

SANMINA-SCI CORP  
Form 10-K  
November 24, 2010  
Table of Contents

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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 October 2, 2010

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 0-21272

Sanmina-SCI Corporation

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

77-0228183

(I.R.S. Employer Identification Number)

2700 N. First St., San Jose, CA

(Address of principal executive offices)

95134

(Zip Code)

Registrant's telephone number, including area code:

(408) 964-3500

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

Common Stock, \$0.01 Par Value

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

None

(Title of Class)

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

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 Securities 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 Exchange Act 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 and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

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

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant was approximately \$962,426,240 as of April 3, 2010, based upon the last reported sale price of the common stock on the Nasdaq Global Select Market on April 2, 2010.

As of November 15, 2010, the number of shares outstanding of the registrant's common stock was 79,811,960.

#### DOCUMENTS INCORPORATED BY REFERENCE

Certain information is incorporated into Part III of this report by reference to the Proxy Statement for the registrant's annual meeting of stockholders to be held on January 20, 2011 to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Form 10-K.

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Table of Contents

## SANMINA-SCI CORPORATION

## INDEX

## PART I

Item 1.	Business	<u>3</u>
Item 1A.	Risk Factors Affecting Operating Results	<u>18</u>
Item 1B.	Unresolved Staff Comments	<u>28</u>
Item 2.	Properties	<u>29</u>
Item 3.	Legal Proceedings	<u>30</u>
Item 4.	(Removed and Reserved)	<u>30</u>

## PART II

Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	<u>31</u>
Item 6.	Selected Financial Data	<u>33</u>
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>34</u>
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	<u>47</u>
Item 8.	Financial Statements and Supplementary Data	<u>47</u>
Item 9.	Changes In and Disagreements With Accountants on Accounting and Financial Disclosure	<u>86</u>
Item 9A.	Controls and Procedures	<u>86</u>
Item 9B.	Other Information	<u>86</u>

## PART III

Item 10.	Directors and Executive Officers of the Registrant	<u>87</u>
Item 11.	Executive Compensation	<u>87</u>
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	<u>87</u>
Item 13.	Certain Relationships and Related Transactions	<u>87</u>
Item 14.	Principal Accountant Fees and Services	<u>87</u>

## PART IV

Item 15.	Exhibits and Financial Statement Schedules	<u>88</u>
Signatures		<u>94</u>

Table of Contents

PART I

Item 1. Business

Overview

We are an independent global provider of customized, integrated electronics manufacturing services, or EMS. We provide these comprehensive services primarily to original equipment manufacturers, or OEMs, in the communications, enterprise computing and storage, multimedia, industrial and semiconductor capital equipment, defense and aerospace, medical, CleanTech and automotive industries. The combination of our advanced technologies, extensive manufacturing expertise and economies of scale enables us to meet the specialized needs of our customers in these markets in a cost-effective manner. We were originally incorporated in Delaware in May 1989.

Our end-to-end services in combination with our global expertise in supply chain management enables us to manage our customers' products throughout their life cycles. These services include:

- product design and engineering, including initial development, detailed design, prototyping, validation, preproduction services and manufacturing design release;
- manufacturing of components, subassemblies and complete systems;
- final system assembly and test;
- direct order fulfillment and logistics services; and
- after-market product service and support.

Our manufacturing services are vertically integrated, allowing us to manufacture key system components and subassemblies for our customers. By manufacturing key system components and subassemblies ourselves, we enhance continuity of supply and reduce costs for our customers. In addition, we are able to have greater control over the production of our customers' products. System components and subassemblies that we manufacture include high-end printed circuit boards, printed circuit board assemblies, backplanes and backplane assemblies, enclosures, cable assemblies, precision machining, optical components and modules, and memory modules.

We manufacture products in 18 countries on four continents. We seek to locate our facilities near our customers and our customers' end markets in major centers for the electronics industry or in lower cost locations. Many of our plants located near our customers and their end markets are focused primarily on final system assembly and test, while our plants located in lower cost areas engage primarily in high volume, less complex component and subsystem manufacturing and assembly.

We have become one of the largest global EMS providers by capitalizing on our competitive strengths including our:

- end-to-end services;
- product design and engineering resources;

- vertically integrated manufacturing services;
- advanced technologies;
- global capabilities;
- customer-focused organization;
- expertise in serving diverse end markets; and
- experienced management team.

3

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## Table of Contents

### Industry Overview

EMS companies are the principal beneficiaries of the increased use of outsourced manufacturing services by the electronics and other industries. Outsourced manufacturing refers to an OEM's use of EMS companies, rather than internal manufacturing capabilities, to manufacture their products. Historically, EMS companies generally manufactured only components or partial assemblies. As the EMS industry has evolved, OEMs have increased their reliance on EMS companies for additional, more complex manufacturing services including design services. Some EMS companies now often manufacture and test complete systems and manage the entire supply chains of their customers. Industry leading EMS companies offer end-to-end services including product design and engineering, manufacturing, final system assembly and test, direct order fulfillment, after-market product service and support, and global supply chain management.

We believe increased outsourced manufacturing by OEMs will continue because it allows OEMs to:

**Reduce Operating Costs and Capital Investment.** In the current economic environment, OEMs are under significant pressure to reduce manufacturing costs and capital expenditures. EMS companies can provide OEMs with flexible, cost-efficient manufacturing services through their manufacturing expertise and more significant economies of scale. In addition, as OEM products have become more technologically advanced, the manufacturing and system test processes have become increasingly automated and complex, requiring significant capital investments. EMS companies enable OEMs to access technologically advanced manufacturing and test equipment and facilities without additional capital expenditures.

**Focus on Core Competencies.** The electronics industry is highly competitive and subject to rapid technological change. As a result, OEMs increasingly are focusing their resources on activities and technologies in which they expect to add the greatest value. By offering comprehensive manufacturing services and supply chain management, EMS companies enable OEMs to focus on their core competencies including next generation product design and development as well as marketing and sales.

**Access Leading Design and Engineering Capabilities.** The design and engineering of electronic products has become more complex and sophisticated and in an effort to become more competitive, OEMs are increasingly relying on EMS companies to provide product design and engineering support services. EMS companies' design and engineering services can provide OEMs with improvements in the performance, cost and time required to bring products to market. EMS companies are providing more sophisticated design and engineering services to OEMs, including the design and engineering of complete products following an OEM's development of a product concept.

**Improve Supply Chain Management and Purchasing Power.** OEMs face challenges in planning, procuring and managing their inventories efficiently due to fluctuations in customer demand, product design changes, short product life cycles and component price fluctuations. EMS companies employ sophisticated production management systems to manage their 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. EMS companies are significant purchasers of electronic components and other raw materials and can capitalize on the economies of scale associated with their relationships with suppliers to negotiate price discounts, obtain components and other raw materials that are in short supply and return excess components. EMS companies' expertise in supply chain management and their relationships with suppliers across the supply chain enable them to help OEMs reduce their cost of goods sold and inventory exposure.

**Access Global Manufacturing Services.** OEMs seek to reduce their manufacturing costs by having EMS companies manufacture their products in the lowest cost locations that are appropriate for their products and end customers.

OEMs also are increasingly requiring particular products to be manufactured simultaneously in multiple locations, often near end users, to bring products to market more quickly, reduce shipping and logistics costs and to meet local product content requirements. Global EMS companies are able to satisfy these requirements by capitalizing on their geographically dispersed manufacturing facilities, including those in lower cost regions.

Accelerate Time to Market. OEMs face increasingly short product life cycles due to increased competition and rapid technological changes. As a result, OEMs need to reduce the time required to bring their products to market. OEMs often can bring a product to market faster by using an EMS company's expertise in new product introduction including manufacturing design, engineering support and prototype production. OEMs often can more quickly achieve volume production of their products by capitalizing on an EMS company's manufacturing expertise, global presence and infrastructure.

Table of Contents

Competitive Overview

We offer our OEM customers end-to-end services that span the entire product life cycle:

Competitive Strengths

We believe our competitive strengths differentiate us from our competitors and enable us to better serve the needs of OEMs. Our competitive strengths include:

End-to-End Services. We provide services throughout the world to support our customers' products during their entire life cycle, from product design and engineering, through manufacturing, to direct order fulfillment and after-market product service and support. We believe that our end-to-end services are more comprehensive than the services offered by our competitors because of our focus on adding value before and after the actual manufacturing of our customers' products. Our end-to-end services enable us to provide our customers with a single source of supply for their EMS needs, reduce the time required to bring products to market, lower product costs and allow our customers to focus on those activities in which they expect to add the highest value. We believe that our end-to-end services allow us to develop closer relationships with our customers and more effectively compete for their future business.



## Table of Contents

**Product Design and Engineering Resources.** We provide product design and engineering services for new product designs, cost reductions and design for manufacturability (DFx). Our engineers work with our customers during the complete product life cycle. Our design centers provide hardware, software, ECAD, verification, regulatory, and testing services. We design high speed digital, analog, radio frequency, wired, wireless, optical and electro-mechanical products.

Our engineering engagement models include Joint Design Manufacturing (JDM), Contract Design Manufacturing and consulting engineering for DFx, Value Engineering (cost reduction re-design), and design for environmental compliance with the European Union's Restrictions of Hazardous Substances, or RoHS, and Waste Electrical and Electronic Equipment or WEEE. We focus on industry segments that include Communications, Enterprise Computing and Storage, Medical, Multimedia, Defense & Aerospace, Industrial & Semiconductor Capital Equipment, CleanTech and Automotive. System solutions for these industry segments are supported through our vertically integrated component technologies, namely, printed circuit boards, backplanes, enclosures, cable assemblies, precision machining, memory modules and optical modules.

In the JDM model, our customers bring market knowledge and product requirements. We offer complete design engineering and new product introductions or NPI services. For JDM products, typically the intellectual property is jointly owned by us and the customer and we realize manufacturing revenue associated with building and shipping the product.

**Vertically Integrated Manufacturing Services.** We provide a range of vertically integrated manufacturing services. Key system components that we manufacture include complete printed circuit boards and printed circuit board assemblies, backplanes and backplane assemblies, enclosures, cable assemblies, precision machine components, optical modules and memory modules. By manufacturing these system components and subassemblies ourselves, we enhance continuity of supply and reduce costs for our customers. In addition, we are able to have greater control over the production of our customers' products and retain incremental profit opportunities for us. Examples of products that we manufacture using our full range of services include wireless base stations, network switches, routers and gateways, optical switches, enterprise-class servers and storage appliances, set-top boxes, MRI and computer tomography (CT) scanners, and equipment used in the semiconductor chip manufacturing process, including equipment for photolithography, chemical mechanical polishing, physical vapor deposition, automated handling tools and robotics for wafer transfer.

**Advanced Technologies.** We provide services utilizing advanced technologies which we believe allows us to differentiate ourselves from our competitors. These advanced technologies include the fabrication of complex printed circuit boards and backplanes having over 60 layers and process capabilities for a range of low signal loss, high performance materials, buried capacitors and resistors and high density interconnects using micro via holes that are formed using laser drills. We have added capabilities to manufacture high density flex and rigid-flex PCBs with up to 30 layers and 8 transition layers in support of Defense and Aerospace markets along with high end medical electronics.

Our printed circuit board assembly technologies include micro ball grid arrays, fine pitch discretes and small form factor radio frequency and optical components, as well as advanced packaging technologies used in high pin count application specific integrated circuits and network processors. We use innovative design solutions and advanced metal forming techniques to develop and fabricate high-performance indoor and outdoor chassis, enclosures and frames. Our assembly services use advanced technologies including precision optical alignment, multi-axis precision stages and machine vision technologies. We use sophisticated procurement and production management tools to effectively manage inventories for our customers and ourselves. We have also developed build-to-order, or BTO and configure-to-order, or CTO systems that enable us to manufacture and ship finished systems within 48 to 72 hours after receipt of an order. We have established a centralized EMS technology council to coordinate the development

and introduction of new technologies to meet our customers' needs in various locations and to increase collaboration among our facilities.

**Global Capabilities.** Most of our customers compete and sell their products on a global basis. As such, they require global solutions that include regional manufacturing for selected end markets, especially when time to market, local manufacturing or content and low cost solutions are critical objectives. Our global network of facilities in 18 countries provides our customers a combination of sites to maximize both the benefits of regional and low cost manufacturing. To manage and coordinate our global operations, we employ an enterprise-wide software system at substantially all of our manufacturing locations that operates on a single IT platform and provides us with company-wide information regarding component inventories and orders. This system enables us to standardize planning and purchasing at the plant level and to optimize inventory management and utilization. Our systems also enable our customers to receive key information regarding the status of their individual programs.

## Table of Contents

**Customer-Focused Organization.** We believe customer relationships are critical to our success and our organization is focused on providing our customers with a high level of customer service. Our key customer accounts are managed by dedicated account teams including a global business manager directly responsible for account management. Global business managers coordinate activities across divisions to effectively satisfy our customers' requirements and have direct access to our senior management to quickly address customer concerns. Local customer account teams further support the global teams and are linked by a comprehensive communications and information management infrastructure.

**Expertise in Serving Diverse End Markets.** We have experience in serving our customers in the communications, enterprise computing and storage, multimedia, industrial and semiconductor capital equipment, defense and aerospace, medical, CleanTech and automotive markets. Our diversification across end markets reduces our dependence upon any one customer or segment. In order to cater to the specialized needs of customers in particular market segments, we have dedicated personnel, and in some cases facilities, with industry-specific capabilities and expertise. We also maintain compliance with industry standards and regulatory requirements applicable to certain markets including, among others, the medical and defense and aerospace sectors.

**Experienced Management Team.** We believe that one of our principal assets is our experienced management team. Our Chief Executive Officer, Jure Sola, co-founded Sanmina in 1980. Hari Pillai, President and Chief Operating Officer, joined us in 1994 and has served in various senior manufacturing management positions since that time. We believe that the significant experience of our management team enables us to capitalize on opportunities in the current business environment.

## Our Business Strategy

Our objective is to maintain and enhance our leadership position in the EMS industry. Key elements of our strategy include:

**Capitalizing on Our Comprehensive Services.** We intend to capitalize on our end-to-end services which we believe will allow us to both sell additional services to our existing customers and attract new customers. Our end-to-end services include product design and engineering, manufacturing, final system assembly and test, direct order fulfillment, after-market product service and support and supply chain management. Our vertically integrated manufacturing services enable us to manufacture additional system components and subassemblies for our customers. When we provide a customer with a number of services, such as component manufacturing or higher value-added services, we are often able to improve our margins and profitability. Consequently, our goal is to increase the number of manufacturing programs for which we provide multiple services. To achieve this goal, our sales and marketing organization seeks to cross-sell our services to customers.

**Extending Our Technology Capabilities.** We rely on advanced processes and technologies to provide our vertically integrated manufacturing services. We continually strive to improve our manufacturing processes and have adopted a number of quality improvement and measurement techniques to monitor our performance. We work with our customers to anticipate their future manufacturing requirements and align our technology investment activities to meet their needs. We use our design expertise to develop product technology platforms that we can customize by incorporating other components and subassemblies to meet the needs of particular OEMs. These technologies enhance our ability to manufacture complex, high-value added products, allowing us to continue to win business from existing and new customers.

**Joint Design Manufacturing Solutions.** As a result of customer feedback, and our customers' desire to manage research and development expenses, we have expanded our product design services to develop systems and components jointly with our customers. In a JDM model, our customers bring market knowledge and product

requirements. We offer complete design engineering and NPI services. Our offerings in design engineering include product architecture, development, integration, regulatory and qualification services; while NPI services include quick-turn prototyping, supply chain readiness, functional test development and release to volume production. For JDM products, typically the intellectual property is jointly owned by us and the customer and we realize manufacturing revenue associated with building and shipping the product.

**Continuing to Penetrate Diverse End Markets.** We focus our marketing and sales efforts on major end markets within the electronics industry. We have targeted markets that we believe offer significant growth opportunities and for which OEMs sell complex products that are subject to rapid technological change because the manufacturing of these products requires higher value-added services. Our approach to our target markets is two-fold: we intend to strengthen our significant presence in the communications and enterprise computing markets, and also focus on under-penetrated target markets, including the medical, industrial and semiconductor capital equipment, CleanTech, automotive, and defense and aerospace industries, many of which have not extensively relied upon EMS companies in the past. We intend to continue our diversification across market segments and customers to reduce our dependence on any particular market.

## Table of Contents

**Pursuing Strategic Transactions.** We seek to undertake strategic transactions that give us the opportunity to access new customers, manufacturing and service capabilities, technologies and geographic markets. In addition, we plan to continue to pursue OEM divestiture transactions that will augment existing strategic customer relationships with favorable supply agreement terms or build new relationships with customers in attractive end markets. Potential future transactions may include a variety of different business arrangements, including acquisitions, spin-offs, strategic partnerships, restructurings and divestitures. We intend to continue to evaluate and pursue strategic opportunities on a highly selective basis.

**Continuing to Seek Cost Savings and Efficiency Improvements.** We seek to optimize our facilities to provide cost-efficient services for our customers. We maintain extensive operations in lower cost locations, including Latin America, Eastern Europe, China, Southeast Asia and India, and we plan to expand our presence in these lower cost locations as appropriate, to meet the needs of our customers. We believe that we are well positioned to take advantage of future opportunities on a global basis as a result of our vertically integrated manufacturing strategy.

### Our Products and Services

We offer our OEM customers end-to-end services that span the entire product life cycle. Examples of products that we manufacture for OEMs include wireless and wireline communications equipment, high-end computer servers and storage devices, avionics, medical imaging and diagnostic systems and digital satellite set-top boxes. These products may require us to use some or all of our end-to-end services.

**Product Design and Engineering.** Our design and engineering groups provide customers with design and engineering services from initial product design and detailed product development through to production. These groups also complement our vertically integrated manufacturing capabilities by providing manufacturing design services for printed circuit boards, backplanes and enclosures. Our offerings in design engineering include product architecture, development, integration, regulatory and qualification services; while NPI services include quick-turn prototype, functional test development and release to volume production.

We provide initial product development and detailed product design and engineering services for products such as communications base stations, optical switches and modules, set top boxes, network switches and routers, computer server and storage products and medical devices. We follow a well defined product life cycle process during our design and development as follows:

**Initial Product Development.** We provide a range of design and engineering services to customers to complement their initial product development efforts. During this phase, our design engineers work with our customers' product development teams to assist with product concepts, selecting key components, cost trade-offs and design reviews.

**Detailed Product Design.** During the detailed product development phase, we work with our customers' product development engineers to optimize product designs to improve the efficiency of the manufacturing (design for manufacturability) of these products and reduce manufacturing costs. We further analyze product design to improve the ability of tests (design for test) used in the manufacturing process to identify product defects and failures. We provide software development support for product development, including installing operating systems on hardware platforms, developing software drivers for electronic devices and developing diagnostic, production test and support software. We design components that are incorporated into our customers' products including printed circuit boards, backplanes, enclosures and cables assemblies.

**Pre-production.** After a detailed product design has been completed and the product is released for prototype production, we can build a prototype on a quick turnaround basis. We then analyze the feasibility of manufacturing the product and make any necessary design modifications to the prototype and re-test the prototype to validate its

design. We also provide early-stage test development during the prototype phase. We evaluate prototypes to determine if they will meet safety and other standards such as standards published by Underwriters Laboratories, an independent product safety testing and certification organization and other similar domestic and international organizations. We also typically provide low-volume manufacturing to satisfy our customers' initial needs. We review the material and component content of our customers' designs with a view to designing in alternative components that may provide cost savings. Our preproduction services help our customers reduce the time required to bring new products to market.

Component Technology Design Services. We provide design and technology support for our vertically integrated components and subassemblies, including:

## Table of Contents

**Printed Circuit Board and Backplane Design.** We support our customers with printed circuit board and backplane design and development assistance for optimizing performance, manufacturability and cost. These printed circuit boards and backplanes incorporate high layer counts and large form factors and are used in complex products such as optical networking products and communications switches. These designs also incorporate component miniaturization technologies and other advanced technologies that increase the number and density of components that can be placed on a printed circuit board. These technologies enable OEMs to provide greater functionality in smaller products. We also provide signal integrity engineering services which enable the transmission of high speed electrical signals through a system while maintaining signal quality and data integrity.

**Electro-Mechanical Design.** We have mechanical design groups globally that design and engineer a variety of electro-mechanical systems for the communications, enterprise computing and storage, multimedia, industrial, semiconductor, defense, aerospace, medical and CleanTech markets. Our teams of highly skilled designers address structural, thermal, environmental, seismic, power distribution, and interconnect or cabling features of the product, and provide the regulatory compliance or certification requirements for the product and its intended environment. In addition to providing conceptual and detailed mechanical design services, our offerings include engineering analysis, DFMA (design for manufacturability and assembly), value engineering, project management, engineering documentation and qualification services - thus providing a virtual one-stop service to launch the product. Analytical capabilities cover thermal analysis and testing, stress and vibration analysis, dimensional and tolerance analysis, EMC/EMI analysis, etc. Product designs can involve a wide variety of materials, such as steel, aluminum alloys, injection molded plastics and die-castings. Our design experience covers a range of products, including indoor and outdoor wireless base station cabinets, datacom and computing racks, chassis, frames, enclosures for high-end servers, data storage systems, industrial and medical imaging systems, gaming consoles, gas analysis instrumentation, etc.

**Manufacturing.** Manufacturing includes the following vertically integrated manufacturing services:

**Printed Circuit Boards.** We have the ability to produce multilayer printed circuit boards on a global basis with high layer counts and fine line circuitry. Our ability to support NPI and quick turn fabrication followed by manufacturing in both North America and Asia allows our customers to accelerate their time to market as well as their time to volume. Standardized processes and procedures make transitioning of products easier for our customers. Our technology roadmaps provide leading-edge capabilities and higher yielding processes. Engineering teams are available on a world-wide basis to support designers in DFM analysis and assemblers with field application support.

Printed circuit boards are made of fiberglass/resin laminated material layers and contain copper circuits which interconnect and transmit electrical signals among the components that make up electronic devices. Increasing the density of the circuitry in each layer is accomplished by reducing the width of the circuit tracks and placing them closer together in the printed circuit board along with adding layers and via hole structures. We are currently capable of efficiently producing printed circuit boards with up to 60 layers and circuit track widths as narrow as two mils (50 micron) in production volumes. Specialized production equipment along with an in-depth understanding of high performance laminate materials allow for fabrication of some of the largest form factor and highest speed (in excess of 10 gigabits per second, or Gbps) backplanes available in the industry. We have also developed several proprietary technologies and processes which improve electrical performance, connection densities and reliability of printed circuit boards. Some of these technologies, such as Buried Capacitance™, have become industry standards and are licensed to other board fabricators.

**Printed Circuit Board Assembly and Test.** Printed circuit board assembly involves attaching electronic components, such as integrated circuits, capacitors, microprocessors, resistors and memory modules to printed circuit boards. The most common technologies used to attach components to printed circuit boards employ surface mount technology, or SMT, and pin-through-hole assembly, or PTH. SMT involves the use of an automated assembly system to place and solder components to the printed circuit board. In PTH, components are placed on the printed circuit board by

insertion into holes punched in the circuit board. Components also may be attached using press-fit technology in which components are pressed into connectors affixed to the printed circuit board. We use SMT, PTH, press-fit as well as new attachment technologies that are focused on miniaturization and increasing the density of component placement on printed circuit boards. These technologies, which support the needs of our OEM customers to provide greater functionality in smaller products, include chip-scale packaging, ball grid array, direct chip attach and high density interconnect. We perform in-circuit and functional testing of printed circuit board assemblies. In-circuit testing verifies that all components have been properly inserted and attached and that the electrical circuits are complete. We perform functional tests to confirm that the board or assembly operates in accordance with its final design and manufacturing specifications. We either design and procure test fixtures and develop our own test software, or we use



## Table of Contents

our customers' test fixtures and test software. In addition, we provide environmental stress tests of the board or assembly that are designed to confirm that the board or assembly will meet the environmental stresses, such as heat, to which it will be subject.

**Backplanes and Backplane Assemblies.** Backplanes are very large printed circuit boards that serve as the backbones of sophisticated electronics products and provide interconnections for printed circuit boards, integrated circuits and other electronic components. We fabricate backplanes in our printed circuit board plants. Backplane fabrication is significantly more complex than printed circuit board fabrication due to the large size and thickness of the backplanes. We manufacture backplane assemblies by press fitting high density connectors into plated through holes in the bare backplane. In addition, many of the newer higher technology backplanes require SMT attachment of passive discrete components as well as high pin count ball grid array packages. These advanced assembly processes require specialized equipment and a strong focus on quality and process control. We also perform in-circuit and functional tests on backplane assemblies. We have developed proprietary technology and “know-how” which enables backplanes to run at data rates in excess of 10 Gbps. We currently have capabilities to manufacture backplanes with up to 60 layers in sizes up to 27.5x42 inches and 0.500 inches in thickness, utilizing a wide variety of high performance laminate materials. These are among the largest and most complex commercially manufactured backplanes and we are one of a limited number of manufacturers with these capabilities.

**Enclosure Systems.** Enclosure systems are used across all major markets to house and protect complex and fragile electronic components, modules and sub-systems, so that the system's functional performance is not compromised due to mechanical, environmental or any hostile conditions. Our enclosure manufacturing services include fabrication of cabinets, chassis, frames and racks integrated with various electronic components and sub-systems for power and thermal management, control, sensing and alarm functions. We manufacture a broad range of enclosures from basic enclosures for low end servers, to large and highly complex enclosures, such as those used in indoor and outdoor wireless base station products. We serve a variety of end markets, partnering with customers from initial concept development through integration and final system assembly and test. Our enclosure expertise is readily accessible at any of our state-of-the-art facilities that provide metal fabrication, high-volume metal stamping, plastic injection molding, aluminum die-casting and robotic welding capabilities.

**Cable Assemblies.** Cable assemblies are used to connect modules, assemblies and subassemblies in electronic devices. We provide a broad range of cable assembly products and services. We design and manufacture a broad range of high-speed data, radio frequency and fiber optic cabling products. Cable assemblies that we manufacture are often used in large rack systems to interconnect subsystems and modules.

**Precision Machining.** As part of our mission to provide complete manufacturing solutions to customers, Sanmina-SCI offers a suite of world-class precision machining services in the USA, Israel and China. We utilize advanced numerically controlled machines enabling the manufacture of components to very tight tolerances and the assembly of these components in clean environments. Capabilities include expertise in complex medium- and large-format mill and lathe machining of aluminum, stainless steel, plastics, ferrous and nonferrous alloys, and exotic alloys. We also have in-house welding, helium and hydrostatic leak-test capabilities. Through an established supply chain we do lapping, plating, anodizing, EDM, heat-treating, cleaning, laser inspection, painting and packaging. We have dedicated facilities supporting machining and complex integration with access to a suite of state-of-the-art, computer-controlled machining equipment that can satisfy the most rigorous demands for production and quality. This equipment includes fully automated “lights-out” machinery that continues production in the absence of human operators. With some of the largest horizontal milling machines in the United States we are a supplier of vacuum chamber systems for the semiconductor and flat panel display equipment markets. We also support a number of other markets such as medical, oil and gas exploration, and transportation.

Microelectronic Components and Modules. Optical and RF components are the key building blocks of many systems and we produce both passive and active components. RF and Optical modules are integrated subsystems that use a combination of industry standard and/or custom components. We are a provider of RF and optical components and systems for customers in the telecommunications, networking, medical and military markets. Our experience in RF and optical communications and networking products spans long haul/ultra long haul and metro regions for transport/transmission, as well as access and switching applications, including last mile solutions. We are currently supplying product to the 40G and 100G optical marketplace based on these technologies. Our service offerings for optical communications customers are designed to deliver end-to-end solutions with special focus on design and industrialization, optical and RF component, module and blade assembly, as well as system integration and test.

Modular Solutions™. Modular solutions are integrated subsystems that use industry standard integrated circuits

## Table of Contents

including Dynamic Random Access Memory (DRAM), non-volatile Flash Memory, Application Specific Integrated Circuits (ASICs) and controllers, microprocessors and digital signal processors. We develop and manufacture innovative DRAM Modules, Flash Memory Products, Solid-State Drives (SSDs) and Mixed Technology Devices. These solid-state high-technology products are designed to optimize the value and performance of our customers' applications in the Networking & Communications, Enterprise Computing & Storage, Defense & Aerospace, and Embedded & Industrial markets. Our advanced design and manufacturing capabilities offer superior assembly, testing, programming, and deployment solutions for all modular product needs. To maintain our leadership position as a modular solutions provider, we are continuously researching, developing and implementing next-generation solutions such as Element SSDs, Arxcis-NV™, SATADIMM, and SATA Cube™ to meet the needs of OEMs with high-performance, space-constrained and thermally challenging environments. We also provide innovative DDRI, DDRII, and DDRIII DRAM modules utilizing stacked Chip-Scale-Packaging (CSP) technology, Ram-Stack™, offering high densities in ultra small form factors. We integrate both standard and custom modules in the products we manufacture. We rely on our superior quality, flexibility and quick response to bring to market the solutions that meet our customers' needs at a competitive cost.

**Final System Assembly and Test.** We provide final system assembly and test in which assemblies and modules are combined to form complete, finished products. We often integrate printed circuit board assemblies manufactured by us with enclosures, cables and memory modules that we also produce. Our final assembly activities also may involve integrating components and modules that others manufacture. The complex, finished products that we produce typically require extensive test protocols. Our test services include both functional and environmental tests. We also test products for conformity to applicable industry, product integrity and regulatory standards. Our test engineering expertise enables us to design functional test processes that assess critical performance elements including hardware, software and reliability. By incorporating rigorous test processes into the manufacturing process, we can help to assure our customers that their products will function as designed. Products for which we currently provide final system assembly and test include wireless base stations, wireline communications switches, optical networking products, high-end servers, etc.

**Direct Order Fulfillment.** We provide direct order fulfillment for 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, such as a retail outlet, 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 BTO and CTO capabilities. BTO involves building a system having the particular configuration ordered by the OEM customer. CTO involves configuring systems to an end customer's order. The end customer typically places this order by choosing from a variety of possible system configurations and options. We are capable of meeting a 48 to 72 hour turn-around-time for BTO and CTO by using advanced manufacturing processes and a real-time warehouse management and data control system on the manufacturing floor. 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. Our systems are sufficiently flexible to support direct order fulfillment for a variety of different products, such as servers, workstations, set-top boxes, medical devices, scanners, printers and monitors.

## Global Supply Chain Management

We purchase large quantities of electronic components and other raw materials from a range of suppliers. Our global supply chain management primary task involves in consolidating our global spend to create the synergy and leverage to drive our supply base for better cost competitiveness and more favorable terms. As a result, we often receive more favorable terms from suppliers which can enable us to provide our customers with greater cost reductions than they

can obtain themselves. Our strong supplier relationships also often enable us to obtain electronic components and other raw materials that are in short supply or return excess inventories to suppliers even when they are not contractually obligated to accept them.

Supply chain management also involves the planning, purchasing and warehousing of product components. The other objective of our supply chain management services is to reduce excess component inventory in the supply chain by scheduling deliveries of components at a competitive price and on a just-in-time, as-and-when-needed basis. We use sophisticated production management systems to manage our procurement and manufacturing processes in an efficient and cost effective manner. We collaborate with our customers to enable us to respond to their changing component requirements for their products and to reflect any changes in these requirements in our production management systems. These systems often enable us to forecast future supply and demand imbalances and develop strategies to help our customers manage their component requirements. Our enterprise-wide software systems provide us with company-wide information regarding component inventories and orders to standardize planning and purchasing at the plant level. These systems enable us to transfer product

## Table of Contents

components between plants to respond to changes in customer requirements or to address component or other raw material shortages.

### Our End Markets

We have targeted markets that we believe offer significant growth opportunities and for which OEMs sell complex products that are subject to rapid technological change. We believe that markets involving complex, rapidly changing products offer us opportunities to produce products with higher margins because these products require higher value-added manufacturing services and may also include our advanced vertically integrated components. Our approach to our target markets is two-fold—we intend to strengthen our significant presence in the communications and enterprise computing and storage markets market, while also focusing on other under-penetrated target markets, including the medical, automotive, industrial and semiconductor capital equipment, and defense and aerospace, and CleanTech industries, many of which have not extensively relied upon EMS companies in the past. Our diversification across market segments and customers helps mitigate our dependence on any particular market.

**Communications Infrastructure: Wireless and Wireline Access, Optical and Wireline Transmission and Switching and Enterprise Networking.** In the communications sector, we focus on infrastructure equipment. This includes wireless and wireline access and transmission systems, optical networking and transmission and enterprise networking systems. Our product design and engineering staff has extensive experience designing and industrializing advanced communications products and components for these markets. Products we manufacture include point-to-point microwave systems, wireless base stations, satellite receivers and various radio frequency appliances, optical switches and transmission hardware and wireline access equipment including switches and routers among others. We also design and manufacture optical, RF and microelectronic components which are key devices in many of these products.

**Enterprise Computing and Storage.** We provide CTO and BTO services to the enterprise computing and storage market. We tightly couple our vertically integrated supply chain with manufacturing and logistics allowing for assembly and distribution of products to be completed more quickly with high quality standards and at low cost. Our vertical integration capabilities include racks, enclosures, cables, complex multi-layer printed circuit boards, printed circuit assemblies and backplanes. In addition, we have designed and developed some of the most compact and powerful storage devices available on the market today which we have coupled with our global, vertically integrated supply chain and manufacturing capabilities to deliver true end-to-end, no touch, cost-effective EMS solutions to the data storage industry.

**Multimedia.** We manufacture digital set-top boxes, point of sale equipment, digital cameras, digital home gateways, professional audio-video equipment and internet protocol entertainment devices. For our multimedia OEM customers, we manage the production process for multimedia products including product design and engineering, test development, supply chain management, manufacturing of printed circuit boards and assemblies, final system assembly and test, direct order fulfillment including our BTO and CTO capabilities, and repair services.

**Industrial and Semiconductor Systems.** Our expertise in manufacturing highly complex systems includes production of industrial and semiconductor capital equipment, front-end environmental chambers, computer controllers and test and inspection equipment. We also have significant experience in manufacturing highly complex systems such as, process chambers, photolithography tools, etch tools, wafer handling interfaces, flat panel display test and repair equipment, chem-mech planarization tools, optical inspection and x-ray equipment, explosive detection equipment, and large format printing plate machines.

**Defense and Aerospace.** We offer our end-to-end services to the defense and aerospace industry. We believe that this industry currently represents a significant growth opportunity for us due in part to the growing desire of defense and aerospace OEMs to outsource non-core manufacturing activities in order to reduce costs. We believe our experience in

serving the aerospace industry, as well as our product design and engineering capabilities, represent key competitive strengths for us in the defense and aerospace market. Defense and aerospace products that we design and manufacture include avionics systems, weapons guidance systems, tactical and secure network communications systems, detection systems for homeland defense, cockpit communications systems and space systems.

Medical. We provide comprehensive manufacturing and related services to the medical industry including design, logistics and regulatory approval support. The manufacturing of products for the medical industry often requires compliance with domestic and foreign regulations including the Food and Drug Administration's or FDA's quality system regulations and the European Union's medical device directive. In addition to complying with these standards, our medical manufacturing facilities comply with ISO 13485-2003 (formerly EN 46002) and ISO 9001:2000. Sanmina manufactures a broad range of medical systems including blood glucose meters, computed tomography scanner assemblies, respiration systems, blood

## Table of Contents

analyzers, cosmetic surgery systems, ultrasound imaging systems and a variety of patient monitoring equipment.

CleanTech. We are committed to serving companies leading the clean technology, or CleanTech, revolution in the solar, wind, fuel cell, battery systems, LED lighting and smart infrastructure industries. We leverage traditional electronics manufacturing services (EMS) for CleanTech customers in areas related to power electronics, control and distribution, smart meters and full-system integration. Beyond traditional EMS, our extensive range of electro-mechanical design and complex system manufacturing capabilities are an excellent fit across all CleanTech segments. Our manufacturing operations are strategically located in close proximity to CleanTech “hot spots”.

Automotive. In the automotive industry, we manufacture different types of sensors, body controllers, engine control units, radios, HVAC control heads and blower modules as well as cables for entertainment solutions. We also provide design support, product and process qualification, manufacturing, supply chain management, supplier quality assurance and end-of-life services. All our automotive dedicated factories are TS 16949 certified and provide printed circuit boards, printed circuit board assemblies and cables as well as final systems.

### Customers

A relatively small number of customers have historically generated a significant portion of our net sales. Sales to our ten largest customers represented 49.9%, 48.0% and 48.2% of our net sales for 2010, 2009 and 2008, respectively. For 2010, one customer, EchoStar Corporation, represented approximately 11% of our net sales. For 2009 and 2008, no customer represented 10% or more of our net sales.

We seek to establish and maintain long-term relationships with our customers and have served many of our principal customers for several years. Historically, we have had substantial recurring sales from existing customers. We have also expanded our customer base through our marketing and sales efforts as well as acquisitions. We have been successful in broadening relationships with customers by providing vertically integrated products and services as well as multiple products and services in multiple locations.

We typically enter into supply agreements with our major OEM customers with terms ranging from three to five years. Our supply agreements with our OEM customers generally do not obligate the customer to purchase minimum quantities of products. However, the customer typically remains liable for the cost of the materials and components that we have ordered to meet the customer's production forecast but which are not used, provided that the material was ordered in accordance with an agreed-upon procurement plan. In some cases, the procurement plan contains provisions regarding the types of materials for which our customers will assume responsibility. Our supply agreements typically contain provisions permitting cancellation and rescheduling of orders upon notice and subject, in some cases, to cancellation and rescheduling charges. Order cancellation charges typically vary by product type and depend upon how far in advance of shipment a customer notifies us of the cancellation of an order. In some circumstances, our supply agreements with customers provide for cost reduction objectives during the term of the agreement.

We generally do not obtain firm, long-term commitments from our customers under supply agreements. As a result, customers can cancel their orders, change production quantities or delay orders. Uncertain economic conditions and our general lack of long-term p