including the future results of our 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 2021 relate to the calendar year ended December 31, 2021; references to 2020 relate to the calendar year ended December 31, 2020, etc.

General

Benchmark Electronics, Inc. (Benchmark) is a Texas corporation that began operations in 1979 and is today a worldwide provider of innovative product design services, engineering services, technology solutions and advanced manufacturing services (both electronic manufacturing services (EMS) and precision technology services). In this Report, references to Benchmark, the Company or use of the words "we", "our" and "us" include Benchmark's subsidiaries unless otherwise noted.

From initial product concept to volume production, including direct order fulfillment and aftermarket services, Benchmark has been providing integrated services and solutions to original equipment manufacturers (OEMs) since 1979. Today, Benchmark proudly serves the following industries: aerospace and defense (A&D), medical technologies, complex industrials, semiconductor capital equipment (semi-cap), next-generation telecommunications and advanced computing.

Our customer engagement focuses on three principal areas:

- *Design & Engineering Services*, which include design for manufacturability, manufacturing process 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 provide these services across all the industries we serve, but focus primarily in regulated industries such as medical, complex industrials, A&D, and semi-cap.
- *Technology Solutions*, which involve developing a library of building blocks or reference designs primarily in defense solutions, surveillance systems, radio frequency (RF) and high-speed design, and front-end managed connectivity data collection systems. We often merge these technology solutions with engineering services to provide turnkey product development from requirements through to volume production that we support with our manufacturing services. Our building blocks can be utilized across a variety of industries

but we have significant capabilities in the A&D and the complex industrials markets. We have also developed differentiated capabilities in RF and high-speed design for both components and substrates. The need to reduce size, weight, and power (SWaP) to accommodate high frequency electronics communications is important to customers in the A&D, medical and next generation telecommunications markets.

- *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, optics, 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, assembly and functional testing primarily for the semi-cap market (serving semiconductor capital equipment customers) and A&D market.

Our core strength lies in our ability to provide concept-to-production solutions in support of our customers. 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 – especially for complex products with lower volume and higher mix in regulated markets with higher reliability requirements. These capabilities enable us to build strong strategic relationships with our customers and to become an integral part of their business.

We believe our primary competitive advantages are our leading edge technical capabilities in engineering services (including product design in which we can take a product idea from concept to design to volume manufacturing), technology solutions (especially high frequency RF solutions, microelectronics, and miniaturization), and manufacturing services (including electronics and complex precision machining capabilities) provided by highly skilled personnel. We also have diversified end market and regulated market experience in our targeted higher-value markets. To support customers in these markets, we have invested in strategic global supply chain design and execution.

In addition, we believe that a strong focus on human capital through the talent we hire and retain is critical to maintaining our competitiveness. We are driving a customer-centric organization with a high degree of accountability and ownership to develop processes necessary to exceed customer expectations and deliver financial performance aligned to our goals. Through our employee feedback process, we solicit and act upon information to improve our company and better support our customers and business processes in the future. We have taken steps to attract the best leaders and are accelerating our efforts to increase our diversity and inclusion in our employee and management ranks as we seek to develop an innovative and forward thinking workforce for the future.

Our Industry

Outsourcing engineering and manufacturing services enable OEMs to concentrate on their core strengths, such as research and development, branding, and marketing and sales. In an outsourcing model, OEMs also benefit from improved efficiencies and reduced production costs, volume purchasing leverage, reduced fixed capital investments, improved inventory management, and access to global engineering and manufacturing resources. OEMs continue to turn to outsourcing partners to reduce time-to-market and time-to-volume production through utilization of their service providers' product design and engineering services, technology solutions and manufacturing services.

Outsourcing rates fluctuate periodically, and not all industries we serve are outsourcing at the same growth rates. The traditional markets of computing and telecommunications have used the outsourcing model for a number of years and have a lower outsourcing growth potential than the less-outsourced medical, complex industrials, A&D, and semi-cap markets, which we identify as our higher-value markets. The higher-value markets typically provide the opportunity for increased value-add which leads to higher profitability than the traditional markets and in some cases provide the potential for stable growth. The higher-value markets also align well with our expertise in more complex and highly regulated products, and we believe we are well-positioned to capitalize on increased outsourcing in these markets.

Our Strategy

Our goal is to be the solutions provider of choice to leading OEMs that 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 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 in the more traditional markets of computing and telecommunications often compete on price with short product life cycles and require less value-add from EMS providers. We focus on lower-volume manufacturing customers in the A&D, medical, and industrial markets, which are often in highly regulated industries where they are increasingly outsourcing higher value-added services to their EMS providers to meet stringent regulatory and time-to-market requirements. In the traditional markets, we focus on customers with more complex requirements such as high-performance computing and next generation telecommunications. In the higher-value markets where outsourcing growth rates are increasing and product life cycles are longer, we focus on customers where there is a strong match between our capabilities and their needs. Our objective is to achieve annual sales from higher-value market customers around 80% of total revenue which may fluctuate from period-to-period based on the mix of revenue between sectors.

- *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 United States and Mexico (Americas), Asia and Europe. Leading with engineering is important to our strategy to increase sales to customers in our targeted higher-value markets where products require high quality, extreme reliability and low product failure rates. By leveraging our advanced technology and engineering solutions, customers can focus on core branding and marketing initiatives while we focus on bringing their products to market 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 growth industries by becoming an integral part of their concept-to-production and full product life cycle requirements. 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 frequently changing customer design specifications and production requirements. We focus on caring for our customers and ensuring that their needs are consistently met or exceeded.
- *Deliver Complete Manufacturing Solutions Globally*. OEMs increasingly require a wide range of specialized design engineering and manufacturing services from EMS providers in order to reduce costs and accelerate their time-to-market and time-to-volume production. Building on our integrated engineering and manufacturing capabilities, we offer services from initial product design and test to final product assembly and distribution to OEM customers. Our precision technology services and complex mechanical manufacturing, along with our systems integration assembly and direct order fulfillment services, allow our customers the potential to 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 Americas, Asia and Europe.
- *Continue to Seek Cost Savings and Operational Excellence.* We seek to optimize our network of facilities to provide cost-efficient services for our customers. We have a global culture of continuous improvement, sharing best practices and implementing lean principles. We will continue to drive lean and operational excellence initiatives with common global processes that allow us to optimize our cost structure and capacity. Our customers benefit from these initiatives by sharing in the cost savings and knowing that their manufacturing partner can scale to meet their growth needs.
- *Optimize our Global Footprint.* We will continue to evaluate our global footprint to ensure we are improving the utilization of our facilities, expanding in the regional locations where customers would like to do business with us, and investing capital in new capabilities that match identified market needs. This effort has led to some site closures and site expansion across our network as appropriate.
- *Pursue Strategic Acquisitions.* Our capabilities have continued to expand through acquisitions, and we will continue to selectively seek acquisitions which 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 continue a strong focus on cash conversion and appropriate capital management. We continue to be focused on effective capital deployment by balancing appropriate investments to support ongoing business and driving organic growth while providing returns to our shareholders through dividends and share repurchases. Future investments may include augmenting internal technical capabilities complemented by targeted acquisitions.

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.

Design & Engineering Services and Technology Solutions:

Our approach is to coordinate and integrate our concept, design, prototype and other engineering capabilities 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 that require 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 own the resulting designs in our contract design services business. We employ a proven seven-step process for concept-to-production in our design services model that enables a shorter product development cycle and gives our customers a competitive advantage in time-to-market and time-to-profit. Our multi-disciplined engineering teams provide expertise in a number of 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 specifications, designs and quick-turn prototypes, then validate and ramp our customers' products into volume manufacturing.
- *Custom Testing and Automation Equipment Design and Build Services.* We provide our customers 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 and 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, munitions, and soldier platforms that require ruggedization for harsh environments and secure communications. We are developing advanced manufacturing capabilities and processes for RF microwave and photonics designs that utilize highly accurate micro-electronics and photonics equipment, complementing our engineering expertise in these areas. We are focused on the high frequency and SWaP requirements resulting from the challenges in the defense and telco 5G markets.

Manufacturing Services *(Electronics Manufacturing and Testing Services):*

As OEMs seek to provide greater functionality in smaller products, 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 offer a variety of advanced manufacturing solutions. These packaging and interconnect technologies include but are not limited to:

- *Printed Circuit Board Assembly (PCBA) & 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
    - Micro-Ball Grid Array
    - Land Grid Array
    - Quad Flat No-Leads
    - Package-on-Package
    - 01005 Chip Components
    - Circuit Design and Fabrication of Hybrid interconnect and CCDs
- 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, and
    - 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
    - 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 understand the evolving international environmental laws and regulations on content, packaging, labeling and similar issues concerning the environmental impact of their products, including: "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. Manufacturing sites in the Americas, Asia and Europe regions are experienced with both water soluble and no-clean processes.

- *Systems Assembly & Test.* We offer a full spectrum of subsystem and system integration services. These include 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 and provide environmental stress tests of assemblies of boards or systems. We also 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. This includes 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 florescence, 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 services including full electromechanical assembly and testing 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 & 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 frames; and
  - Sheet metal and paint.

Our global network of operations includes manufacturing facilities in eight 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, Singapore and Thailand. Our network also includes engineering centers that lead customer engagements and provide solutions to customers in the Americas, Asia and Europe. Additionally, we are compliant with and/or hold the following accreditations, certifications and registrations by geography:

	Americas	Europe	Asia
ISO 13485 – Medical	√	√	√
FDA/QSR Compliant – Medical	√		√
ISO 14971 – Medical Risk Management	√		
MedAccred	√		√
AS9100 – Aerospace	√	√	√
ITAR (International Traffic and Arms)	√	√	
Nadcap (National Aerospace & Defense Assoc. Program)	√		√
FAA Approved Parts Manufacturer – Aviation	√		
IATF 16949 – Automotive	√		√
TL9000 – Telecommunications	√		
ANSI ESD S20:20	√	√	√
ISO 9001 – Quality	√	√	√
ISO 14001 – Environmental Health and Safety	√	√	√
OHSAS 18001/ISO 45001 – Occupational Health and Safety	√	√	√

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. Utilizing our agility and expertise in supply chain management and our relationships with suppliers across the supply chain, we strive to help reduce our customers' cost of goods sold and inventory exposure. However, due to the COVID pandemic, as well as global labor and supply disruptions, we continue to see component supply chain constraints across all commodity categories that are constraining our ability to produce the full demand forecasts we are receiving from customers.

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 System*s. 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 provide assurance of supply, optimized cost, and reduced 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 module that controls serialization, production and quality data for all of our facilities around the world using state-of-the-art statistical process control techniques for continuous process improvements. 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 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 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, operational, 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 in an effort to anticipate and meet the current and future needs of our customers.

Our key customer accounts are supported by dedicated teams directly responsible for 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 sector for 2021, 2020 and 2019.

Higher-Value Markets	2021	2020	2019
Industrials	20%	18%	20%
A&D	15	21	19
Medical	20	24	20
Semi-Cap	26	18	12
	81%	81%	71%

Traditional Markets	2021	2020	2019
Computing	9%	8%	16%
Telecommunications	10	11	13
	19%	19%	29%
Total	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 47%, 41% and 38% of our sales in 2021, 2020 and 2019, respectively. Sales to Applied Materials represented 16% and 12% of our total sales in 2021 and 2020, respectively. In 2019, no single customer represented 10% or more of our total sales.

Seasonality

Seasonality in our business has historically been driven by customer complexity and product mix, particularly the industries that our customers serve. Although we have historically experienced higher sales during the fourth quarter, this pattern does not repeat itself every year. 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 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, particularly with regard to supply disruptions due to COVID, 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 purchasing components at slightly 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 the COVID pandemic, as well as global labor and supply disruptions, we continue to see component supply chain constraints across all commodity categories that are constraining our ability to produce the full demand forecasts we are receiving from customers.

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 traditional markets, such as 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 Stephen J. Beaver, SVP, 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. The team performed an assessment in 2020 of ESG topics aligned with the Sustainability Accounting Standards Board (SASB) with the goal of developing future reporting that will include 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 expect to publish and release our inaugural 2021 Sustainability Report at or around the time of the filing of our proxy statement for our 2022 Annual Meeting of Shareholders. Our most current sustainability information is posted on our website at https://www.bench.com/sustainability.

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. Our sustainability priorities include:

Environmental Responsibility:

- We are committed to protecting the natural environment and our community by complying with all applicable legal and regulatory requirements.
- We engage our employees to accomplish this by conserving energy; reducing consumption of natural resources; preserving air, soil, and water quality, managing waste properly and encouraging reuse or recycling; reducing use of toxic substances and applying an ethical approach to source reduction and disposal efforts.
- All Benchmark manufacturing facilities are either currently certified or undergoing certification to ISO 14001, which is a set of standards related to environmental management and systems. The ISO 14001 standards help 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.

Care for 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. Thus, we are strengthening our diversity, equity and inclusion programs with a planned set of actions around organizational training, refreshed company values, and a revitalized recruitment strategy. For additional information, see "—Human Capital Management" below.
- We are 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.
- We are committed to participating in the development of our surrounding communities and supporting diversity.
- In the fall of 2019, a strategic customer presented a Benchmark operation with a "Supplier ESG Excellence Award" for their "participation, leadership and superiority during the Forced and Bonded Labor Prevention Program."

Ethics & Corporate Responsibility:

- 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.
- We are committed to observing fair, transparent and accountable operating practices.
- Benchmark believes that its ultimate responsibility is to help create and foster the best possible work environment for everyone in our organization. To this end, we implemented 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, in 2018 we upgraded our whistleblower Helpline to include global local phone numbers, together with language support, that allows reporters to "Speak Up!" in over 150 native languages. In addition, we added a web portal that allows online reporting of concerns, a place to ask questions, or quickly access ethics and compliance policies.
- We believe these efforts strengthen our enterprise ethics and compliance efforts and foster the environment where employees and stakeholders can express and have concerns resolved.

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 endorses EcoVadis, a provider of sustainability ratings, intelligence and collaborative performance improvement tools for global supply chains. The EcoVadis methodology evaluates criteria across four themes: environment, fair labor practices, ethics/fair business practices and supply chains. In 2021, Benchmark was again awarded the EcoVadis Silver Medal-Sustainability rating, placing it in the upper quartile of EcoVadis rated companies.
- Benchmark also supports Rule 13p-1 under the Exchange Act (Conflict Minerals Law) and efforts to avoid sourcing conflict minerals that directly or indirectly finance or benefit armed groups in the Democratic Republic of Congo (DRC) and in adjoining countries. Consistent with the Conflict Minerals Law and the OECD Due Diligence Guidance concerning conflict minerals, Benchmark adopted the Conflict Free Sourcing Initiative Due Diligence reporting process and seeks to obtain conflict minerals content declarations from its suppliers, all in an effort to promote 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 source 3TG only from smelters and refiners validated as being conflict free and that do not directly or indirectly benefit or finance armed groups in the DRC or other covered country;
  - our suppliers to fully-comply with the Conflict Minerals Law and provide all necessary declarations;
  - our suppliers to pass these requirements through to their supply chain and determine the source and chain of custody of specified minerals, including 3TG; and any suppliers not willing to comply with these requirements shall be reviewed by our global procurement team 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. For additional information, see "—Environmental, Social & Governance (ESG) & Sustainability—Ethics & Corporate Responsibility," above.

Purpose and Culture

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 values that drive our culture. These 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 in 2020 with Board oversight to drive the five tenets of our long-term ESG strategy: Environmental Responsibility, Our People, Our Community, Governance and Our COVID Response. 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 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 all-important 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. In early 2021, the Board's Nominating, Sustainability and Governance Committee committed to adding more diversity to our Board with the goal of adding continued female representation, as well as a racially and/or ethnically diverse member as we continue to evolve our Board structure. In June 2021, the Company welcomed Lynn Wentworth as our latest female director. In October 2021, Benchmark appointed a new independent director, Ramesh Gopalakrishnan, to fill a vacant board position. Mr. Gopalakrishnan 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 refresh our Board in the future.

In January 2022, the senior executive team selected 16 Benchmark team members to serve on the Company's inaugural Inclusion Council. The Inclusion Council, which includes our Chief Executive Officer and our Chief Human Resources Officer, meet 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 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 also conducted a global engagement and inclusion survey in the fall of 2021 to elicit feedback from employees, and is developing action plans for continuous improvement in the areas of leadership, communication, culture, inclusion, growth and development. The Human Capital and Compensation Committee of our Board of Directors reviews these initiatives and results with our 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. In 2020, the Company began implementing a new Human Capital Management (HCM) system to establish a foundation and common database upon which the Company can centralize people-related data and standardize people management processes across the globe. The HCM system provides an operating framework to enable leaders to better hire talent and manage teams, including setting goals, performance evaluations, succession planning, and learning and

development. The HCM system will also provide 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 development through our online learning platform.

We offer competitive compensation and benefits packages that reflect the needs of our workforce. In the U.S., 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 tools 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. From the onset of the COVID pandemic, we established a COVID Task Force, a cross-functional advisory team of Company leaders committed to promoting the health and safety of our employees in accordance with Centers for Disease Control and Prevention (CDC) guidelines and ensuring that our employees' safety remains a constant focal point. The COVID Task Force has promulgated policies, procedures, protocols and guidelines relating to symptom awareness and contact tracing, remote work requirements, effective hygiene practices, travel restrictions, temperature screening, visitor protocols, social distancing, facial mask requirements, enhanced cleaning protocols and decontamination procedures.

As of December 31, 2021, we employed approximately 10,900 people, approximately 340 of whom were engaged in design and development engineering. 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, Singapore 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 2021, 2020 and 2019, 55%, 52% and 47%, respectively, of our sales were from our international operations. See Note 8 and Note 13 to 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, anticorruption, 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 regulations could cause us significant expense" in Part I, Item 1A of this Report.

Available Information

Our website may be viewed at http://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 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 http://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 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

Our business, financial condition and results of operations have been and are expected to continue to be adversely affected by the COVID pandemic, the extent of which is uncertain and difficult to predict. The widespread outbreak of any other health epidemics could also adversely affect our business, financial condition and results of operations.

Any outbreaks of contagious diseases and other adverse public health developments, particularly in countries where we operate, could have a material and adverse effect on our business, financial condition and results of operations. In late 2019, there was an outbreak of a new strain of coronavirus (COVID) first identified in Wuhan, Hubei Province, China, which has since spread globally. On March 11, 2020, the World Health Organization declared COVID a pandemic. Further, the COVID outbreak has resulted in government authorities around the world implementing numerous measures to try to reduce the spread of COVID, such as travel bans and restrictions, quarantines, "shelter-in-place," "stay-at-home," total lock-down orders, business limitations or shutdowns and similar orders. As a result, the COVID pandemic has negatively impacted the global economy, disrupted global supply chains and workforce participation, and created significant volatility and disruption of financial markets.

More recently, more contagious variants of COVID, such as the Delta and Omicron variants, have emerged and spread globally, which has caused some governments to reimplement various measures, or impose new restrictions, in an effort to lessen the spread of COVID and its variants.

Benchmark provides critical infrastructure products and essential services in each of our locations. However, as a result of the COVID pandemic, including the related responses from government authorities, the Company's operations were impacted worldwide starting in the first quarter of 2020. For example, the Company's facilities worldwide, to varying degrees, were affected in 2021 and 2020 by government enacted plant shut-downs, stay-at-home or shelter-in-place or similar restrictions, which resulted in reduced productivity levels throughout our facilities that negatively impacted our operations. Additionally, the Company has experienced a challenging supply chain environment and labor constraints in 2020, and 2021, which are expected to continue throughout 2022, as well as increased direct costs and under absorption of fixed costs, due to the COVID pandemic. For additional information see "—COVID Pandemic Update" in Part II, Item 7 of this Report.

Additionally, our business, financial condition and results of operations have been and may be further impacted in several ways, including, but not limited to, the following:

- further disruptions to our operations, including due to additional facility closures, restrictions on our operations and sales, marketing and distribution efforts and/or interruptions to our engineering and design processes and other important business activities;
- reduced demand for our products and services, particularly due to disruptions to the businesses and operations of our customers;
- interruptions, availability or delays in global shipping to transport our products;
- further disruptions, slowdowns or stoppages in the supply chain for our products, in addition to higher costs;
- limitations on employee resources and availability, including due to sickness, government restrictions, labor supply shortages, the desire of employees to avoid contact with large groups of people, mass transit disruptions or a shortage of available vaccinations;
- greater difficulty in collecting customer receivables;
- a continuation or worsening of general economic conditions, including increased inflation;
- a fluctuation in foreign currency exchange rates or interest rates could result from market uncertainties;
- an increase in the cost or the difficulty to obtain debt or equity financing could affect our financial condition or our ability to fund operations or future investment opportunities;
- any breach of financial covenants contained in our credit agreement;
- current or near future trends may cause certain inventory to be slow-moving and trigger the need to review for excess and obsolete inventory or the valuation of inventory;
- changes to the carrying value of our goodwill and intangible assets; and
- an increase in regulatory restrictions or continued market volatility could hinder our ability to execute strategic business activities, as well as negatively impact our stock price.

The spread of COVID has caused us to modify our business practices (including employee travel, employee work locations, and cancellation of physical participation in meetings, events and conferences), and we may take further actions as may be required by government authorities or that we determine are in the best interests of our employees, customers, partners, and suppliers. There is no certainty that such measures will be enough to mitigate the risks posed by the virus, and our ability to perform critical functions could be harmed.

The emergence of the significantly more contagious Delta and Omicron variants of COVID and the prevalence of breakthrough cases of infection among fully vaccinated people adds additional uncertainty and could result in further impacts to our business and operations, including those discussed above.

Any of the foregoing could adversely affect our business, financial condition and results of operations. The potential effects of COVID may also impact many of our other risk factors discussed in this Report. The exact extent of the impact of the COVID pandemic on our business, financial condition and results of operations will depend on future developments, which are highly uncertain, continuously evolving and cannot be predicted, including, but not limited to, the duration and spread of the COVID pandemic and its severity; the emergence and severity of its variants, including the Delta and Omicron variants; the actions to contain the virus or treat its impact, including the availability and efficacy of vaccinations (particularly with respect to emerging strains of the virus) and the rate of inoculations; general economic factors, such as increased inflation; global supply chain constraints and shortages;

labor supply issues; and how quickly and to what extent normal economic and operating conditions can resume, which may not return fully to pre-pandemic levels.

Shortages or price increases of components specified by our customers have 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. Currently, supply shortages for components and commodity categories used in manufacturing have resulted in industry-wide shortages of electronic components and have curtailed production of assemblies, primarily as a result of the ongoing COVID pandemic, including due to related labor and supply disruptions. In some instances, such component shortages have resulted in delayed shipments. Because of the continued increase in demand for surface mount components, we anticipate component shortages and longer lead times for certain components to occur. 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, 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,
- equipment for the A&D industries;
- telecommunication equipment;
- computers 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. For example, the declines in demand in the aerospace market in 2020 and 2021 had a significant impact on us for those fiscal years.

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 47%, 41% and 38% of our sales in 2021, 2020 and 2019, 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. In the past, we have been required to increase staffing and other expenses 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. On other occasions, our customers have required rapid increases in production, which have 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 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 can 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.

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.

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.

We may encounter significant delays or defaults in payments owed to us by customers for products we have manufactured or components 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 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 depends 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 would 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 international operations are subject to certain risks.

During 2021, 2020 and 2019, 55%, 52% and 47%, 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 as discussed elsewhere in this “Risk Factors” section;
- 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 and outbreaks of war), 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 duties, import controls, tariffs, and trade barriers (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;
- 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 made 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 U.S. 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 U.S. 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 business may be adversely impacted by 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 start-up 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 Corp 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 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 this contracting. 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. 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 nonrenewal of our tax holiday in Malaysia in 2021, 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 U.S. 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.

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. Legal Proceedings.

Compliance or the failure to comply with environmental 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 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.

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 noncompliant 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 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 vital data.

We routinely monitor our systems for cyber threats and have processes in place to detect 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 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 (CMMC) 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 IT infrastructure and enterprise resource planning 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, 2021, our total outstanding debt (excluding unamortized debt issuance costs and finance leases) was $131.3 million, all of which represented borrowings under our term loan facility (the Term Loan). 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, 2021, we had $192.1 million in goodwill and $64.2 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 London interbank offered rate

(LIBOR), the bank's prime rate or the federal funds rate. We are also exposed to interest rate risk on our invested cash balances.

The elimination of LIBOR could adversely affect our business, results of operations or financial condition. Borrowings under our credit facilities use LIBOR as a benchmark for establishing the applicable interest rate. The UK's Financial Conduct Authority announced that sometime after 2021 it would no longer persuade or compel panel banks to submit the rates required to calculate LIBOR. The consequences of these developments with respect to LIBOR cannot be entirely predicted but could result in an increase in the cost of our variable rate indebtedness causing a negative impact on our financial position, liquidity and results of operations. Specifically, the use of an alternative reference rate could result in increased costs, including increased interest expense on our borrowings, and increased borrowing costs in the future. Management continues to evaluate the LIBOR exposure risks.

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;
- 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, global pandemics, such as COVID, the availability and cost of credit, concerns about volatile energy costs, declining asset values, inflation, rising unemployment, 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 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 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 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.

The following chart summarizes the approximate square footage of our principal manufacturing facilities by country:

Location	Sq. Ft.
Americas	
United States:	
Alabama	195,000
Arizona	170,000
California	388,000
Minnesota	459,000
New Hampshire	161,000
Texas	155,000
Mexico	492,000
Asia	
China	326,000
Malaysia	347,000
Thailand	756,000
Europe	
Netherlands	159,000
Romania	143,000
Total	3,751,000

Our principal manufacturing facilities consist of 1.9 million square feet in facilities that we own, with the remaining 1.9 million square feet in leased facilities whose terms expire between 2022 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 22,000 square feet dedicated to engineering, sales and procurement services.

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 23, 2022, as reported by the New York Stock Exchange, was $25.60. There were approximately 500 record holders of our common shares as of February 23, 2022. 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 2021, cash dividends paid totaled $23.3 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 the our debt agreements, and other factors that the Board of Directors may deem relevant, including the impact of the COVID pandemic. 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 of its equity securities that are registered pursuant to Section 12 of the Exchange Act during the quarter ending December 31, 2021.

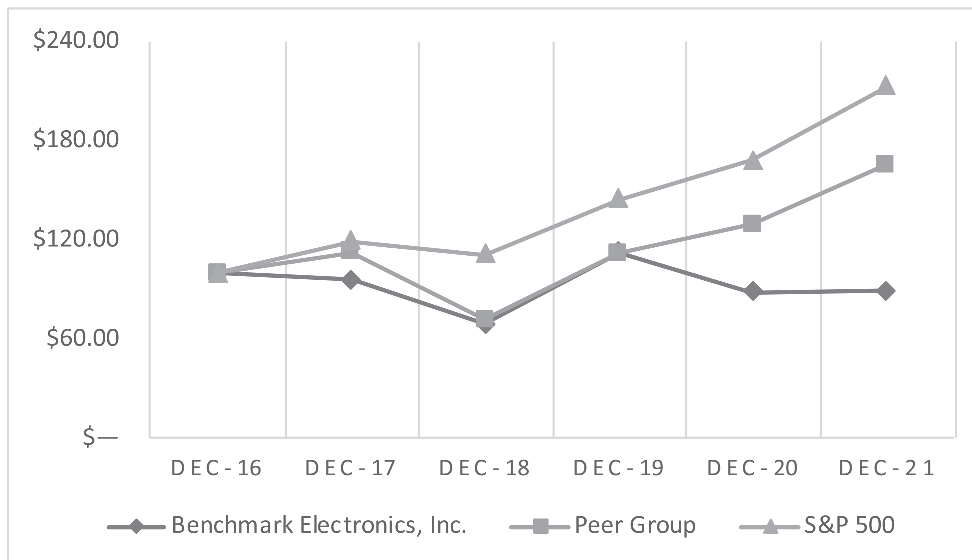
Period	(a) Total Number of Shares (or Units) Purchased	(b) Average Price Paid per Share (or Unit)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs(1)
October 1 to 31, 2021	—	$ —	—	$164.0 million
November 1 to 30, 2021	—	—	—	$164.0 million
December 1 to 31, 2021	—	—	—	$164.0 million
Total	—	$ —	—	

[(1)]On October 30, 2018, the Company announced that the Board of Directors authorized the repurchase of $100 million of the Company's common stock in addition to the $250 million previously announced on March 7, 2018. On February 24, 2020, the Company announced that the Board of Directors authorized the repurchase of an additional $150 million of the Company's common stock. Net of shares repurchased to date, the total remaining authorization as of December 31, 2021 is $164.0 million. Stock 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 are funded from available cash and may be commenced, suspended or discontinued at any time without prior notice. Shares of stock repurchased under the program are retired.

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. Since 2017, the Company has repurchased a total of 16.3 million common shares for an aggregate of $428.5 million at an average price of $26.35 per share.

Performance Graph

The following graph compares the cumulative total shareholder return on our common shares for the five-year period commencing December 31, 2016 and ending December 31, 2021, 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, 2016 in our common shares and in each of the two indices, and that dividends, if any, were reinvested.



	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21
Benchmark Electronics, Inc.	$ 100.00	$ 95.40	$ 69.00	$ 112.70	$ 88.60	$ 88.90
Peer Group	$ 100.00	$ 112.60	$ 71.60	$ 111.80	$ 128.90	$ 165.40
S&P 500	$ 100.00	$ 119.40	$ 111.00	$ 144.30	$ 167.80	$ 212.90

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 further discussion and analysis regarding our financial condition and results of operations for the year ended December 31, 2020 as compared to the year ended December 31, 2019, refer to Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020 filed with the SEC on March 1, 2021.

COVID Pandemic Update

In late 2019, there was an outbreak of a new strain of coronavirus (COVID) first identified in Wuhan, Hubei Province, China, which has since spread globally. On March 11, 2020, the World Health Organization declared COVID a pandemic. Further, the COVID outbreak has resulted in government authorities around the world implementing numerous measures to try to reduce the spread of COVID, such as travel bans and restrictions, quarantines, "shelter-in-place," "stay-at-home," and total lock-down orders, business limitations or shutdowns and similar orders. As a result, the COVID pandemic has negatively impacted the global economy, disrupted global supply chains and workforce participation, and created significant volatility and disruption of financial markets. In an effort to first and foremost protect the health and safety of our employees, we continue to take proactive action to adopt social distancing policies at our locations globally, including working from home for certain employees, limiting the number of employees attending meetings, reducing the number of people in our locations at any one time, and significantly limiting employee travel. More recently, more contagious variants of COVID (the Delta and Omicron variants) have emerged and spread globally, which has caused some governments to reimplement various measures, or impose new restrictions, in an effort to lessen the spread of COVID and its variants. It is unclear at this point the full impact the Delta and Omicron variants will have on the global economy and on our Company.

As a result of the COVID pandemic, our revenue during 2020 and 2021 was negatively impacted primarily as a result of operational inefficiencies relating to reduced productivity levels throughout our facilities and supply chain constraints, which affected our ability to support customer demand. Additionally, the COVID pandemic negatively impacted our 2020 and 2021 results due to increased direct costs associated with labor expenses and personal protective equipment for our employees, as well as under absorption of fixed costs.

Benchmark provides critical infrastructure products and essential services in each of our locations, which has allowed us to continue to operate. The COVID pandemic continues to affect the Company's operations into 2022. End market demand continues to grow as more customers recover from the pandemic. However, we continue to see component supply chain constraints across all commodity categories which are constraining our ability to produce the full demand forecasts we are receiving from customers. See "2021 Overview" below and "Risk Factors-Shortages or price increases of components specified by our customers have delayed and are expected to continue delaying shipments and may adversely affect our profitability" in Part II, Item 1A of this Report for additional information.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted in the United States in response to the COVID pandemic. The CARES Act among other things, permits net operating loss carryovers and carrybacks to offset 100% of taxable income for taxable years beginning before 2021, and contains modifications on the limitation of business interest for tax years beginning in 2019 and 2020. The Company evaluated the impact of these provisions and determined these provisions did not have any impact on the year ended December 31, 2021 and 2020. In addition, the CARES Act allows for employee retention tax credits to be taken in U.S. payroll tax filings and allows for the deferral of the employer portion of social security taxes with 50% to be paid at the end of calendar years 2021 and 2022, respectively. Accordingly, the Company deferred the payment of the employer portion of social security taxes for the year ended December 31, 2020 until the end of 2021 and 2022, respectively. During December 2021, the Company paid approximately 50% of the social security taxes previously deferred. The Company has also determined it was entitled to employee retention credits and filed for the credits in the second quarter 2020 payroll tax reports pursuant to the guidance provided by the Internal Revenue Service. The amount of credits has been recorded in operating expenses for the year ended December 31, 2020. The Company has determined that it is not eligible for employee retention tax credits as of December 31, 2021, and the deferral of the employer portion of social security taxes is not available for 2021. We have not received the retention credits from

the Internal Revenue Service that we applied for during second quarter of 2020. The Internal Revenue Service has had some delays in processing the filings for the tax refunds.

We continue to monitor the evolving situation and guidance from international and domestic authorities, including federal, state and local public health authorities, and may take additional actions based on their recommendations. In these circumstances, there may be developments outside our control requiring us to adjust our operating plan. As such, the exact extent of the impact of the COVID pandemic on our business, financial condition and results of operations, is currently unknown and will depend on future developments, which are highly uncertain, continuously evolving and cannot be predicted. This includes, but is not limited to, the duration and spread of the COVID pandemic and its severity; the emergence and severity of its variants, including the Delta and Omicron variants; the actions to contain the virus or treat its impact, including the availability and efficacy of vaccinations (particularly with respect to emerging strains of the virus) and the rate of inoculations; general economic factors, such as increased inflation; global supply chain constraints and shortages; labor supply issues; and how quickly and to what extent normal economic and operating conditions can resume, which may not return fully to pre-pandemic levels.

Accordingly, our current results and financial condition discussed herein may not be indicative of future operating results and trends. See "Risk Factors" in Part I, Item 1A of this Report for additional risks we face due to the COVID pandemic.

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.

In 2019, ransomware incident related costs incurred totaled $7.7 million, net of estimated insurance recoveries of $5.0 million. These costs were primarily comprised of the certain employee related expenses and various third party consulting services, including forensic experts, legal counsel and other IT professional expenses.

During the year ended December 31, 2020, the Company collected $6.6 million of insurance recoveries which include the $5.0 million of estimated insurance recoveries recorded in 2019 and an additional $1.6 million recorded in 2020. During the year ended December 31, 2021, the Company collected an additional $3.9 million of insurance recoveries. As of December 31, 2021, the Company has collected insurance recoveries totaling $10.5 million. No further insurance recoveries are expected.

2021 OVERVIEW

Sales for 2021 were $2.3 billion, a 10% increase from sales of $2.1 billion in 2020. During 2021, sales to customers in our various industry sectors fluctuated from 2020 as follows:

- Industrials increased by 15%,
- A&D decreased by 10%
- Medical decreased by 7%,
- Semi-cap increased by 49%,
- Computing increased by 16%, and
- Telecommunications increased by 8%.

The overall revenue increase was due primarily to higher overall demand from both our Higher-value and Traditional markets (as discussed below). Higher-value market revenues were up 10% year-over-year from strength in the Semi-Cap and Industrials sectors. Traditional market revenues were up 12% year-over-year from strength in both Computing and Telecommunications sectors.

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, including in each case as a result of the COVID pandemic, have adversely affected 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. Sales to our ten largest customers represented 47% and 41% of our total sales in 2021 and 2020, respectively. Sales to Applied Materials represented 16% and 12% of our total sales in 2021 and 2020, respectively. Due to the COVID pandemic, as well as global labor and supply disruptions, we continue to see component supply chain constraints across all commodity categories that are constraining our ability to produce the full demand forecasts we are receiving from customers. Lead times continue to extend, and more components are being placed on allocation by suppliers. Additionally, there continues to be an increase in pushouts of previously committed component orders and tighter allocation and timing restrictions across the component suppliers. These last-minute allocations created inefficiencies in our operations and contributed to the sequential increase in inventory.

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. In addition, a number of our new program ramps remain subject to competitive constraints that can exert downward pressure on our margins. During periods of low production volume, we generally have unabsorbed manufacturing overhead costs and reduced gross profit. Gross profit can also be impacted by other situations, such as COVID and supply chain constraints.

We have undertaken initiatives to restructure our business operations with the intention of improving utilization and reducing costs. During 2021, we recognized $9.3 million of restructuring and other costs due in part to expenses associated with various site closures and restructuring activities. In addition, we incurred $4.4 million in costs related to asset impairments in the Americas.

RESULTS OF OPERATIONS

The following table presents the percentage relationship that certain items in our consolidated statements of income bear to sales for the periods indicated. 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.

	Year Ended December 31,		
	2021	2020	2019
Sales	100.0%	100.0%	100.0%
Cost of sales	90.9	91.5	91.8
Gross profit	9.1	8.5	8.2
Selling, general and administrative expenses	6.1	6.0	5.6
Amortization of intangible assets	0.3	0.4	0.4
Restructuring charges and other costs	0.6	1.0	0.6
Ransomware related incident costs (recovery), net	(0.2)	(0.1)	0.3
Income from operations	2.4	1.2	1.3
Other expense, net	(0.3)	(0.4)	(0.1)
Income before income taxes	2.0	0.8	1.2
Income tax expense	0.4	0.2	0.2
Net income	1.6%	0.7%	1.0%

2021 Compared With 2020

Sales

As noted above, sales increased 10% in 2021. The percentages of our sales by sector were as follows:

	2021	2020
Higher-Value Markets		
Industrials	20%	18%
A&D	15	21
Medical	20	24
Semi-Cap	26	18
	81	81
Traditional Markets		
Computing	9	8
Telecommunications	10	11
	19	19
Total	100%	100%

Industrials. 2021 sales increased 15% to $428.4 million from $373.1 million in 2020. The increase was primarily due to continued demand improvements from oil & gas, building infrastructure, and commercial transportation programs.

Aerospace and Defense. 2021 sales decreased 10% to $381.7 million from $423.6 million in 2020 primarily due to program transitions and lower demand in our commercial aerospace programs which have yet to recover to pre-pandemic levels.

Medical. 2021 sales decreased 7% to $461.8 million from $498.5 million in 2020 primarily due to the slower ramp in new medical programs, the impact of supply chain constraints which limited revenue growth and lower demand for elective surgery products in the first half of 2021. While demand improved in the second half, component availability continued to limit our ability to fulfill all demand from our medical customers.

Semiconductor Capital Equipment. 2021 sales increased 49% to $549.3 million from $369.0 million in 2020. The increase was primarily due to higher demand across our customer base in the front-end semiconductor capital equipment space where we provide differentiated engineering design, precision machining services, and complex system assembly.

Computing. 2021 sales increased 16% to $199.4 million from $171.3. million in 2020. The increase was primarily due to the planned ramp of high-performance computing programs.

Telecommunications. 2021 sales increased 8% to $234.6 million from $217.7 million in 2020. The increase was primarily due to demand improvement for satellite programs and new broadband ramps.

Our international operations are subject to the risks of doing business abroad. See Item 1A for 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 2021 and 2020, 55% and 52%, respectively, of our sales were from international operations.

Gross Profit

Gross profit increased 17.7% to $205.9 million in 2021 from $175.0 million in 2020. Similarly, gross profit margin increased to 9.1% in 2021 from 8.5% in 2020. Both due primarily to higher revenues, mix of revenues and improved utilization.

Selling, General and Administrative (SG&A) Expenses

SG&A increased to $136.7 million in 2021 from $122.2 million in 2020. The increase was primarily due to the increase in variable compensation, medical expenses, and continued IT infrastructure investments along with reinstatement of some benefits in 2021 such as the 401(k) match that was temporarily suspended as a cost saving

measure in 2020 due to COVID. During 2021 and 2020, the provisions to accounts receivable for doubtful accounts (net of recoveries) were $0.0 million and $2.2 million, respectively.

Amortization of Intangible Assets

Amortization of intangible assets was $6.4 million in 2021 and $9.1 million in 2020. The decrease was primarily due to an intangible asset becoming fully amortized in 2020.

Restructuring Charges and Other Costs

During 2021, we recognized $9.3 million of restructuring and other costs due primarily to expenses associated with announced site closures, reduction in force and other restructuring activities. In addition, we incurred $4.4 million in costs related to asset impairments in the Americas that were the result of restructuring activities. During 2020, we recognized $13.2 million of restructuring and other costs due primarily to expenses associated with announced site closures, reduction in force and other restructuring activities. In addition, we incurred $5.7 million in charges and $1.0 million in costs related to asset impairments in the Americas and Asia, respectively. See Note 17 to the consolidated financial statements in Part II, Item 8 of this Report for additional information on our restructuring charges.

Ransomware Incident Related Costs, Net

During the fourth quarter ended December 31, 2019, ransomware incident related costs incurred totaled $12.7 million or $7.7 million, net of estimated insurance recoveries of $5.0 million. These costs were primarily comprised of certain employee related expenses and various third-party consulting services, including forensic experts, legal counsel and other IT professional expenses. During the year ended December 31, 2020, we collected $6.6 million of insurance recoveries which include the $5.0 million of estimated insurance recoveries recorded in 2019 and an additional $1.6 million recorded in 2020. During the year ended December 31, 2021, we collected an additional $3.9 million of insurance recoveries. As of December 31, 2021, the Company has collected insurance recoveries totaling $10.5 million. No further insurance recoveries are expected.

Interest Expense

Interest expense remained essentially flat at $8.5 million in 2021 from $8.4 million in 2020.

Interest Income

Interest income decreased to $0.5 million in 2021 from $1.2 million in 2020 due to lower invested cash equivalents and lower interest rates.

Income Tax Expense

Income tax expense of $9.6 million in 2021 represented an 21.2% effective tax rate for 2021, compared with $3.2 million for 2020 representing an effective tax rate of 18.3%. The higher effective tax rate in 2021 is the result of the mix of profits in our foreign and U.S. jurisdictions with a higher amount of foreign earnings being taxed in the U.S. from the global intangible low-tax income calculation method under the U.S. Tax Cuts and Jobs Act (U.S. Tax Reform).

The Company has been granted certain tax incentives, including tax holidays, for its subsidiaries in China, Malaysia, and Thailand that expire at various dates, unless extended or otherwise renegotiated and are subject to certain conditions with which the Company expects to comply. The expiration dates of these tax incentives are as follows: 2023 in China and 2028 in Thailand. The Malaysia tax incentive expired as of March 31, 2021, but the Company has applied for an extension of the Malaysia tax holiday in 2022 which will extend the tax holiday for another five years until 2026. See Note 8 to the consolidated financial statements in Part II, Item 8 of this Report.

Net Income

We reported a net income of $35.8 million, or $0.99 per diluted share for 2021, compared with a net income of $14.1 million, or $0.38 per diluted share, for 2020. The net increase of $21.7 million in 2021 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 Amended and Restated Credit Agreement (as defined below). Cash and cash equivalents and restricted cash totaled $271.7 million at December 31, 2021 and $396 million at December 31, 2020. During 2021 and 2020, we repatriated $35 million and $25 million, respectively, of foreign earnings to the U.S.

Cash used in operating activities was $2.6 million in 2021. The cash used in operations during 2021 consisted primarily of $35.8 million of net income, adjusted for $44.2 million of depreciation and amortization, a $140.0 million increase in accounts payable, and a $34.0 million increase in advance payments from customers, primarily offset by a $47.0 million increase in accounts receivable due to higher sales and a $197.9 million increase in inventories in support of meeting customer demand. Working capital was $0.7 billion at both December 31, 2021 and December 31, 2020.

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. 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, as discussed above under “COVID Pandemic Update,” we have been impacted by supply chain constraints, including shortages, longer lead times and increased transit times.

Cash used in investing activities was $41.9 million in 2021 primarily due to purchases of additional property, plant and equipment totaling $38.8 million. The purchases of property, plant and equipment were primarily for machinery and equipment in the Americas and Asia.

Cash used in financing activities was $74.0 million in 2021. Principal payments on our credit agreement and finance lease obligations totaled $155.6 million and $0.9 million, respectively, borrowings under the credit agreement totaled $150.0 million, share repurchases totaled $40.2 million, dividends paid totaled $23.3 million, and we received $0.3 million from the exercise of stock options.

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. The Amended and Restated 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 not exceeding $100 million, subject to the satisfaction of certain conditions and exceptions. As of December 31, 2021, we had $131.3 million in borrowings outstanding under the Term Loan facility and $3.9 million in letters of credit outstanding under our revolving credit facility. $246.1 million remains available for future borrowings under the 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 the Amended and Restated Credit Agreement.

The Amended and Restated 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 Amended and Restated 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, 2021, we were in compliance with all of these covenants and restrictions.

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.

As of December 31, 2021, we had cash and cash equivalents, including restricted cash, totaling $271.7 million and we have $246.1 million available for borrowings under the Amended and Restated Credit Agreement. During the next 12 months, we believe our capital expenditures will approximate $50 million to $60 million, principally for machinery and equipment to help increase our production capacity to support anticipated revenue growth and our ongoing business around the globe.

On March 6, 2018, our Board of Directors approved an expanded stock repurchase program granting us the authority to repurchase up to $250 million in common stock in addition to the $100 million approved on December 7, 2015. On October 26, 2018, the Board of Directors authorized an additional $100 million shares for repurchase above our existing program. On February 19, 2020, the Board of Directors authorized the repurchase of an additional $150 million of the Company's common stock. As of December 31, 2021, we had $164.0 million remaining under the share repurchase authorization to purchase additional shares. We are under no commitment or obligation to repurchase any particular amount of common stock.

The Company began declaring and paying quarterly dividends during the first quarter of 2018. 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. During 2021 and 2020, cash dividends paid totaled $23.3 million and $23.0 million, respectively. On December 13, 2021, 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 30, 2021. The dividend of $5.8 million was paid on January 13, 2022. 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, including the impact of the COVID pandemic. Dividend payments are not mandatory or guaranteed; there can be no assurance that the Company will continue to pay a dividend in the future.

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 Amended and Restated 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.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Management's discussion and analysis of financial condition and results of operations is based upon our consolidated financial statements, 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 pending 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 of services provided. Our contracts with customer 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 the ability to realize 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. Our valuation allowance as of December 31, 2021 of $18.7 million relates to deferred tax assets from our foreign locations.

Differences in our future operating results as compared to the estimates utilized in the determination of the valuation allowances could result in adjustments in valuation allowances in future periods. For example, a significant increase in our operations in the United States, future accretive acquisitions in the United States and any movement in the mix of profits from our international operations to the United States would result in a reduction in the valuation allowance and would increase income in the period such determination was made. Alternatively, significant economic downturns in the United States generating additional operating loss carryforwards and potential movements in the mix of profits to international locations would result in an increase in the valuation allowance and would decrease income in the period such determination was made. In addition, any significant prolonged economic downturns in some of our foreign locations would generate operating loss carryforwards and an increase in the valuation allowance, respectively.

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 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. 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 by 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 unit. An impairment loss would be recognized to the extent that the carrying amount exceeds the asset's 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, 2021 and 2020, we had goodwill of approximately $192.1 million, respectively, associated with our Americas and Asia business segments.

Based on our qualitative assessments of goodwill as of December 31, 2021, 2020 and 2019, we concluded that it was more likely than not that the fair value of our Americas and Asia business segments 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(r) 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 2022 under lease obligations and debt arrangements. Non-cancelable 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. These select long lead-time manufacturers of semiconductors and electronics components seeking to prevent customers from over-ordering quantities beyond their true demand, are now requiring all new purchase orders to have NCNR (non-cancellable, non-returnable) purchase order terms. Most purchase orders beyond this time frame are normally cancelable, however more manufacturers in the current constrained environment are looking to limit their liability and adding NCNR terms. We do not use off-balance sheet financing techniques other than traditional operating leases, 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, 2021 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, 2021 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 net sales. 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, 2021 have not been designated as accounting hedges and, therefore, changes in fair value are recorded within our consolidated statements of income.

On July 30, 2021, the Company entered 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 in the condensed consolidated balance sheets until earnings are affected by the variability of the cash flows. During the year ended December 31, 2021, the Company recorded an unrealized loss on the forward currency exchange contracts in other comprehensive income (see Note 19).

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 Amended and Restated Credit Agreement. As of December 31, 2021, we had $131.3 million outstanding on the floating rate Term Loan facility, and we have an interest rate swap agreement with a notional amount of $129.4 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 Notes to 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

(in thousands, except par value)	December 31, 2021	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 271,749	$ 390,808
Restricted cash	—	5,182
Accounts receivable, net of allowance for doubtful accounts of $788 and $1,371, respectively	355,883	309,331
Contract assets	155,243	142,779
Inventories	523,240	327,377
Prepaid expenses and other assets	41,688	26,457
Income taxes receivable	341	417
Total current assets	1,348,144	1,202,351
Property, plant and equipment, net	186,666	185,272
Operating lease right-of-use assets	99,158	79,966
Goodwill	192,116	192,116
Deferred income taxes	5,972	4,924
Other assets, net	71,824	79,606
	$ 1,903,880	$ 1,744,235
Liabilities and Shareholders' Equity		
Current liabilities:		
Current installments of long-term debt	$ 985	$ 9,161
Accounts payable	426,555	282,208
Advance payments from customers	118,124	84,122
Income taxes payable	6,164	5,572
Accrued liabilities	102,554	100,073
Total current liabilities	654,382	481,136
Long-term debt, less current installments	129,289	131,051
Operating lease liabilities	90,878	72,120
Other long-term liabilities	55,445	65,552
Deferred income taxes	84	4,788
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 – 35,213 and 36,295, respectively	3,521	3,629
Additional paid-in capital	507,447	510,405
Retained earnings	479,992	492,205
Accumulated other comprehensive loss	(17,158)	(16,651)
Total shareholders' equity	973,802	989,588
	$ 1,903,880	$ 1,744,235

See accompanying notes to consolidated financial statements.

BENCHMARK ELECTRONICS, INC. AND SUBSIDIARIES
Consolidated Statements of Income

(in thousands, except per share data)	Year ended December 31, 2021	2020	2019
Sales	$ 2,255,319	$ 2,053,131	$ 2,268,095
Cost of sales	2,049,418	1,878,083	2,082,567
Gross profit	205,901	175,048	185,528
Selling, general and administrative expenses	136,700	122,195	126,740
Amortization of intangible assets	6,384	9,099	9,461
Restructuring charges and other costs	13,699	19,970	13,101
Ransomware related incident costs (recovery), net	(3,944)	(1,350)	7,681
Income from operations	53,062	25,134	28,545
Interest expense	(8,472)	(8,364)	(6,664)
Interest income	540	1,196	3,829
Other income (expense)	277	(673)	1,559
Income before income taxes	45,407	17,293	27,269
Income tax expense	9,637	3,238	3,844
Net income	$ 35,770	$ 14,055	$ 23,425
Earnings per share:			
Basic	$ 1.00	$ 0.38	$ 0.61
Diluted	$ 0.99	$ 0.38	$ 0.60
Weighted-average number of shares outstanding:			
Basic	35,655	36,524	38,338
Diluted	36,101	36,817	38,763

See accompanying notes to consolidated financial statements.

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

(in thousands)	Year Ended December 31, 2021	2020	2019
Net income	$ 35,770	$ 14,055	$ 23,425
Other comprehensive income (loss):			
Foreign currency translation adjustments	(4,354)	4,050	(585)
Unrealized gain (loss) on derivatives, net of tax	3,370	(3,142)	(3,716)
Other	477	(800)	(1,334)
Other comprehensive income (loss)	(507)	108	(5,635)
Comprehensive income	$ 35,263	$ 14,163	$ 17,790

See accompanying notes to 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, 2018	41,357	$ 4,136	$ 554,939	$ 584,274	$ (11,124)	$ 1,132,225
Stock-based compensation expense	—	—	10,194	—	—	10,194
Shares repurchased and retired	(4,719)	(472)	(52,436)	(69,202)	—	(122,110)
Stock options exercised	82	8	1,577	—	—	1,585
Vesting of restricted stock units	311	31	(31)	—	—	—
Shares withheld for taxes	(74)	(7)	(2,224)	—	—	(2,231)
Dividends declared	—	—	—	(22,621)	—	(22,621)
Net income	—	—	—	23,425	—	23,425
Other comprehensive loss	—	—	—	—	(5,635)	(5,635)
Balances, December 31, 2019	36,957	$ 3,696	$ 512,019	$ 515,876	$ (16,759)	$ 1,014,832
Stock-based compensation expense	—	—	10,398	—	—	10,398
Shares repurchased and retired	(964)	(97)	(10,704)	(14,419)	—	(25,220)
Stock options exercised	55	5	953	—	—	958
Vesting of restricted stock units	336	34	(34)	—	—	—
Shares withheld for taxes	(89)	(9)	(2,227)	—	—	(2,236)
Dividends declared	—	—	—	(23,307)	—	(23,307)
Net income	—	—	—	14,055	—	14,055
Other comprehensive income	—	—	—	—	108	108
Balances, December 31, 2020	36,295	$ 3,629	$ 510,405	$ 492,205	$ (16,651)	$ 989,588
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)
Dividends declared	—	—	—	(23,267)	—	(23,267)
Net income	—	—	—	35,770	—	35,770
Other comprehensive loss	—	—	—	—	(507)	(507)
Balances, December 31, 2021	35,213	$ 3,521	$ 507,447	$ 479,992	$ (17,158)	$ 973,802

See accompanying notes to consolidated financial statements.

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

(in thousands)	Year Ended December 31, 2021	2020	2019
Cash flows from operating activities:			
Net income	$ 35,770	$ 14,055	$ 23,425
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Depreciation	35,003	37,739	37,112
Amortization	9,149	11,053	11,315
Provision for doubtful accounts	—	2,160	8,608
Deferred income taxes	(6,883)	(7,312)	(2,367)
Asset impairments	4,357	6,950	834
Insurance recoveries	—	—	(5,000)
(Gain) loss on the sale of property, plant and equipment	148	(155)	53
Stock-based compensation expense	15,262	10,398	10,194
Changes in operating assets and liabilities:			
Accounts receivable	(46,967)	13,586	134,926
Contract assets	(12,464)	18,282	(20,979)
Inventories	(197,867)	(10,799)	(5,238)
Prepaid expenses and other assets	(12,201)	4,080	2,494
Accounts payable	139,952	(15,553)	(121,860)
Advance payments from customers	34,002	46,611	9,254
Accrued liabilities	(508)	(9,826)	19,623
Operating leases	(167)	724	1,029
Income taxes	792	(1,555)	(10,287)
Net cash provided by (used in) operations	(2,622)	120,438	93,136
Cash flows from investing activities:			
Proceeds from sales of investments at par	—	—	50
Additions to property, plant and equipment	(38,794)	(34,584)	(32,576)
Proceeds from the sale of property, plant and equipment	239	368	259
Additions to purchased software	(3,383)	(4,935)	(2,542)
Cash received from business divestitures	—	4,714	—
Other	63	54	(54)
Net cash used in investing activities	(41,875)	(34,383)	(34,863)
Cash flows from financing activities:			
Debt issuance costs	(1,150)	—	—
Proceeds from stock options exercised	346	958	1,585
Employee taxes paid for with shares withheld	(3,174)	(2,236)	(2,231)
Dividends paid	(23,260)	(23,041)	(23,287)
Borrowings under credit agreement	150,000	110,000	—
Borrowings under finance leases	—	864	—
Principal payments on credit agreement	(155,625)	(117,500)	(5,626)
Principal payments on finance leases	(873)	(1,351)	(1,168)
Share repurchases	(40,216)	(25,220)	(122,110)
Net cash used in financing activities	(73,952)	(57,526)	(152,837)
Effect of exchange rate changes	(5,792)	3,505	418
Net (decrease) increase in cash and cash equivalents and restricted cash	(124,241)	32,034	(94,146)
Cash and cash equivalents and restricted cash at beginning of year	395,990	363,956	458,102
Cash and cash equivalents and restricted cash at end of year	$ 271,749	$ 395,990	$ 363,956

See accompanying notes to consolidated financial statements.

Notes to 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 innovative product design services, engineering services, technology solutions and advanced manufacturing services (both electronic manufacturing services and precision technology services). 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 industries: aerospace and defense (A&D), medical technologies, complex industrials, semiconductor capital equipment (semi-cap), next-generation telecommunications and advanced computing. 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 and 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 $76.2 million and $131.7 million at December 31, 2021 and 2020, 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 accounts receivable 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. During 2021, 2020 and 2019, the Company recorded $0.0 million, $2.2 million and $8.6 million in charges for a provision to accounts receivable, net of recoveries.

The following table summarizes the activity in the Company's allowance for doubtful accounts during 2021, 2020 and 2019:

(in thousands)	Balance at Beginning of Period	Charges to Operations	Deductions	Balance at End of Period
Year ended December 31, 2021:				
Allowance for doubtful accounts(1)	$ 1,371	—	(583)	$ 788
Year ended December 31, 2020:				
Allowance for doubtful accounts(1)	$ 10,085	2,160	(10,874)	$ 1,371
Year ended December 31, 2019:				
Allowance for doubtful accounts(1)	$ 1,733	10,323	(1,971)	$ 10,085

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

(e) Inventories

Inventories include material, labor and overhead and are stated at the lower of cost (principally first-in, first-out method) or net realizable value.

(f) Property, Plant and Equipment

Property, plant and equipment are stated at cost. Depreciation is calculated on the straight-line method over the useful lives of the assets – 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 on 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 we 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 statements 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. See Note 6.

(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. 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.

(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 by 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.

Goodwill is tested 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, 2021, 2020 and 2019, the Company concluded that goodwill was not impaired.

(j) Earnings Per Share

Basic earnings per share is computed using the weighted-average number of 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.

	Year Ended December 31,		
(in thousands, except per share data)	2021	2020	2019
Net income	$ 35,770	$ 14,055	$ 23,425
Denominator for basic earnings per share – weighted-average number of common shares outstanding during the period	35,655	36,524	38,338
Incremental common shares attributable to exercise of dilutive options	39	36	90
Incremental common shares attributable to outstanding restricted stock units	407	257	335
Denominator for diluted earnings per share	36,101	36,817	38,763
Basic earnings per share	$ 1.00	$ 0.38	$ 0.61
Diluted earnings per share	$ 0.99	$ 0.38	$ 0.60

Potentially dilutive securities totaling less than 0.1 million common shares in 2021, 2020 and 2019, were not included in the computation of diluted earnings per share because their effect would have been anti-dilutive.

(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. 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 product to the customer, which is generally when the goods are shipped. Revenue from design, development and engineering services is 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 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. The Company has considered the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in assessing the need for the valuation allowance.

(m) Stock-Based Compensation

All share-based payments to employees, including grants of employee stock options (which have not been awarded since 2015), are recognized in the consolidated financial statements based on their grant date fair values. The total compensation cost recognized for stock-based awards was $15.3 million, $10.4 million and $10.2 million for 2021, 2020 and 2019, respectively. The future tax benefit of these stock-based awards as of the grant date was $3.6 million, $2.4 million and $2.4 million for each of 2021, 2020 and 2019. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model. Awards of restricted stock units and performance-based restricted stock units are valued at the closing market price of the Company's common stock on the date of grant. For performance-based restricted stock units, compensation expense is based on the probability

that the performance goals will be achieved, which is monitored by management throughout the requisite service period. When it becomes probable, based on the Company's expectation of performance during the measurement period, that more or less than the previous estimate of the awarded shares will vest, an adjustment to stock-based compensation expense is recognized as a change in accounting estimate.

As of December 31, 2021, the unrecognized compensation cost and remaining weighted-average amortization period related to stock-based awards were as follows:

(in thousands)	Restricted Stock Units	Performance-based Restricted Stock Units [(1)]
Unrecognized compensation cost	$ 20,245	$ 289
Remaining weighted-average amortization period	2.4 years	1.6 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 2021, 2020 and 2019 was approximately $0.3 million, $1.0 million and $1.6 million, respectively. The actual tax benefit realized as a result of stock option exercises and the vesting of other share-based awards during 2021, 2020 and 2019 was $2.7 million, $2.1 million and $2.3 million, respectively. For 2021, 2020 and 2019, the total intrinsic value of stock options exercised was $0.5 million, $0.5 million and $0.7 million, respectively.

The Company awarded performance-based restricted stock units to employees during 2021, 2020 and 2019. 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 be 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 financial statements in accordance with U.S. GAAP with consideration given to the potential impacts of COVID. However, actual results could differ materially from these estimates and be significantly affected by the duration and spread of the COVID pandemic and its severity; the emergence and severity of its variants, including the Delta and Omicron variants; the actions to contain the virus or treat its impact, including the availability and efficacy of vaccinations (particularly with respect to emerging strains of the virus) and the rate of inoculations; general economic factors, such as increased inflation; global supply chain constraints and shortages; labor supply issues; and how quickly and to what extent normal economic and operating conditions can resume, which may not return fully to pre-pandemic levels. 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 and 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.

- 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 whose inputs are observable or whose significant value drivers are observable.
- 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 and other receivables, accounts payable, accrued liabilities and long-term debt and financing lease obligations. The Company believes that the carrying values of these instruments approximate their fair value. As of December 31, 2021, the fair value estimates for the Company's forward currency exchange contracts and the Company's interest rate swap agreement were based on Level 2 inputs of the fair value hierarchy. See Note 10.

(p) Foreign Currency

For foreign subsidiaries 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 reported in other comprehensive income. Exchange losses arising from transactions denominated in a currency other than the functional currency of the entity involved are included in other expense and totaled approximately $0.3 million, $1.8 million and $1.7 million in 2021, 2020 and 2019, respectively. These amounts include the amount of gain (loss) recognized in income 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 the fair value of the derivative is recorded in other comprehensive income to the extent the derivative is effective and recognized in the consolidated statements of income when the hedged item affects earnings. Changes in fair value of derivatives that are not designated as cash flow hedges are recorded in earnings. 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 statements of cash flows.

(r) New Accounting Pronouncements

Not Yet Adopted

In March 2020, the Financial Accounting Standards Board (FASB) issued ASU No. 2020-04, Facilitation of the Effects of Reference Rate Reform on Financial Reporting (Topic 848). The pronouncement provides temporary optional expedients and exceptions for applying U.S. GAAP to transactions affected by reference rate (e.g., LIBOR) reform if certain criteria are met to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. This update is effective as of March 12, 2020 through December 31, 2022. We will evaluate transactions or contract modifications occurring as a result of reference rate reform and determine whether to apply the optional guidance on an ongoing basis. The update is currently not expected to have a material impact on our consolidated financial statements.

The Company has determined that other recently issued accounting standards will either have no material impact on its consolidated financial position, results of operations or cash flows, or will not apply to its operations.

Note 2—Inventories

Inventory costs are summarized as follows:

	December 31,	
(in thousands)	**2021**	**2020**
Raw materials	$ 504,307	$ 312,856
Work in process	15,338	8,687
Finished goods	3,595	5,834
	$ 523,240	$ 327,377

Note 3—Property, Plant and Equipment

Property, plant and equipment consists of the following:

(in thousands)	December 31, 2021	December 31, 2020
Land	$ 5,867	$ 5,689
Buildings and building improvements	76,139	85,672
Machinery and equipment	506,652	521,382
Furniture and fixtures	10,035	10,426
Vehicles	1,125	1,142
Leasehold improvements	42,288	39,716
Construction in progress	17,719	1,679
	659,825	665,706
Less accumulated depreciation	(473,159)	(480,434)
	$ 186,666	$ 185,272

Note 4—Goodwill and Other Intangible Assets

The changes each year in goodwill allocated to the Company's reportable segments were as follows:

(in thousands)	Americas	Asia	Total
Goodwill as of December 31, 2019, 2020 and 2021	$ 154,014	$ 38,102	$ 192,116

Other assets, net consist primarily of acquired identifiable intangible assets and capitalized purchased software costs. Acquired identifiable intangible assets and purchased software as of December 31, 2021 and 2020 were as follows:

(in thousands)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	$ 100,136	$ (59,680)	$ 40,456
Purchased software costs	49,788	(34,325)	15,463
Technology licenses	26,800	(26,800)	—
Trade names and trademarks	7,800	—	7,800
Other	868	(356)	512
Intangible assets, December 31, 2021	$ 185,392	$ (121,161)	$ 64,231

(in thousands)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	$ 100,228	$ (53,429)	$ 46,799
Purchased software costs	46,183	(33,307)	12,876
Technology licenses	28,800	(26,833)	1,967
Trade names and trademarks	7,800	—	7,800
Other	868	(333)	535
Intangible assets, December 31, 2020	$ 183,879	$ (113,902)	$ 69,977

Customer relationships are being amortized on a straight-line basis over a period of 10 to 14 years. Capitalized purchased software costs are amortized straight-line over the estimated useful life of the related software, which ranges from 2 to 14 years. Technology licenses are being amortized over their estimated useful lives in proportion to the economic benefits consumed. During 2021, 2020 and 2019, $3.4 million, $4.9 million and $2.5 million,

respectively, of purchased software costs were capitalized. Amortization on the statements of cash flow for 2021, 2020 and 2019 was as follows:

	Year Ended December 31,		
(in thousands)	2021	2020	2019
Amortization of intangible assets	$ 6,384	$ 9,099	$ 9,461
Amortization of capitalized purchased software costs	2,128	1,493	1,393
Amortization of debt costs	637	461	461
	$ 9,149	$ 11,053	$ 11,315

The estimated future amortization expense of acquired intangible assets for each of the next five years is as follows (in thousands):

Year ending December 31,	Amount
2022	6,367
2023	5,979
2024	4,817
2025	4,817
2026	18,989

Note 5—Borrowing Facilities

Long-term debt outstanding as of December 31, 2021 and 2020 consists of the following:

	December 31,	
(in thousands)	2021	2020
Revolving credit facility	$ —	$ —
Term loan	131,250	136,874
Less unamortized debt issuance costs	(1,670)	(1,155)
Long-term debt	$ 129,580	$ 135,719

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.

The Amended and Restated Revolving Credit Facility is available for general corporate purposes. The Amended and Restated 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 not exceeding $100 million, subject to the satisfaction of certain conditions and exceptions.

The Term Loan Credit 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 until the maturity date.

Interest on outstanding borrowings under the Amended and Restated Credit Agreement (other than swingline loans) accrues, at the Company's option, at (a) the London Interbank Offered Rate (LIBOR) plus the Applicable Rate (as defined in the Amended and Restated Credit Agreement) of approximately 1.0% to 2.0% 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 0.5%, (ii) the Bank of America, N.A. prime rate and (iii) the one month LIBOR adjusted daily plus 1.0%) plus the Applicable Rate of approximately 0.0% to 1.0% per annum, depending on various factors.

As of December 31, 2021, a portion of the $131.3 million of the outstanding debt under the Amended and Restated Credit Agreement is effectively at a fixed interest rate of 2.928% as a result of a $129.4 million notional interest rate swap contract 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 Amended and Restated 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 Amended and Restated 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 Amended and Restated 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, 2021, the Company had $131.3 million in borrowings outstanding under the Term Loan Facility and $3.9 million in letters of credit outstanding under the Revolving Credit Facility. The Company had $246.1 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.

The aggregate maturities of long-term debt for each of the five years subsequent to December 31, 2021 are as follows: 2022, $0.8 million; 2023, $3.3 million; 2024, $4.1 million; 2025, $6.6 million; and 2026, $116.5 million.

Note 6 – Leases

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

The components of lease expense were as follows:

	Year Ended December 31,	
(in thousands)	**2021**	**2020**
Finance lease cost:		
Amortization of right-of-use assets (included in depreciation expense)	$ 444	$ 727
Interest on lease liabilities	192	428
Operating lease cost	16,155	15,930
Short-term lease cost	339	573
Variable lease cost	1,737	1,748
Total lease cost	$ 18,867	$ 19,406

	2021	2020
Other information:		
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows used for finance lease	$ 212	$ 462
Operating cash flows used for operating leases	$ 16,721	$ 15,627
Financing cash flows used for finance lease	$ 873	$ 1,351
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 32,811	$ 17,607

The lease assets and liabilities as of December 31, 2021 were as follows (in thousands):

	December 31, 2021	December 31, 2020
Finance lease right-of-use assets (included in other assets)	$ 760	$ 2,448
Operating lease right-of-use assets	$ 99,158	$ 79,966
Finance lease liability, current (included in current installments of long-term debt)	$ 165	$ 1,661
Finance lease liability, noncurrent (included in long-term debt)	$ 529	$ 2,832
Operating lease liabilities, current (included in accrued liabilities)	$ 13,465	$ 11,516
Operating lease liabilities, noncurrent	$ 90,878	$ 72,120
Weighted average remaining lease term – finance leases	3.9 years	3.0 years
Weighted average remaining lease term – operating leases	10.0 years	10.0 years
Weighted average discount rate – finance leases	4.8%	9.0%
Weighted average discount rate – operating leases	4.1%	4.4%

Future annual minimum lease payments and finance lease commitments as of December 31, 2021 were as follows (in thousands):

Year ending December 31,	Operating Leases	Finance Leases
2022	16,516	194
2023	15,030	194
2024	13,554	194
2025	12,573	178
2026	10,324	—
2027 and thereafter	60,339	—
Total minimum lease payments	$ 128,336	$ 760
Less: imputed interest	(23,993)	(66)
Present value of lease liabilities	$ 104,343	$ 694

As of December 31, 2021, the Company's future operating leases that have not yet commenced are immaterial.

Note 7—Common Stock and Stock-Based Awards Plans

Dividends

The Company began declaring and paying quarterly dividends during the first quarter of 2018. During 2021, 2020 and 2019, cash dividends paid totaled $23.3 million, $23.0 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, 2021, 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 30, 2021. The dividend of $5.8 million was paid on January 13, 2022. 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, including the impact of the COVID pandemic. Dividend payments are not mandatory or guaranteed; there can be no assurance 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 stock 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. As of December 31, 2021, the Company had $164.0 million remaining under the stock repurchase authorization.

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. 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. During 2020, the Company repurchased a total of 1.0 million common shares for an aggregate of $25.2 million at an average price of $26.16 per share. During 2019, the Company repurchased a total of 4.7 million common shares for an aggregate of $122.1 million at an average price of $25.86 per share.

Stock-Based Compensation

The Company's 2019 Omnibus Incentive Compensation Plan (the 2019 Plan) authorizes the Company, upon approval of the Compensation Committee of the Board of Directors, to grant a variety of awards, including stock options, restricted shares and restricted stock units (both time-based and performance-based) and 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 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, subject to the continued employment of the employee by 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 been in the form of restricted stock units, which vest in annually, starting on the grant date.

As of December 31, 2021, 2.2 million additional common shares were available for issuance under the Company's 2019 Plan.

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

(in thousands, except per share data)	**Number of Options**	**Weighted-Average Exercise Price**	**Weighted-Average Remaining Contractual Term (Years)**	**Aggregate Intrinsic Value**
Outstanding as of December 31, 2018	374	20.35		
Exercised	(100)	21.21		
Forfeited or expired	(4)	21.29		
Outstanding as of December 31, 2019	270	20.02		
Exercised	(76)	19.87		
Forfeited or expired	(6)	23.08		
Outstanding as of December 31, 2020	188	$ 19.98		
Exercised	(54)	19.77		
Forfeited or expired	(2)	20.16		
Outstanding and exercisable as of December 31, 2021	132	$ 20.06	1.74	$ 926

The aggregate intrinsic value in the table above is before income taxes and is calculated as the difference between the exercise price of the underlying options and the Company's closing stock price as of the last business day of 2021 for options that had exercise prices that were below the closing price.

As of December 31, 2021, 2020 and 2019, the number of options exercisable was 0.1 million, 0.2 million and 0.3 million, respectively, and the weighted-average exercise price of those options was $20.06, $19.98 and $20.02, respectively.

Restricted stock units, time-based and performance-based, remain outstanding as detailed below.

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, 2018	595	$ 28.93
Granted	632	27.36
Vested	(254)	28.09
Forfeited	(80)	28.97
Non-vested awards outstanding as of December 31, 2019	893	28.06
Granted	533	26.52
Vested	(336)	27.69
Forfeited	(64)	28.54
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

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 units outstanding as of December 31, 2018	319	$ 29.19
Granted(1)	198	27.45
Vested	(57)	31.40
Forfeited	(76)	$ 21.23
Non-vested units outstanding as of December 31, 2019	384	28.89
Granted(1)	165	28.02
Forfeited	(181)	$ 30.04
Non-vested units outstanding as of December 31, 2020	368	27.93
Granted(1)	234	28.60
Forfeited	(60)	$ 29.38
Non-vested units outstanding as of December 31, 2021	542	28.06

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

Note 8—Income Taxes

Income tax expense (benefit) based on income before income taxes consisted of the following:

(in thousands)	Year Ended December 31, 2021	2020	2019
Current:			
U.S. Federal	$ 6	$ 1,406	$ (1,697)
State and local	1,702	24	(3,567)
Foreign	14,812	9,120	11,474
	16,520	10,550	6,210
Deferred:			
U.S. Federal	(6,179)	(3,784)	1,815
State and local	(1,380)	(1,021)	1,409
Foreign	676	(2,507)	(5,590)
	(6,883)	(7,312)	(2,366)
	$ 9,637	$ 3,238	$ 3,844

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

(in thousands)	Year Ended December 31, 2021	2020	2019
United States	$ (34,930)	$ (33,790)	$ (13,756)
Foreign	80,337	51,083	41,025
	$ 45,407	$ 17,293	$ 27,269

Income tax expense differed from the amounts computed by applying the U.S. Federal statutory income tax rate to income before income taxes as a result of the following:

(in thousands)	Year Ended December 31, 2021	2020	2019
Tax at statutory rate	$ 9,536	$ 3,632	$ 5,727
State taxes, net of federal tax effect	(36)	(788)	(1,705)
Effect of foreign operations and tax incentives	(4,048)	(6,372)	(5,870)
Change in valuation allowance	(336)	(3,029)	(2,283)
Stock-based compensation	(69)	347	118
GILTI	2,104	1,667	955
Foreign tax refund benefit	(7,285)	—	—
Losses in foreign jurisdictions for which no benefit has been provided	2,608	5,798	4,379
Change in uncertain tax benefits reserve	8,858	(31)	200
Other	(1,695)	2,014	2,323
Total income tax expense	$ 9,637	$ 3,238	$ 3,844

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 (Transition Tax) 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, effective January 1, 2018. The Company recorded the effects of the changes in the 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, US tax credit carryforwards, and foreign tax credit carryforwards that were allowed to be utilized against the 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, 2021 of $54.7 million. The Company intends to pay this liability over the remaining four year payment period as prescribed by the U.S. Tax Reform and regulatory guidance issued by the IRS. $48.3 million of the Transition Tax liability is included in other long term liabilities. Payments for years subsequent to December 31, 2021 are as follows: 2022, $6.4 million; 2023, $12.1 million; 2024, $16.1 million; and 2025, $20.1 million.

During 2021 and 2020, the Company repatriated $35.0 million and $25.0 million, respectively, of foreign earnings to the U.S. As of December 31, 2021, the Company has approximately $365.2 million in cumulative undistributed foreign earnings of 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 is considered to be non-permanently reinvested and is 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 $4.6 million of unrecognized deferred tax liability 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 taxes on cash distributions.

During 2021, the Company recorded an additional tax benefit of $7.3 million with respect to a refund claim of foreign cash taxes of $16.5 million that was filed in 2021. $9.2 million of the total refund claim was recorded previously in 2018.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities are presented below:

	December 31,	
(in thousands)	**2021**	**2020**
Deferred tax assets:		
Carrying value of inventories	$ 2,704	$ 3,470
Accrued liabilities and allowances deductible for tax purposes on a cash basis	10,592	13,086
Goodwill	1,320	1,704
Stock-based compensation	3,741	2,559
Operating right-of-use lease liabilities	24,851	20,003
Net operating loss carryforwards	17,417	19,120
Tax credit carryforwards	4,629	3,368
Interest rate swap liabilities	1,133	2,263
Other	5,961	5,025
	72,348	70,598
Less: valuation allowance	(18,702)	(19,038)
Net deferred tax assets	53,646	51,560
Deferred tax liabilities:		
Plant and equipment, due to differences in depreciation	(4,887)	(7,899)
Operating right-of-use lease assets	(24,590)	(19,742)
Intangible assets, due to differences in amortization	(11,687)	(14,078)
Foreign withholding tax	(4,902)	(6,102)
Other	(1,692)	(3,603)
Gross deferred tax liability	(47,758)	(51,424)
Net deferred tax liability	$ 5,888	$ 136
The net deferred tax liability is classified as follows:		
Long-term asset	$ 5,972	$ 4,924
Long-term liability	(84)	(4,788)
Total	$ 5,888	$ 136

All deferred taxes are classified as non-current on the balance sheet as of December 31, 2021 and 2020. All deferred tax assets and liabilities are offset and presented as a single net noncurrent amount by each tax jurisdiction.

The net change in the total valuation allowance for 2021, 2020 and 2019 was a $0.3 million decrease, a $3.0 million increase and a $2.3 million increase, 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. 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, 2021.

As of December 31, 2021, the Company had $0.6 million in U.S. Federal operating loss carryforwards which will expire from 2027 to 2036; state operating loss carryforwards of approximately $8.1 million which will expire from 2023 to 2041; foreign operating loss carryforwards of approximately $12.0 million with indefinite carryforward periods; and foreign operating loss carryforwards of approximately $49.0 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 $1.8 million which will expire at varying dates through 2026. The Company also has U.S. research and development tax credit carryforwards of $2.9 million which will expire from 2038 through 2041.

The Company has been granted certain tax incentives, including tax holidays, for its subsidiaries in China, Malaysia, and Thailand that expire at various dates, unless extended or otherwise renegotiated and are subject to certain conditions with which the Company expects to comply. The expiration dates of these tax incentives are as follows: 2023 in China and 2028 in Thailand. The Malaysia tax incentive expired as of March 31, 2021, but the Company has applied for an extension of the Malaysia tax holiday in 2022 which will extend the tax holiday for another five years until 2026. The net impact of these tax incentives was to lower income tax expense for 2021, 2020, and 2019 by approximately $7.7 million (approximately $0.21 per diluted share), $7.4 million (approximately $0.20 per diluted share) and $5.0 million (approximately $0.13 per diluted share), respectively, as follows:

	Year Ended December 31,		
(in thousands)	**2021**	**2020**	**2019**
China	$ 443	$ —	$ —
Malaysia	$ 1,946	$ 4,945	3,010
Thailand	5,360	2,496	2,025
	$ 7,749	$ 7,441	$ 5,035

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 financial statements. As of December 31, 2021, the total amount of the reserve for uncertain tax benefits including interest and penalties was $9.5 million. A reconciliation of the beginning and ending amount of unrecognized tax benefits, excluding interest and penalties, is as follows:

	December 31,		
(in thousands)	**2021**	**2020**	**2019**
Balance as of January 1	$ 499	$ 513	$ 313
Additions related to current year tax positions	7,424	—	200
Additions related to prior year tax positions	1,575	—	—
Decreases related to prior year tax positions	(138)	—	—
Decreases related to lapse of statutes	(239)	(14)	—
Balance as of December 31	$ 9,121	$ 499	$ 513

During 2021, the Company released $138.0 thousand of uncertain tax benefits related to prior year tax positions and $239.0 thousand of uncertain tax benefits related to lapse of statutes. During 2021, the Company recorded additional uncertain tax benefits related to prior year and current tax positions of $1.6 million and $7.4 million, respectively. During 2020, the Company released $14.0 thousand of uncertain tax benefits related to prior year tax positions. During 2019, the Company recorded $0.2 million of uncertain tax benefits related to prior year tax positions.

The reserve is classified as a current or long-term liability in the consolidated balance sheets 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 income tax benefits as a component of current income tax expense. The amount of accrued potential interest on unrecognized tax benefits included in the reserve as of December 31, 2021 is $328.0 thousand. The reserve for potential penalties is $17.0 thousand. The amount of accrued potential interest or unrecognized tax benefits included in the reserve as of December 31, 2020 is $91.0 thousand. The reserve for potential penalties is $17.0 thousand. The Company did not record any interest and penalties during 2020 or 2019.

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 2012 to 2021. 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 ten largest customers represented 47%, 41% and 38% of total sales for 2021, 2020 and 2019, respectively. Sales to our largest customers were as follows for the indicated periods:

	Year ended December 31,		
(in thousands)	**2021**	**2020**	**2019**
Applied Materials, Inc. and subsidiaries	$ 353,673	$ 241,522	$ *

* amount is less than 10% of total sales.

During 2021 and 2020, net sales attributable to our largest customer were reported in the Americas and Asia reportable segments.

Note 10—Financial Instruments and Concentration of Credit Risk

The Company's financial instruments include cash equivalents, accounts receivable, other receivables, accounts payable, accrued liabilities and long-term debt. The Company believes that the carrying values of these instruments approximate fair value because of their short-term nature. 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.

On July 30, 2021, the Company entered into forward currency exchange contracts designated as cash flow hedges of forecasted foreign currency expenses with a notional amount of $10.5 million as of December 31, 2021. Changes in the fair value of the derivatives are recorded in accumulated other comprehensive loss in the condensed consolidated balance sheets until earnings are affected by the variability of the cash flows. During the year ended December 31, 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 and transferred unrealized losses $0.4 million to cost of sales (See Note 19). The Company also has forward currency exchange contracts in place as of December 31, 2021 that have not been designated as accounting hedges and, therefore, changes in fair value are recorded within the condensed consolidated statements of income.

As of December 31, 2021, 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 and Europe.

The Company has an interest rate swap agreement with a notional amount of $129.4 million and $136.9 million as of December 31, 2021 and 2020, respectively, to hedge a portion of its interest rate exposure on outstanding borrowings under the Amended and Restated Credit Agreement. Under this interest rate swap agreement, the Company receives variable rate interest payments based on the one-month LIBOR rate and pays fixed rate interest payments. The fixed interest rate for the contract is 2.928%. The effect of this swap is to convert a portion of the floating rate interest expense on the borrowing under the Amended and Restated Credit Agreement to fixed interest rate expense. Based on the terms of the interest rate swap contract and the underlying borrowings outstanding under the Amended and Restated 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 other comprehensive income on the accompanying consolidated balance sheets until earnings are affected by the variability of cash flows. As of December 31, 2017, the Company had an interest rate swap agreement with a notional amount of $155.3 million with a fixed interest rate of 1.4935%. During 2018, the Company terminated this agreement for $3.5 million and the gain was amortized to offset interest expense over the remaining term of the swap agreement which ended November 2020.

The fair value of the interest rate swap agreements was a $4.3 million liability as of December 31, 2021 and a $9.0 million liability as of December 31, 2020 recorded in accrued liabilities in the consolidated balance sheets. During the year ended December 31, 2021, the Company recorded unrealized gains of $4.7 million ($3.5 million net of tax) on the swaps in other comprehensive loss. During the year ended December 31, 2020 the Company recorded unrealized losses of $2.7 million ($2.0 million net of tax) on the swap in other comprehensive loss and transferred unrealized gains of $1.5 million ($1.1 million net of tax) on the terminated swap to interest expense. During the year ended December 31, 2019, the Company recorded unrealized losses of $3.3 million ($2.5 million net of tax) on the swap in other comprehensive loss and transferred unrealized gains of $1.7 million ($1.2 million net of tax) on the terminated swap to interest expense. See Note 19.

As of December 31, 2021, the fair value estimate for the Company's interest rate swap agreement were based on Level 2 inputs of the fair value hierarchy, as we obtained the valuation from a third party active in relevant markets. The valuation of the swap is primarily measured through various pricing models or discounted cash flow analysis that incorporate observable market parameters, such as interest rate yield curves and volatility.

The following table presents the fair value of the Company's derivative instruments:

	Fair Values of Derivative Instrument	
	Liability Derivatives	
	December 31,	
(in thousands)	**2021**	**2020**
Derivatives designated as hedging instruments		
Forward currency exchange contracts	$ 178	$ —
Interest rate swap	$ 4,332	$ 9,011

Financial instruments that subject the Company to credit risk consist of cash and cash equivalents and 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 to well established companies, (ii) ongoing credit evaluation of customers, and (iii) frequent contact with customers, thus enabling management to monitor current changes in business operations and to respond accordingly. Management considers these concentrations of credit risks in establishing our allowance for doubtful accounts and believes these allowances are adequate. The Company had one customer whose gross accounts receivable exceeded 10% of total gross accounts receivable as of December 31, 2021. That customer represented 15% of our total gross accounts receivable.

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 any needed components during periods of allocation could cause delays in manufacturing and could adversely affect results of operations.

Note 12—Accounts Receivable Sale Program

As of December 31, 2021, 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 $120.0 million of specific accounts receivable at any one time.

During the years ended December 31, 2021, 2020 and 2019, the Company sold $394.6 million, $305.8 million and $284.0 million, respectively, of accounts receivable under this program, and in exchange, the Company received cash proceeds of $394.0 million, $305.2 million and $283.2 million, respectively, net of the discount. The loss on the sale resulting from the discount was recorded to other expense within the 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. 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 operating segments is as follows:

(in thousands)	Year Ended December 31, 2021	2020	2019
Net sales:			
Americas	$ 1,203,544	$ 1,209,032	$ 1,428,795
Asia	912,560	746,661	741,630
Europe	228,834	174,547	176,384
Elimination of intersegment sales	(89,619)	(77,109)	(78,714)
	$ 2,255,319	$ 2,053,131	$ 2,268,095
Depreciation and amortization:			
Americas	$ 20,589	$ 22,802	$ 21,784
Asia	10,660	11,018	11,108
Europe	2,878	2,842	3,035
Corporate	10,025	12,130	12,500
	$ 44,152	$ 48,792	$ 48,427
Income from operations:			
Americas	$ 45,807	$ 32,629	$ 55,749
Asia	90,725	63,880	47,862
Europe	11,054	6,077	6,983
Corporate and intersegment eliminations	(94,524)	(77,452)	(82,049)
	53,062	25,134	28,545
Interest expense	(8,472)	(8,364)	(6,664)
Interest income	540	1,196	3,829
Other income (expense)	277	(673)	1,559
Income before income taxes	$ 45,407	$ 17,293	$ 27,269
Capital expenditures:			
Americas	$ 28,673	$ 24,392	$ 15,822
Asia	4,253	7,836	9,493
Europe	6,072	1,838	3,702
Corporate	3,179	5,453	6,101
	$ 42,177	$ 39,519	$ 35,118
Total assets:			
Americas	$ 885,574	$ 777,658	$ 792,180
Asia	663,881	532,793	533,508
Europe	178,263	146,277	139,977
Corporate	176,162	287,507	294,209
	$ 1,903,880	$ 1,744,235	$ 1,759,874

Geographic net sales information provided below reflects the destination of the product shipped. Long-lived assets information is based on the physical location of the asset and includes property, plant and equipment, net, operating lease right-of-use assets, and other long-term assets, net.

(in thousands)	Year Ended December 31, 2021	2020	2019
Geographic net sales:			
United States	$ 1,328,754	$ 1,322,728	$ 1,508,966
Singapore	326,688	$ 222,285	$ 199,934
Other Asia	202,792	168,500	191,095
Europe	285,017	240,672	266,216
Other	112,068	98,946	101,884
	$ 2,255,319	$ 2,053,131	$ 2,268,095
Long-lived assets:			
United States	$ 240,430	$ 235,193	$ 247,074
Asia	65,327	69,669	76,507
Europe	29,588	18,002	20,258
Other	22,303	21,980	23,563
	$ 357,648	$ 344,844	$ 367,402

Note 14 – Revenue

The Company’s revenues are generated primarily from 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 accounts receivable when the entitlement to payment becomes unconditional.

Taxes assessed by governmental authorities that are both imposed on and concurrent with a specific revenue-producing transaction, that are 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

In the following tables, revenue is disaggregated by market sector. The tables also include a reconciliation of the disaggregated revenue with the reportable operating segments.

	Reportable Operating Segments Year Ended December 31, 2021			
(in thousands)	**Americas**	**Asia**	**Europe**	**Total**
Market Sector:				
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
Computing	163,423	35,842	140	199,405
Telecommunications	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	$ 1,203,544	$ 912,560	$ 228,834	$ 2,344,938

	Year Ended December 31, 2020			
(in thousands)	**Americas**	**Asia**	**Europe**	**Total**
Market Sector:				
Industrials	$ 110,063	$ 196,209	$ 66,789	$ 373,061
A&D	401,599	—	21,972	423,571
Medical	255,246	211,567	31,657	498,470
Semi-Cap	158,380	159,016	51,578	368,974
Computing	140,109	31,228	—	171,337
Telecommunications	96,937	119,987	794	217,718
External revenue	1,162,334	718,007	172,790	2,053,131
Elimination of intersegment sales	46,698	28,654	1,757	77,109
Segment revenue	$ 1,209,032	$ 746,661	$ 174,547	$ 2,130,240

	Year Ended December 31, 2019			
(in thousands)	**Americas**	**Asia**	**Europe**	**Total**
Market Sector:				
Industrials	$ 165,163	$ 214,575	$ 73,838	$ 453,576
A&D	400,326	—	31,597	431,923
Medical	263,688	167,296	17,218	448,202
Semi-Cap	102,908	123,764	51,093	277,765
Computing	308,077	53,051	85	361,213
Telecommunications	143,686	149,890	1,840	295,416
External revenue	1,383,848	708,576	175,671	2,268,095
Elimination of intersegment sales	44,947	33,054	713	78,714
Segment revenue	$ 1,428,795	$ 741,630	$ 176,384	$ 2,346,809

During 2021, 2020 and 2019, 90.3%, 90.2% and 91.5%, respectively, of the Company's revenue was recognized as products and services were transferred over time.

The timing of revenue recognition, billings and cash collections result in billed accounts receivable, contract assets and advance payments from customers.

As of December 31, 2021 and 2020, the Company had $155.2 million and $142.8 million, respectively, in contract assets from contracts with customers. The contract assets primarily relate to the Company's right to consideration for work completed but not billed at the reporting date. The contract assets are transferred to accounts receivable when the rights become unconditional.

(in thousands)	Year Ended December 31, 2021	2020
Beginning balance as of December 31	$ 142,779	$ 161,061
Revenue recognized	2,037,206	1,848,807
Amounts collected or invoiced	(2,024,742)	(1,867,089)
Ending balance as of December 31	$ 155,243	$ 142,779

As of December 31, 2021 and 2020, the Company had $118.1 million and $84.1 million, respectively, in advance payments from customers. Of those amounts $79.9 million and $54.9 million, respectively, were related to both customer deposits and prepayments of inventory and $38.2 million and $29.2 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 2021, 2020 and 2019, the Company made contributions to the plans of approximately $3.3 million, $3.1 million and $6.2 million, respectively. The Company also has defined contribution benefit plans for certain of its international employees primarily dictated by the custom of the regions in which it operates. During each of 2021, 2020 and 2019, the Company made contributions to the international plans of approximately $0.1 million.

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

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 process of restructuring entails moving production between facilities, reducing staff levels, realigning our business processes, reorganizing our management and other activities.

The Company recognized restructuring charges during 2021, 2020 and 2019 primarily related to the closure of facilities in the Americas and capacity reductions in the workforce of certain facilities across various regions in Asia and Europe, respectively.

The following table summarizes the 2021 activity in accrued restructuring, which is included in accrued liabilities in the condensed consolidated balance sheets, related to various restructuring activities initiated prior to December 31, 2021:

(in thousands)	Balance as of December 31, 2020	Restructuring Charges	Cash Payment	Non-Cash Activity	Foreign Exchange Adjustments	Balance as of December 31, 2021
Restructuring:						
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	$ 4,454	$ 9,345	$ (9,555)	$ (733)	$ —	$ 3,511

In addition, during 2021, we incurred $4.4 million in costs related to asset impairments in the Americas.

The following table summarizes the 2020 activity in accrued restructuring, which is included in accrued liabilities in the condensed consolidated balance sheets, related to various restructuring activities initiated prior to December 31, 2020:

(in thousands)	Balance as of December 31, 2019	Restructuring Charges	Cash Payment	Non-Cash Activity	Foreign Exchange Adjustments	Balance as of December 31, 2020
Restructuring:						
Severance	$ 3,956	$ 7,010	$ (6,666)	$ (304)	$ —	$ 3,996
Lease facility costs	—	3,716	(2,394)	(1,272)	—	50
Other exit costs	—	2,174	(655)	(1,111)	—	408
Total	$ 3,956	$ 12,900	$ (9,715)	$ (2,687)	$ —	$ 4,454

In addition, during 2020, the Company incurred $5.7 million and $1.0 million in costs related to asset impairments in the Americas and Asia, respectively.

The following table summarizes the 2019 activity in accrued restructuring, which is included in accrued liabilities in the condensed consolidated balance sheets, related to various restructuring activities initiated prior to December 31, 2019:

(in thousands)	Balance as of December 31, 2018	Restructuring Charges	Cash Payment	Non-Cash Activity	Foreign Exchange Adjustments	Balance as of December 31, 2019
Restructuring:						
Severance	$ 282	$ 6,449	$ (2,775)	$ —	$ —	$ 3,956
Lease facility costs	—	—	—	—	—	—
Other exit costs	1,053	2,058	(2,156)	(944)	(11)	—
Total	$ 1,335	$ 8,507	$ (4,931)	$ (944)	$ (11)	$ 3,956

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.

We have insurance coverage, including cyber insurance, and worked diligently with our insurance carriers on claims to recover costs incurred, as discussed further below.

In 2019, ransomware incident related costs incurred totaled $12.7 million or $7.7 million, net of estimated insurance recoveries of $5.0 million. These costs were primarily comprised of certain employee related expenses and various third-party consulting services, including forensic experts, legal counsel and other IT professional expenses. During the year ended December 31, 2020, the Company collected $6.6 million of insurance recoveries, which included $5.0 million of estimated insurance recoveries recorded in 2019 and an additional $1.6 million recorded in 2020. During the year ended December 31, 2021, the Company collected an additional $3.9 million of insurance

recoveries. As of December 31, 2021, the Company has collected insurance recoveries totaling $10.5 million. No further insurance recoveries are expected.

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, 2018	$ (11,840)	116	600	$ (11,124)
Other comprehensive gain (loss) before reclassifications	(585)	(2,474)	(1,334)	(4,393)
Amounts reclassified from accumulated other comprehensive loss	—	(1,242)	—	(1,242)
Net current period other comprehensive gain (loss)	(585)	(3,716)	(1,334)	(5,635)
Balances, December 31, 2019	(12,425)	(3,600)	(734)	(16,759)
Other comprehensive gain (loss) before reclassifications	4,050	(2,024)	(800)	1,226
Amounts reclassified from accumulated other comprehensive loss	—	(1,118)	—	(1,118)
Net current period other comprehensive gain (loss)	4,050	(3,142)	(800)	108
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
Net current period other comprehensive gain (loss)	(4,354)	3,370	477	(507)
Balances, December 31, 2021	$ (12,729)	$ (3,372)	$ (1,057)	$ (17,158)

See Note 10 for further explanation of the change in derivative instruments that is recorded to accumulated other comprehensive loss.

Note 20—Supplemental Cash Flow and Non-Cash Information

The following is additional information concerning supplemental disclosures of cash payments.

(in thousands)	Year Ended December 31, 2021	2020	2019
Income taxes paid, net	$ 20,558	$ 18,071	$ 16,895
Interest paid	$ 8,207	$ 9,048	$ 8,347
Non-cash investing activity:			
Additions to property, plant and equipment in accounts payable	$ 8,614	$ 3,164	$ 9,119

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, 2021 and 2020, 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, 2021, 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, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, 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, 2021 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 $9.6 million for the year ended December 31, 2021. 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.

KPMG LLP

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

Phoenix, Arizona
February 25, 2022

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 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, 2021.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2021 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. Although we have modified our workplace practices globally due to the pandemic, resulting in some of our employees working remotely, this has not materially affected our internal control over financial reporting. We are continually monitoring and assessing the impacts and disruptions caused by the pandemic to ensure there are no material effects on our internal control over financial reporting and to minimize such impacts on their design and operating effectiveness.

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.***

Not applicable.

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 2022 Annual Meeting of Shareholders (the 2022 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, 2021 and is incorporated herein by reference.

Item 11. Executive Compensation.

The information required by this item can be found in the 2022 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, 2021:

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	1,730,509[1]	$20.06[1]	2,237,556

[1] Includes 1,598,552 restricted stock units and performance 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 2022 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 2022 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 2022 Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. *Exhibits and Financial Statement Schedules.*

(a) (1) Financial statements of the Company filed as part of this Report:

See Part II, Item 8 - Financial Statements and Supplementary Data of this Report.

See accompanying Report of Independent Registered Public Accounting Firm incorporated herein by reference.

(b) Exhibits

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	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))
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 [3]	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))
10.17	Cooperation Agreement, dated as of December 19, 2016, by and among the Company and Engaged Capital, LLC, Engaged Capital Flagship Master Fund, LP, Engaged Capital Flagship Fund, LP, Engaged Capital Flagship Fund, Ltd, and Engaged Capital Holdings, LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated December 19, 2016 (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)
10.21 [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 [2]	Subsidiaries of Benchmark Electronics, Inc.
23 [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 [2]	Section 1350 Certification of Chief Executive Officer
32.2 [2]	Section 1350 Certification of Chief Financial Officer

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/furnished herewith.

(3) 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 25, 2022

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 25, 2022
/s/ Jeffrey W. Benck Jeffrey W. Benck	President, Chief Executive Officer and Director (principal executive officer)	February 25, 2022
/s/ Roop K. Lakkaraju Roop K. Lakkaraju	Chief Financial Officer (principal financial and accounting officer)	February 25, 2022
/s/ Anne De Greef-Safft Anne De Greef-Safft	Director	February 25, 2022
/s/ Douglas G. Duncan Douglas G. Duncan	Director	February 25, 2022
/s/ Robert K. Gifford Robert K. Gifford	Director	February 25, 2022
/s/ Ramesh Gopalakrishnan Ramesh Gopalakrishnan	Director	February 25, 2022
/s/ Kenneth T. Lamneck Kenneth T. Lamneck	Director	February 25, 2022
/s/ Jeffrey S. McCreary Jeffrey S. McCreary	Director	February 25, 2022
/s/ Lynn A. Wentworth Lynn A. Wentworth	Director	February 25, 2022

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Corporate and Shareholder Data

EXECUTIVE OFFICERS

Jeffrey W. Benck [4]
President and
Chief Executive Officer

Roop K. Lakkaraju [4]
Executive Vice President,
Chief Financial Officer

Michael D. Buseman [4]
Executive Vice President,
Chief Operating Officer

Stephen J. Beaver, Esq. [4]
Senior Vice President,
General Counsel and
Chief Legal Officer,
Corporate Secretary

Robert B. Crawford [4]
Senior Vice President,
Chief Revenue Officer

Scott M. Hicar
Senior Vice President,
Chief Information Officer

Jan M. Janick
Senior Vice President,
Chief Technology Officer

Rhonda R. Turner
Senior Vice President,
Chief Human Resources Officer

LEGAL COUNSEL

Snell & Wilmer L.L.P.
Phoenix, Arizona

(1) Chairman of the Board

(2) Member of Audit Committee

(3) Member of Human Capital and Compensation Committee

(4) Named Executive Officer

(5) Member of Nominating, Sustainability and Governance Committee

INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS

KPMG LLP
Phoenix, Arizona

DIRECTORS

David W. Scheible [1] [3] [5]
Chairman of the Board
of the Company and Current
Operating Advisor to the funds
of Clayton, Dubilier & Rice

Anne De Greef-Safft [3] [5]
Advisor to Private Equity Firms
and their Portfolio Companies
through ADS Consulting

Douglas G. Duncan [2] [5]
Retired President and Chief
Executive Officer
FedEx Freight Corporation

Robert K. Gifford [3]
President and
Chief Operating Officer
BeachBody LLC

Ramesh Gopalakrishnan [2]
President and Chief Operating
Officer of Wind, TPI Composites,
Inc.

Kenneth T. Lamneck [2] [5]
Retired President and
Chief Executive Officer
Insight Enterprises, Inc.

Jeffrey S. McCreary [3] [5]
Retired Interim President and
Chief Executive Officer
Isola Group

Lynn A. Wentworth [2]
Chair of the Audit Committee
of Graphics Packaging Holding
Company

Jeffrey W. Benck [4]
President and
Chief Executive Officer
Benchmark Electronics, Inc.

Stock Trading

The common shares of Benchmark Electronics, Inc. trade on the New York Stock Exchange under the symbol BHE.

Stock Transfer Agent and Registrar

Communications concerning stock transfer requirements, lost certificates or changes of address should be directed to:

Computershare Trust Company, N.A.
P.O. Box 505000
Louisville, Kentucky 40233
800-962-4284

SEC Form 10-K

Our annual report on Form 10-K that has been filed with the Securities and Exchange Commission (excluding exhibits) is included as part of this Annual Report. A copy of exhibits will be provided without charge upon written request to:

Investor Relations
Benchmark Electronics, Inc.
56 South Rockford Drive
Tempe, Arizona 85281

Available Information

We make available free of charge through our internet website (www.bench com) our annual report 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 Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file them with, or furnish them to, the Securities and Exchange Commission.

Financial Mailing List

Shareholders whose stock is held in trust or by a brokerage firm may receive timely financial mailings directly from Benchmark by writing to Investor Relations at the above address.

Annual Meeting

Shareholders are invited to attend the Benchmark Electronics, Inc. annual meeting, which will be held at

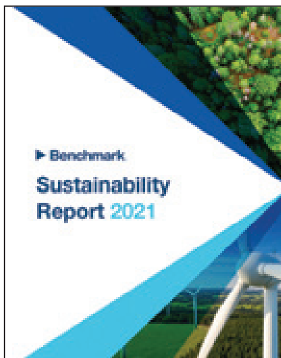
Benchmark Electronics, Inc.
56 South Rockford Drive
Tempe, Arizona 85281
Wednesday, May 25, 2022
8:00 a.m. Arizona time

Corporate Headquarters

Benchmark Electronics, Inc.
56 S Rockford Dr
Tempe, AZ 85281
USA

833-BENCH-00 (833.236.2400)
info@bench.com

www.bench.com



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2021 Sustainability Report

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