

TTM TECHNOLOGIES INC  
Form 10-K  
March 01, 2013  
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**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**Form 10-K**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)**

**OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the fiscal year ended December 31, 2012**

**Commission file number 0-31285**

**TTM TECHNOLOGIES, INC.**

*(Exact Name of Registrant as Specified in Its Charter)*

**Delaware**

*(State or Other Jurisdiction of*

*Incorporation or Organization)*  
**1665 Scenic Avenue Suite 250,  
Costa Mesa, California**

*(Address of Principal Executive Offices)*

**91-1033443**

*(I.R.S. Employer*

*Identification No.)*

**92626**

*(Zip Code)*

**(714) 327-3000**

*(Registrant's telephone number, including area code)*

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

**Title of Each Class**  
Common Stock, \$0.001 par value

**Name of Each Exchange on Which Registered**  
Nasdaq Global Select Market

## Edgar Filing: TTM TECHNOLOGIES INC - Form 10-K

Indicate by check mark whether 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 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 and posted on its Corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 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 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 the 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 Act). Yes  No

The aggregate market value of Common Stock held by non-affiliates of the registrant (based on the closing price of the registrant's Common Stock as reported on the Nasdaq Global Select Market on June 25, 2012, the last business day of the most recently completed second fiscal quarter), was \$464,399,238. For purposes of this computation, all officers, directors, and 10% beneficial owners of the registrant are deemed to be affiliates of the registrant. Such determination should not be deemed to be an admission that such officers, directors, or 10% beneficial owners are, in fact, affiliates of the registrant.

As of February 26, 2013, there were outstanding 81,936,905 shares of the registrant's Common Stock, \$0.001 par value.

### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for its 2013 Annual Meeting of Stockholders are incorporated by reference into Part III of this report.

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**PART I**

**Statement Regarding Forward-Looking Statements**

*This report on Form 10-K contains forward-looking statements regarding future events or our future financial and operational performance. Forward-looking statements include statements regarding markets for our products; trends in net sales, gross profits and estimated expense levels; liquidity and anticipated cash needs and availability; and any statement that contains the words anticipate, believe, plan, forecast, foresee, estimate, project, expect, seek, target, intend, goal and other similar expressions. The forward-looking statements included reflect our current expectations and beliefs, and we do not undertake publicly to update or revise these statements, even if experience or future changes make it clear that any projected results expressed in this annual report or future quarterly reports to stockholders, press releases or company statements will not be realized. In addition, the inclusion of any statement in this report does not constitute an admission by us that the events or circumstances described in such statement are material. Furthermore, we wish to caution and advise readers that these statements are based on assumptions that may not materialize and may involve risks and uncertainties, many of which are beyond our control, that could cause actual events or performance to differ materially from those contained or implied in these forward-looking statements. These risks and uncertainties include the business and economic risks described in Item 1A Risk Factors .*

*Unless otherwise indicated or unless the context requires otherwise, all references in this document to TTM, our company, we, us, our, and similar names refer to TTM Technologies, Inc. and its subsidiaries.*

**ITEM 1. BUSINESS**

**General**

We are a leading global provider of time-critical and technologically complex printed circuit board (PCB) products and backplane assemblies (PCBs populated with electronic components), which serve as the foundation of sophisticated electronic products. We are the largest PCB manufacturer in North America and the sixth largest PCB manufacturer in the world, based on 2011 revenues, according to a report by Prismark Partners LLC, a PCB industry research firm, and we generated approximately \$1.3 billion in net sales in 2012. We had 19,934 employees worldwide as of December 31, 2012, and we operate a total of 15 specialized and integrated facilities in the United States and China. We focus on providing time-to-market and advanced technology products and offer a one-stop manufacturing solution to our customers from engineering support to prototype development through final volume production. This one-stop solution allows us to align technology development with the diversified needs of our customers, many of whom are based in high growth markets, and to enable them to reduce the time required to develop new products and bring them to market. We serve a diversified customer base consisting of approximately 1,025 customers in various markets throughout the world, including manufacturers of networking/communications infrastructure products, touch screen tablets and mobile media devices (e-readers and smartphones). We also serve the high-end computing, aerospace/defense, and industrial/medical industries. Our customers include both original equipment manufacturers (OEMs) and electronic manufacturing services (EMS) providers.

In April 2010, we acquired from Meadville Holdings Limited (Meadville) all of the issued and outstanding capital stock of four of its subsidiaries. These four companies and their respective subsidiaries, collectively referred to as the PCB Subsidiaries, comprised Meadville's PCB manufacturing and distribution business. Prior to the acquisition, the PCB Subsidiaries made Meadville one of the leading PCB manufacturers in China by revenue, with a focus on producing high-end PCB products. Our April 2010 acquisition of the PCB Subsidiaries greatly increased our global production capacity, expanded our presence in the touch screen tablet and mobile media device markets, and enhanced our flexible, rigid-flex, high-density interconnect (HDI) and substrate product capabilities.

We manage our worldwide operations based on two geographic operating segments: (1) *Asia Pacific*, which consists of the PCB Subsidiaries and their seven PCB fabrication plants, which include a substrate facility; and (2) *North America*, which consists of seven domestic PCB fabrication plants, including a facility that provides

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follow-on value-added services primarily for one of the PCB fabrication plants, and one backplane assembly plant in Shanghai, China, which is managed in conjunction with our U.S. operations. Each segment operates predominantly in the same industry with production facilities that produce similar customized products for our customers and use similar means of product distribution.

### **Industry Overview**

PCBs are manufactured in panels from sheets of laminated material. Each panel is typically subdivided into multiple PCBs, each consisting of a pattern of electrical circuitry etched from copper to provide an electrical connection between the components mounted to it. PCBs serve as the foundation for virtually all electronic products, ranging from consumer electronics products (such as cellular phones, smartphones, touch screen tablets and personal computers) to high-end commercial electronic equipment (such as medical equipment, data communications routers, switches and servers) and aerospace/defense electronic systems.

High-end commercial equipment and aerospace/defense products require customized, multilayer PCBs using advanced technologies. Most high-end commercial and aerospace/defense end markets have low volume requirements that demand a highly flexible manufacturing environment. Traditionally, consumer electronics products utilized commodity-type PCBs with lower layer counts, less complexity and larger production runs. However, recent advances in consumer electronics products are driving a transition to higher layer count, more complex PCBs.

According to Prismark Partners LLC, the worldwide market for PCBs was approximately \$54.4 billion in 2012, with the Americas producing 7% (approximately \$3.6 billion), China producing 40% (approximately \$21.7 billion) and the rest of the world producing 53% (approximately \$29.1 billion). According to Prismark Partners, worldwide PCB revenue is expected to increase at a rate of 2% to 4% in 2013.

Demand for increasing functionality in electronic products has increased the complexity of PCBs, and this trend is expected to continue. Consumers desire more capacity in their devices – in other words, the demand for the same or smaller size devices with more features is on the rise. Products designed to offer faster data transmission, thinner and more lightweight features, and reduced power consumption generally require increasingly complex PCBs to meet these criteria. By using HDI technology, circuit densities can be increased, thereby providing for smaller products with higher packaging densities. According to a September 2012 report by IDC, a well-known market research firm, the market for smartphones and tablet PCs will grow to 1.3 billion units and 261.4 million units, respectively, in 2016. This translates to a 20.5% and 29.8% compounded annual growth rate (CAGR) in smartphones and tablet PCs, respectively, from 2011 to 2016.

Following a similar upward trend, the global substrate market, which represents approximately 16% of the global PCB market, is expected to grow at a CAGR of 7% from 2011 to 2016 according to a 2012 report by Prismark Partners LLC. This growth is driven by increasing demand for end products containing highly advanced semiconductors. The Chinese substrate market alone is expected to grow at a CAGR of 15% over the same period of time due to both China's increased production of semiconductors and the continuing growth in end products containing highly advanced semiconductors. Substrate manufacturing requires deployment of large amounts of resources and strong engineering services. For this reason, we believe that the number of competitors is much smaller compared to standard PCB manufacturers.

The PCB manufacturing market is highly fragmented with relatively few large scale companies. According to a report by N.T. Information LTD, a PCB industry research firm, there were approximately 2,600 to 2,800 PCB manufacturers worldwide in 2012, with the top 20 companies representing approximately 43% of the global market. As a result of global economic trends, the number of PCB producers operating in China has increased significantly since 2000. This corresponds with a significant decline in the number of North American and European PCB producers during the same time period.

### **Industry Trends**

We believe that several trends are impacting the PCB manufacturing industry. These trends include:

*Shorter electronic product life cycles.* Continual advances in technology have shortened the life cycles of complex commercial electronic products, placing greater pressure on OEMs to quickly bring new products to

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market. The accelerated time-to-market and ramp-to-volume needs of OEMs for high-end commercial equipment create opportunities for PCB manufacturers that can offer engineering support in the prototype stage and manufacturing scalability throughout the production life cycle.

*Increasing complexity of electronic products.* OEMs continue to design higher performance electronic products, which in turn require technologically complex PCBs that can accommodate higher speeds and component densities, including HDI PCBs. These complex PCBs can require very high layer counts, advanced manufacturing processes and materials, and high-mix production capabilities, which involve processing small lots in a flexible manufacturing environment. OEMs increasingly rely upon larger PCB manufacturers, which possess the financial resources necessary to invest in advanced manufacturing process technologies and sophisticated engineering staff, often to the exclusion of smaller PCB manufacturers that do not possess such technologies or resources. Even the low end of the PCB market (less than four layers) continues to transition to higher layer counts as consumer products increase in complexity. Advances in chip technology continue to drive market growth in HDI, substrate and flex PCB categories.

*Increasing concentration of global PCB production in Asia.* In recent years, many electronics manufacturers have moved their commercial production to Asia to take advantage of its exceptionally large, relatively low-cost labor pool. In particular, the trend has favored China, which had the largest PCB market in terms of both revenue and number of suppliers in 2011 according to Prismark Partners and N.T. Information LTD. The overall technical capability of suppliers in China has improved dramatically in recent years, and China has emerged as a global production center for cellular phones, smartphones, touch screen devices, computers and computer peripherals, and high-end consumer electronics. According to N.T. Information LTD, approximately 60% of the world's PCB production will be generated from China, Hong Kong and Taiwan by 2014. The continued outsourcing of production to China should result in additional commercial market share potential for PCB manufacturers with a strong presence and reputation in China.

*Decreased reliance on multiple PCB manufacturers by OEMs.* OEMs traditionally have relied on multiple PCB manufacturers to provide different services as an electronic product moves through its life cycle. The transfer of a product among different PCB manufacturers often results in increased costs and inefficiencies due to incompatible technologies and manufacturing processes and production delays. In addition, OEMs generally find it easier and less costly to manage fewer PCB manufacturers. As a result, OEMs are reducing the number of PCB manufacturers and backplane assembly service providers on which they rely, presenting an opportunity for those that can offer one-stop manufacturing capabilities from prototype to volume production.

*Increased requirements for aerospace/defense products.* The aerospace/defense market is characterized by increasingly time-consuming and complex certification processes, long product life cycles, and a demand for leading-edge technology with extremely high reliability and durability. While the US Department of Defense (DoD) budget faces increasing scrutiny as part of overall US budget deficit reduction efforts, we anticipate that a continued DoD commitment and upgrades incorporating leading-edge PCB technology in products for intelligence, surveillance and reconnaissance, communications and weapon systems combined with Foreign Military Sales (FMS) programs and a recovering global commercial aerospace industry will support a significant long-term market for these products.

## **Our Strategy**

Our goal is to be the leading global provider of time-critical, one-stop manufacturing services for highly complex PCBs. In our Asia Pacific operating segment, we intend to primarily target the smartphone, touch screen tablet and networking infrastructure markets; increase our high technology conventional, HDI, flex and rigid-flex capabilities and capacities; and enhance our current niche position in substrates. In our North America operating segment, we intend to continue to capitalize on our advanced technology, high mix/low volume and quick turnaround (QTA) service capabilities; enhance our commercial PCB capacity; expand our strategic account management model to strengthen our customer relationships; and expand our market leadership positions in the commercial aerospace and defense markets. More generally, our strategy includes:

*Emphasize advanced technological capabilities and manufacturing processes.* As the demand for more high-end PCBs increases across all markets, production of sophisticated PCBs becomes more complex. We address this growing market by delivering time critical and highly complex manufacturing services. We

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manufacture PCBs with layer counts in excess of 30 layers and believe that our HDI, flex and rigid-flex, substrate and other high technology capabilities provide an attractive market niche for our company. Our Asia Pacific operating segment has been one of the leading HDI PCBs manufacturers and a niche IC substrate supplier and, accordingly, we believe that we have an early-mover advantage over many of our competitors. With rising requirements for faster data transmission, shrinking features (lightweight and thin) and lower power consumption, more PCB designs have migrated to more complex HDI PCBs from conventional multi-layer PCBs. This is especially true of portable devices such as smartphones and tablet PCs. As a leading manufacturer, we continually evaluate and invest in advanced production equipment, new manufacturing processes, and engineering and process technology capabilities in order to further reduce our delivery times, improve quality, increase yields and decrease costs.

*Focus on early stages of product life cycle.* We work to service our customers' needs from the earliest stages of product development, including design services, engineering support and prototype development. By building alliances with our customers early in the development process, we are able to gain advantages in our core markets through the sharing and transfer of technologies and know-how. These alliances, often the result of strategic account management efforts, frequently allow us to gain access to new product pipelines and technologies we may not be able to otherwise obtain, or to obtain them more rapidly, thereby enhancing our leadership position in our targeted markets. Our expertise with new product development is enhanced by our ability to deliver highly complex PCBs to customers in significantly compressed lead times. This rapid delivery service enables OEMs to develop sophisticated electronic products more quickly and reduce their time to market. In addition, our QTA services provide us with an opportunity to cross-sell our other services, including high-mix and volume production in our targeted end markets.

*Pursue new customers in higher growth end markets.* We continue to pursue new customers with high growth characteristics and target additional high growth end markets that are characterized by rapid product introduction cycles and demand for time-critical services. In that regard, our 2010 Meadville acquisition provided significant opportunities in high growth end markets such as the networking/communications infrastructure, touch screen tablet, mobile media device (cellular phones and smartphones) and high-end computing markets. Over the last several years, China has emerged as a global production center for these products. This trend has driven the growth of the PCB market, particularly in China. Our strategic focus on these fast-growing markets, together with our reputation and network of China facilities, has enabled us to generate strong sales growth. Our ability to serve these markets is enhanced by our technological capabilities, as these markets require PCB products with higher layer counts, feature miniaturization, and higher circuit density. In addition, we intend to pursue high-end commercial and defense customers that demand flexible and advanced manufacturing processes, expertise with high-performance specialty materials assembly and testing capabilities, and expertise in other high-mix and complex technologies. We regularly evaluate and pursue internal initiatives aimed at adding new customers and better serving existing customers within our markets.

*Capitalize on our significant presence in China.* We believe that our Asia Pacific operating segment provides a key strategic and competitive advantage. Many key suppliers, direct OEM customers, and EMS customers manufacturing on behalf of OEMs are located in China. China's increasing dominance in electronics supply chain management is particularly evident in desktop computers, notebook computers, servers, cellular phones, smartphones, touch screen tablets, and communication equipment products. Proximity to these China-based suppliers and customers enables us to react swiftly to customer demand for comprehensive PCB products and services. We are also able to coordinate more effectively with our suppliers, and enjoy a cost advantage in terms of transportation costs over PCB manufacturers located outside of China. Furthermore, due to relatively low labor costs in China, we are able to maintain comparatively lower operating costs and increased production process flexibility.

*Maintain our customer-driven culture.* Our customer-oriented culture emphasizes extraordinary service, competitive differentiation and superior execution. Our customer-oriented strategies include engaging in co-development of new products, capturing new technology products for next generation equipment, and continuing to invest in and enhance our HDI PCB, rigid flex and flex PCB capabilities. Our ability to anticipate and meet customers' needs is critical to retaining existing customers and attracting leading companies as new customers. Other key elements of our customer focus include managing customer schedules and vendor inventory.

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*Market our facility specialization and one-stop manufacturing solution.* We utilize a facility specialization strategy in which each order is directed to the facility best suited to the customer's particular delivery time, product complexity and volume needs. Our plants use compatible technologies and manufacturing processes, allowing us to move orders between plants to optimize operating efficiency. This strategy provides customers with faster delivery times and enhanced product quality and consistency. In addition, our global one-stop manufacturing solution includes engineering support, prototype, low volume/high-mix products, medium volume/ramp and high-volume production. This one-stop solution allows us to provide a broad array of services and technologies to meet the rapidly evolving needs of our customers. See *Item 2 Properties* for a further description of our global specialized and integrated production facilities.

*Provide extensive support for aerospace/defense customers.* Success in the aerospace/defense market is generally achieved only after manufacturers demonstrate the long-term ability to pass extensive OEM and government certification processes, numerous product inspections, audits for quality and performance, and extensive administrative requirements associated with participation in government and high reliability commercial aerospace programs. United States export controls represent a barrier to entry for international competition as they restrict the overseas export and/or overseas manufacture of defense-related materials, services, and sensitive technologies that are associated with United States government programs. In addition, the complexity of the end products serves as a barrier to entry to many potential new suppliers. TTM's strong historical relations with leading North American commercial aerospace contractors, coupled with the TTM global manufacturing footprint, position us with an early advantage to support the emerging commercial aerospace industry in China.

## **Products and Services**

We offer a wide range of PCB products, including conventional PCBs, HDI PCBs, flexible PCBs, rigid-flex PCBs, backplane assemblies, and IC substrates. We also offer certain value-added services to support our customers' needs. These include design for manufacturability (DFM) support during new product introduction stages; PCB layout design; simulation and testing services; QTA production; and drilling and routing services. By providing these value-added services to customers, we are able to provide our customers with a one-stop manufacturing solution, which enhances our relationships with our customers.

### ***Conventional PCBs***

A PCB is a board containing a pattern of conducting material, such as copper, which becomes an electrical circuit when electrical components are attached to it. It is the basic platform used to interconnect electronic components and can be found in most electronic products, including computers and computer peripherals, communications equipment, cellular phones, high-end consumer electronics, automotive components and medical and industrial equipment. PCBs are more product-specific than other electronic components because generally they are unique for a specific electronic device or appliance. Conventional PCBs can be classified as single-sided, double-sided and multi-layer boards.

A multi-layer PCB can accommodate more complex circuitry than a double-sided PCB. It has more than two copper circuit layers with pieces of laminate bonded by resin between layers. Multi-layer PCBs require more sophisticated production techniques compared to single and double-sided PCBs, as, among other things, they require high precision manufacturing and more stringent product quality. The number of layers comprising a PCB generally increases with the complexity of the end product. For example, a simple consumer device such as a garage door controller may use a single-sided or double-sided PCB, while a high-end network router or computer server may use a PCB with 20 layers or more.

### ***High density interconnect or HDI PCBs***

Our North America and Asia Pacific operating segments produce HDI PCBs, which are PCBs with higher interconnect density per unit area requiring more sophisticated technology and manufacturing processes for their production than conventional PCB products. HDI PCBs are boards with high-density characteristics including micro-sized holes, or microvias (diameter at or less than 0.15 mm), fine lines (circuit line width and spacing at or less than 0.075 mm) and can be constructed with thin high performance materials, thereby enabling more



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interconnection functions per unit area. HDI PCBs generally are manufactured using a sequential build-up process in which circuitry is formed in the PCB one layer at a time through successive drilling, plating and lamination cycles. In general, a board's complexity is a function of interconnect and circuit density, layer count, laminate material type and surface finishes. As electronic devices have become smaller and more portable with higher functionality, demand for advanced HDI PCB products has increased dramatically. We define advanced HDI PCBs as those having more than one layer of microvia interconnection structure.

### ***Flexible PCBs***

Flexible PCBs are printed circuits produced on a flexible laminate, allowing it to be folded or bent to fit the available space or allow relative movement. We manufacture circuits on flexible substrates that can be installed in three-dimensional applications for electronic packaging systems. Use of flexible circuitry can enable improved reliability, improved electrical performance, reduced weight and reduced assembly costs when compared with traditional wire harness or ribbon cable packaging. Flexible PCBs can provide flexible electronic connectivity of an electrical device's apparatus such as printer heads, cameras, camcorders, TVs, mobile handsets, and touch screen tablets. For some of our flexible PCB customers we also assemble components onto the flexible PCBs we manufacture.

### ***Rigid-flex PCBs***

Rigid-flex circuitry provides a simple means to integrate multiple PCB assemblies and other elements such as display, input or storage devices without wires, cables or connectors, replacing them with thin, light composites that integrate wiring in ultra-thin, flexible ribbons between sections. In rigid-flex packaging, a flexible circuit substrate provides a backbone of wiring with rigid multilayer circuit sections built up as modules where needed.

Since the ribbons can be bent or folded, rigid-flex provides a means to compactly package electronics in three dimensions with dynamic or static bending functions as required, enabling miniaturization and thinness of product design. The simplicity of rigid-flex integration also generally reduces the number of parts required, which can improve reliability. The increasing popularity of mobile electronics coupled with the design trend of developing increasingly thinner, lighter and more feature-rich products is expected to further drive growth in the rigid-flex and flex sector, where these PCBs are the backbone of miniaturization.

Rigid-flex technology is essential to a broad range of applications including aerospace, industrial and transportation systems requiring high reliability; hand-held and wearable electronics such as mobile phones, video cameras and music players where thinness and mechanical articulation are essential; and ultra-miniaturized products such as headsets, medical implants and semiconductor packaging where size and reliability are paramount.

### ***Backplane assemblies***

A backplane is an interconnecting device that has circuitry and sockets into which PCBs or other additional electronic devices can be plugged. In a computer, these may be referred to as a "motherboard". The manufacture of backplane assemblies involves mounting various electronic components to large PCBs. Components include, but are not limited to, connectors, capacitors, resistors, diodes, integrated circuits, hardware and a variety of other parts. We can assemble backplanes and sub-systems and provide full system integration of backplane assemblies, cabling, power, thermal, and other complex electromechanical parts into chassis and other enclosures. In addition to assembly services, we provide inspection and testing services such as automated optical inspection (AOI) and X-ray inspection to ensure that all components have been properly placed and electrical circuits are complete. Our focus is to provide backplane and sub-system assembly products primarily as an extension of our commercial and aerospace/defense PCB offerings.

### ***IC substrates***

IC substrates are mounts that are used to connect very small ICs (integrated circuits or semiconductors) to comparatively larger PCBs for assembly into electronic end products such as memory modules, cellular phones, digital cameras, automotive GPS and engine controls. IC substrates, also known as IC carriers, are highly

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miniaturized circuits manufactured by a process largely similar to that for PCBs but requiring the use of ultra-thin materials and including micron-scale features, as they must bridge the gap between sub-micron IC features and millimeter scale PCBs. Consequently, IC substrates are generally manufactured in a semiconductor-grade clean room environment to ensure products are free of defects and contamination.

IC substrates are a basic component of IC packages which, combined with other electronic components in an assembly, control functions of an electronic appliance. IC packages can be broadly divided into single chip modules (or SCMs) and multi-chip modules (or MCMs), with the former containing one IC chip, and the latter containing multiple chips and other electronic components.

### ***Process and product development***

Process and product development plays a vital role in our business. As electronic products become smaller, demands are increasing for higher speed and functionality of such products. Accordingly, continued advancement in processing technology is required to develop increasingly smaller sized PCB products with increased functionality by accommodating even more powerful and complicated chipsets. As product responsiveness and speed increases, special electrical properties become factors affecting signal integrity and the transmission speed between PCBs and the electrical components to which they are connected. Special materials, equipment, chemicals and manufacturing processes are therefore required to ensure the proper functioning of the final electronic end product.

### ***Quick turnaround services***

We refer to our rapid delivery services as quick turnaround or QTA, because we provide custom-fabricated PCBs to our customers within as little as 24 hours to 10 days. As a result of our ability to rapidly and reliably respond to the critical time requirements of our customers, we generally receive premium pricing for our QTA services as compared to standard lead time prices.

*Prototype production.* In the design, testing, and launch phase of a new electronic product's life cycle, our customers typically require limited quantities of PCBs in a very short period of time. We satisfy this need by manufacturing prototype PCBs in small quantities, with delivery times ranging from as little as 24 hours to 10 days.

*Ramp-to-volume production.* After a product has successfully completed the prototype phase, our customers introduce the product to the market and require larger quantities of PCBs in a short period of time. This transition stage between low-volume prototype production and volume production is known as ramp-to-volume. Our ramp-to-volume services typically include manufacturing up to a few hundred PCBs per order with delivery times ranging from 5 to 15 days.

## **Manufacturing Technologies**

The market for our products is characterized by rapidly evolving technology. In recent years, the trend in the electronic products industry has been to increase the speed, complexity, and performance of components while reducing their size. We believe our technological capabilities allow us to address the needs of manufacturers to bring complicated electronic products to market faster.

To manufacture PCBs, we generally receive circuit designs directly from our customers in the form of computer data files, which we review to ensure data accuracy and product manufacturability. Processing these computer files with computer aided manufacturing (CAM) technology, we generate images of the circuit patterns that we then physically develop on individual layers, using advanced photographic processes. Through a variety of plating and etching processes, we selectively add and remove conductive materials to form horizontal layers of thin circuitry, which are separated by electrical insulating material. A multilayer circuit board is produced by laminating together multiple layers of circuitry, using intense heat and pressure under vacuum. Vertical connections between layers are achieved by drilling and plating through small holes, called vias. Vias are made by highly specialized drilling equipment capable of achieving extremely fine tolerances with high accuracy. We specialize in high layer count PCBs with extremely fine geometries and tolerances. Because of the tolerances

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involved, we employ clean rooms in certain manufacturing processes where tiny particles might otherwise create defects on the circuit patterns. We also use automated optical inspection systems and electrical testing systems to ensure consistent quality of the circuits we produce.

We believe that our highly specialized equipment and advanced manufacturing processes enable us to reliably produce PCBs with the following characteristics:

*High layer count.* Manufacturing PCBs with a large number of layers is difficult to accomplish due to the accumulation of manufacturing tolerances and registration systems required. In our North America operating segment, we regularly manufacture PCBs with more than 30 layers on a quick-turn and volume basis. Approximately 63% of our 2012 North America PCB revenue involved the manufacture of PCBs with at least 12 layers or more, compared to 62% in 2011. Printed circuit boards with at least 20 layers or more represented 32% of North America PCB revenue in 2012 and 2011. Approximately 23% of our 2012 and 2011 Asia Pacific net sales involved the manufacture of PCBs with at least 12 layers or more.

*Blind and buried vias.* Vias are drilled holes that provide electrical connectivity between layers of circuitry in a PCB. Blind vias connect the surface layer of the PCB to an internal layer and terminate at the internal layer. Buried vias are holes that do not reach either surface of the PCB but allow inner layers to be interconnected. Products with blind and buried vias can be made thinner, smaller, lighter and with higher component density and more functionality than products with traditional vias.

*High Density Interconnect (HDI).* HDI technology utilizes microvias, which are small vias with diameters generally less than 0.005 inches after plating. Advanced HDI products may also require the micro via to be fully filled using a specialized plating process so that additional micro via structures can be stacked on top to form more complex interconnections. These microvias consume much less space on the layers they interconnect, thereby providing for greater wiring densities and flexibility, also providing closer spacing of components and their attachment pads. The fabrication of PCBs with microvias requires specialized equipment, such as laser drills, and highly developed process knowledge. Applications such as handheld wireless devices employ microvias to obtain a higher degree of functionality from a given surface area. Total HDI PCBs represented approximately 42% of our Asia Pacific net sales in 2012, up from 41% in 2011.

*Embedded passives.* Embedded passive technology involves embedding either the capacitive or resistive elements inside the PCB, which allows for removal of passive components from the surface of the PCB and thereby leaves more surface area for active components. Use of this technology provides greater surface area for surface-mounted ICs and better signal performance, as well as increased functionality of products with higher component density.

*Fine line traces and spaces.* Traces are the connecting copper lines between the different components of the PCB, and spaces are the distances between traces. The smaller the traces and the tighter the spaces, the higher the density on the PCB and the greater the expertise required to achieve a desired final yield on an order. We are able to manufacture PCBs with traces and spaces less than 0.002 inches.

*High aspect ratios.* The aspect ratio is the ratio between the thickness of the PCB and the diameter of a drilled hole. The higher the ratio, the greater the difficulty to reliably form, electroplate and finish all the holes on a PCB. In production, we are able to provide aspect ratios of up to 15:1.

*Thin core processing.* A core is the basic inner-layer building block material from which PCBs are constructed. A core consists of a flat sheet of material comprised of glass-reinforced resin with copper foil laminated on either side. The thickness of inner-layer cores is typically determined by the overall thickness of the PCB and the number of layers required. The demand for thinner cores derives from the requirements for thinner PCBs, higher layer counts and various electrical parameters. Core thickness in our PCBs ranges from as little as 0.002 inches up to 0.062 inches.

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*Advanced hole fill process.* Our advanced hole fill processes provide designers the opportunity to increase the density of component placements by reducing the surface area required to place many types of components. In traditional design, components are routed from their surface interfaces through via connections in order to access power and ground connections and the internal circuitry used to connect to

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other discrete components. Our advanced hole fill processes provide methods to allow for vias to be placed inside their respective surface mount pads by filling the vias with a thermoset epoxy and plating flat copper surface mount pads directly over the filled hole.

*Advanced materials.* We manufacture circuit boards using a wide variety of advanced insulating materials. These high-performance materials offer electrical, thermal, and long-term reliability advantages over conventional materials but are more difficult to manufacture. We are certified by Underwriters Laboratories to manufacture PCBs using many types and combinations of these specialty materials. This wide offering allows us to manufacture complex boards for niche and high-end commercial and aerospace/defense markets.

*High frequency circuits.* We have the ability to produce and test specialized circuits used in radio-frequency or microwave emission and collection applications. These products are typically used for radar, transmit/receive antennas and similar wireless applications. Markets for these products include defense, avionics, satellite, and commercial. The manufacture of these products requires advanced materials, equipment, and methods that are highly specialized and distinct from conventional printed circuit manufacturing techniques. We also offer specialized radio-frequency assembly and test services.

*Thermal management.* Increased component density on circuit boards often requires improved thermal dissipation to reduce operating temperatures. We have the ability to produce printed circuits with electrically passive heat sinks laminated externally on a circuit board or between two circuit boards and/or electrically active thermal cores.

**Customers and Markets**

Our customers include both OEMs and EMS companies that primarily serve the networking/communications, aerospace/defense, high-end computing, cell phone and medical/industrial/instrumentation end markets of the electronics industry. Included in the end markets that our OEM and EMS customers serve is the U.S. government. As a result, we are a supplier, primarily as a subcontractor, to the U.S. government. We measure customers as those companies that have placed orders of \$2,000 or more in the preceding 12-month period. As of December 31, 2012 and 2011, we had approximately 1,025 and 1,220 customers, respectively.

The following table shows the percentage of our net sales in each of the principal end markets we served for the periods indicated:

End Markets(1)	2012	2011	2010
Aerospace/Defense	15%	16%	20%
Cellular Phone <sup>(2)</sup>	14	11	10
Computing/Storage/Peripherals <sup>(2)</sup>	23	23	21
Medical/Industrial/Instrumentation	8	8	9
Networking/Communications	31	36	35
Other <sup>(2)</sup>	9	6	5
Total	100%	100%	100%

(1) Sales to EMS companies are classified by the end markets of their OEM customers.

(2) Smartphones are included in the Cellular Phone end market, tablet PCs are included in the Computing/Storage/Peripherals end market and other mobile devices such as e-readers are included in the Other end market.

Sales attributable to our five largest OEM customers, which can vary from year to year, collectively accounted for 33%, 33%, and 28% of our net sales in 2012, 2011 and 2010, respectively. Our five largest OEM customers in 2012 were, in alphabetical order, Apple, Cisco Systems, Ericsson, Huawei, and IBM. For the year ended December 31, 2012, Apple accounted for 14% of our net sales. Sales attributed to OEMs include sales made through EMS providers. Sales to EMS providers comprised approximately 40%, 42% and 45% of our net sales in 2012, 2011 and 2010, respectively. Although our contractual relationships are with the EMS companies,



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we typically negotiate price and volume requirements directly with the OEMs. In addition, we are on the approved vendor lists of several of our EMS providers. This positions us to participate in business that is awarded at the discretion of the EMS provider. Our five largest EMS customers in 2012 were, in alphabetical order, Celestica, Flextronics, Foxconn, Jabil and Plexus.

During 2012, 2011 and 2010, our net sales by country were as follows:

Country	2012	2011	2010
United States	36%	37%	35%
China	32	39	42
Other	32	24	23
Total	100%	100%	100%

Net sales to other countries, individually, for the years ended December 31, 2012, 2011 and 2010, did not exceed 10% of total net sales.

Our marketing strategy focuses on building long-term relationships with our customers' engineering and new product introduction personnel early in the product development phase, frequently through strategic account management teams. As the product moves from the prototype stage through ramp-to-volume and volume production, we shift our focus to the customers' procurement departments in order to capture sales at each point in the product's life cycle.

Our staff of engineers, sales support personnel, and managers assists our sales representatives in advising customers with respect to manufacturing feasibility, design review, and technological capabilities through direct communication and visits. We combine our sales efforts with customer service at each facility to better serve our customers. Each large customer is typically assigned an account manager to coordinate all of the company's services across all of our facilities. Additionally, the largest and most strategic customers are also supported by selected program management and engineering resources. Our sales force is comprised of direct sales personnel, complemented by a large force of commission-based, independent representatives.

Our domestic U.S. footprint comprises most of our North America operating segment and its seven PCB fabrication plants in California, Connecticut, Utah and Wisconsin, which include a facility that provides follow-on value-added assembly services to our Connecticut PCB fabrication plant; and primary customer inventory hubs in Connecticut, New York, Texas and Wisconsin.

Our international footprint includes our Asia Pacific operating segment and their seven PCB fabrication plants in Hong Kong, Dongguan, Guangzhou, Shanghai and Suzhou, China; a backplane and sub-system assembly operation in Shanghai, China that is part of our North America operating segment; and customer inventory hubs in France, Poland, Hong Kong, China, Mexico, and Southeast Asia. Our international sales force services customers throughout North America, Europe, Asia, and the Middle East. We believe our international reach enables us to access new customers and allows us to better serve existing customers.

For information about net sales, income before income taxes, depreciation, total assets and capital expenditures of each of our segments, and geographical segment information, including net sales to customers and long-lived assets, see Note 20 of the Notes to Consolidated Financial Statements.

**Suppliers**

The primary raw materials we use in PCB manufacturing include copper-clad laminate; chemical solutions such as copper and gold for plating operations; photographic film; carbide drill bits; and plastic for testing fixtures. Although we have preferred suppliers for some raw materials used in the manufacture of PCBs, most of our raw materials are generally readily available in the open market from numerous other potential suppliers.

The primary raw materials we use in backplane assembly are manufactured components such as PCBs, connectors, capacitors, resistors, diodes, integrated circuits and formed sheet metal, many of which are custom made and controlled by our customers' approved vendors. These components for backplane assemblies in some





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cases have limited or sole sources of supply. For example, in some instances our customers will require us to use a specific component from a particular supplier or require us to use a component provided by the customer itself, in which case we may have a single or limited number of suppliers for these specific components.

We typically use just-in-time procurement practices to maintain our raw materials inventory at low levels and work closely with our suppliers to obtain technologically advanced raw materials. In addition, we periodically seek alternative supply sources to ensure that we are receiving competitive pricing and service. Adequate amounts of all raw materials have been available in the past, and we believe this availability will continue into the foreseeable future.

Both PCB and IC substrates are heavy consumers of gold and copper, which represented a significant amount of our cost of goods sold in 2012, and are thus vulnerable to cost increases if raw material prices rise. See *Item 1A Risk Factors* .

## **Competition**

Despite industry consolidation, the PCB industry remains fragmented and characterized by intense competition. Our principal PCB and substrate competitors include Unimicron, Ibiden, Tripod, Foxconn, Viasystems, Sanmina, Multek and Wus. Our principal backplane assembly competitors include Amphenol, Sanmina, Simclar, TT Electronics, and Viasystems.

We believe we compete favorably based on the following competitive factors:

status as a top six global PCB manufacturer;

capability and flexibility to produce technologically complex products;

ability to offer a one-stop manufacturing solution;

specialized and integrated manufacturing facilities;

ability to offer time-to-market capabilities;

leading edge aerospace/defense capabilities;

flexibility to manufacture low volume, high-mix products;

consistent high-quality product; and

outstanding customer service.

In addition, we believe our continuous evaluation and early adoption of new manufacturing and production technologies give us a competitive advantage. We believe that our ability to manufacture PCBs using advanced technologies, including our HDI and substrate capabilities, provides us with a competitive advantage over manufacturers that do not possess this advanced technological expertise. Our future success will depend in large part on our ability to maintain and enhance our manufacturing capabilities and production technologies.

## **Seasonality**

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As a result of the product and customer mix of our Asia Pacific operating segment, a portion of our revenue is subject to seasonal fluctuations. These fluctuations include seasonal patterns in the computer and cellular phone industry, which together have become a significant portion of the end markets that we serve. This seasonality typically results in higher net sales in the third and fourth quarters due to end customer demand for fourth quarter sales of consumer electronics products. Seasonal fluctuations also include the Chinese New Year holidays in the first quarter, which typically results in lower net sales. In addition, our accounting calendar causes the first quarter of the fiscal year to have fewer days than the other quarters, especially the fourth quarter. In some cases, the number of days can differ by as many as twelve days between the first and fourth quarters, which can cause significantly lower first quarter sales. Subsequent to December 31, 2012 we will modify our accounting calendar so that the first quarter ends on the Monday closest to April 1 and the last quarter always ends on December 31, reducing the difference in the number of days between the first and fourth quarters.

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### **Backlog**

Backlog consists of purchase orders received, including, in some instances, forecast requirements released for production under customer contracts. We obtain firm purchase orders from our customers for all products. However, for many of these purchase orders, customers do not make firm orders for delivery of products more than 30 to 60 days in advance. Some of the markets which we serve are characterized by increasingly short product life cycles. For other markets, longer product life cycles are more common as orders are for deliveries greater than 60 days in advance. At December 31, 2012, total backlog was \$175.1 million, compared with \$173.4 million at the end of 2011. Substantially all backlog at December 31, 2012 is expected to be converted to sales in 2013.

### **Intellectual Property**

We believe our business depends on the effectiveness of our fabrication techniques and our ability to continue to improve our manufacturing processes. We have limited patent or trade secret protection for our manufacturing processes. We rely on the collective experience of our employees in the manufacturing process to ensure that we continuously evaluate and adopt the new technologies available in our industry. In addition, we depend on training, recruiting, and retaining our employees, who are required to have sufficient know-how to operate advanced equipment and to conduct complicated manufacturing processes.

### **National Security Matters**

A portion of our business consists of manufacturing defense and defense-related items for various departments and agencies of the U.S. government, including the U.S. Department of Defense, or the DoD, which requires that we maintain facility security clearances under the National Industrial Security Program, or NISP. The NISP requires that a corporation maintaining a facility security clearance take steps to mitigate foreign ownership, control or influence, referred to as FOCI. Pursuant to these laws and regulations, effective October 2010, we entered into a Special Security Agreement with the DoD; Su Sih (BVI) Limited, or Su Sih (a significant foreign owner of our capital stock); and Mr. Tang Hsiang Chien (as the beneficial owner of Su Sih). The purpose of the Special Security Agreement is to deny Mr. Tang, Su Sih, and other persons affiliated with our PCB Subsidiaries, from unauthorized access to classified and controlled unclassified information and influence over our business or management in a manner that could result in the compromise of classified information or could adversely affect the performance of classified contracts.

### **Other Governmental Regulations**

Our operations, particularly those in North America, are subject to a broad range of regulatory requirements relating to export control, environmental compliance, waste management, and health and safety matters. In particular, we are subject to the following:

U.S. Department of State regulations, including the Arms Export Control Act (AECA) and International Traffic In Arms Regulations (ITAR) located at 22 CFR Parts 120-130;

U.S. Department of Commerce regulations, including the Export Administration Regulations (EAR) located at 15 CFR Parts 730-744;

Office of Foreign Asset Control (OFAC) regulations located at 31 CFR Parts 500-599;

U.S. Occupational Safety and Health Administration (OSHA), and state OSHA and Department of Labor laws pertaining to health and safety in the workplace;

U.S. Environmental Protection Agency (U.S. EPA) regulations pertaining to air emissions; wastewater discharges; and the use, storage, discharge, and disposal of hazardous chemicals used in the manufacturing processes; the reporting of chemical releases to the environment; and the reporting of chemicals manufactured in by-products that are beneficially recycled,

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Department of Homeland Security (DHS) regulations regarding the storage of certain chemicals of interest;

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corresponding state laws and regulations, including site investigation and remediation;

corresponding U.S. county and city agencies;

corresponding regulations and agencies in China for our Chinese facilities;

material content directives and laws that ban or restrict certain hazardous substances in products sold in member states of the European Union, China, other countries, and New York City; and

SEC rules that require reporting of the use of certain metals from conflict minerals originating in the Democratic Republic of the Congo and the 9 countries surrounding it pursuant to Section 1502 of the Dodd-Frank Act; and

reporting requirements of the California Transparency in Supply Chains Act of 2010 that requires reporting on efforts to eradicate slavery and human trafficking in retailers and manufacturers supply chains.

To date, the costs of compliance and environmental remediation have not been material to us. However, we face increasingly stringent environmental compliance requirements, especially related to waste water treatment, that will require further capital investment in 2013 in the PRC. Additional or modified requirements may also be imposed in the future. If such additional or modified requirements are imposed on us, or if conditions requiring remediation are found to exist, we may be required to incur substantial additional expenditures.

**Employees**

As of December 31, 2012, we had 19,934 employees. Of our employees, 18,331 were involved in manufacturing and engineering, 280 worked in sales and marketing, and 1,323 worked in accounting, systems and other support capacities. None of our U.S. employees are represented by unions. In China, approximately 13,356 employees are represented by a labor union. We have not experienced any labor problems resulting in a work stoppage and believe that we have good relations with our employees.

**Availability of Reports Filed with the Securities and Exchange Commission**

We are a Delaware corporation, with our principal executive offices located at 1665 Scenic Avenue, Suite 250, Costa Mesa, CA 92626. Our telephone number is (714) 327-3000. Our web site address is [www.ttmtech.com](http://www.ttmtech.com). Information included on our website is not incorporated into this report. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports are available without charge on our website at [www.ttmtech.com/investors/investor\\_sec.aspx](http://www.ttmtech.com/investors/investor_sec.aspx), as soon as reasonably practicable after they are filed electronically with the Securities and Exchange Commission (SEC). Copies are also available without charge by (i) telephonic request by calling our Investor Relations Department at (714) 327-3000, (ii) e-mail request to [investor@ttmtech.com](mailto:investor@ttmtech.com), or (iii) a written request to TTM Technologies, Inc., Attention: Investor Relations, 1665 Scenic Avenue, Suite 250, Costa Mesa, CA 92626.

**ITEM 1A. RISK FACTORS**

*An investment in our common stock involves a high degree of risk. You should carefully consider the factors described below, in addition to those discussed elsewhere in this report, in analyzing an investment in our common stock. If any of the events described below occurs, our business, financial condition, and results of operations would likely suffer, the trading price of our common stock could fall, and you could lose all or part of the money you paid for our common stock.*

*In addition, the following risk factors and uncertainties could cause our actual results to differ materially from those projected in our forward-looking statements, whether made in this annual report or future quarterly reports to stockholders, press releases, or oral statements, whether in presentations, responses to questions, or otherwise.*



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***We are heavily dependent upon the worldwide electronics industry, which is characterized by economic cycles and fluctuations in product demand. A downturn in the electronics industry or prolonged global economic crisis could result in decreased demand for our manufacturing services and materially impact our financial condition.***

A majority of our revenue is generated from the electronics industry, which is characterized by intense competition, relatively short product life cycles, and significant fluctuations in product demand. The industry is subject to economic cycles and recessionary periods and has been negatively affected by the current global economic environment. Due to the uncertainty in the end markets served by most of our customers, we have a low level of visibility with respect to future financial results. Consequently, our past operating results, earnings and cash flows may not be indicative of our future operating results, earnings and cash flows.

Current worldwide economic conditions have led to challenging conditions in the electronics industry. A number of factors, including geopolitical issues, the availability and cost of credit and high unemployment have slowed global economic growth and resulted in recessions in many countries. Continuation of poor economic conditions could adversely impact overall demand in the electronics industry, which could have a negative effect on our business, results of operations, and financial condition. In addition, our ability to access the capital markets may be severely restricted at a time when we would like, or need, to do so, which could have an impact on our flexibility to react to changing economic and business conditions or our ability to pursue acquisitions.

***We may need additional capital in the future to fund investments in our operations, refinance our indebtedness and to maintain and grow our business, and it may not be available on acceptable terms, or at all.***

Our business is capital intensive, and our ability to increase revenue, profit, and cash flow depends upon continued capital spending. We believe that we can meet our capital requirements from internally generated funds, cash on hand, and available borrowings. If we are unable to fund our capital requirements as currently planned, however, it would have a material adverse effect on our business, financial condition, and operating results. If we do not achieve our expected operating results, we would need to reallocate our sources and uses of operating cash flows. This may include borrowing additional funds to service debt payments, which may impair our ability to make investments in our business. Looking ahead at long-term needs, we may need to raise additional funds for a number of purposes, including:

to fund capital equipment purchases to increase production capacity, expand our technological capabilities and replace aging equipment;

to refinance our existing indebtedness;

to fund our operations beyond 2013;

to fund working capital requirements for future growth that we may experience;

to enhance or expand the range of services we offer;

to increase our sales and marketing activities; or

to respond to competitive pressures or perceived opportunities, such as investment, acquisition and international expansion activities. Should we need to raise funds through incurring additional debt, we may become subject to covenants even more restrictive than those contained in our current debt instruments. Furthermore, if we issue additional equity, our equity holders would suffer dilution. There can be no assurance that additional capital would be available on a timely basis, on favorable terms, or at all. If such funds are not available when required or on acceptable terms, our business and financial results could suffer.





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***Our substantial indebtedness could adversely affect our business and limit our ability to plan for or respond to changes in our business, and we may be unable to generate sufficient cash flow to satisfy our significant debt service obligations.***

As of December 31, 2012, we had total indebtedness of approximately \$575.0 million, which represented approximately 43% of our total capitalization. We may incur substantial additional indebtedness in the future, including additional borrowings under our revolving credit facility.

Our substantial indebtedness and the fact that a substantial portion of our cash flow from operations must be used to make principal and interest payments on this indebtedness could have important consequences, including the following:

increasing our vulnerability to general adverse economic and industry conditions;

reducing the availability of our cash flow for working capital, capital investments and other business activities and purposes;

limiting our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate, which would place us at a competitive disadvantage compared to our competitors that may have less debt;

limiting, by the financial and other restrictive covenants in our debt agreements, our ability to borrow additional funds; and

having a material adverse effect on our business if we fail to comply with the covenants in our debt agreements, because such failure could result in an event of default that, if not cured or waived, could result in all or a substantial amount of our indebtedness becoming immediately due and payable.

Our ability to incur significant future indebtedness, whether to finance capital expenditures, potential acquisitions or for general corporate purposes, will depend on our ability to generate cash. This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory, and other factors that are beyond our control. If our business does not generate sufficient cash flow from operations or if future borrowings are not available to us under our secured credit facilities in amounts sufficient to enable us to fund our liquidity needs, our financial condition and results of operations may be adversely affected. If we cannot make scheduled principal and interest payments on our debt obligations in the future, we may need to refinance all or a portion of our indebtedness on or before maturity, sell assets, delay capital expenditures, or seek additional equity. If we are unable to refinance our indebtedness on commercially reasonable terms or at all, or to effect any other of these actions, our business may be harmed.

***Covenants in our credit agreement may adversely affect our company.***

On September 14, 2012, we became a party to a new facility agreement (New Credit Agreement). The New Credit Agreement contains certain financial and operating covenants that include, among other provisions, limitations on dividends or other distributions, maintaining maximum total leverage ratios and minimum net worth, current assets, and interest coverage ratios at both the Company and at the Asia Pacific operating segment level. In addition, our New Credit Agreement includes a covenant that the Principal Shareholders (as defined in the Shareholders Agreement dated April 9, 2010 as amended on September 14, 2012) will not reduce their shareholding below 15 percent of TTM's issued shares. The ability to meet the financial covenants can be affected by events beyond our control, and we cannot provide assurance that we will continue to comply with all of these financial covenants. A breach of any of these covenants could result in a default under the New Credit Agreement. Upon the occurrence of an event of default under the New Credit Agreement, the lenders could elect to declare amounts outstanding thereunder to be immediately due and payable and terminate all commitments to extend further credit. If the lenders accelerate the repayment of borrowings, we may not have sufficient assets to repay the indebtedness owed under the New Credit Agreement and our other indebtedness. See Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—New Credit Agreement.

***We depend upon a relatively small number of OEM customers for a large portion of our sales, and a decline in sales to major customers could harm our results of operations.***

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A small number of customers is responsible for a significant portion of our sales. Collectively, our five largest OEM customers accounted for approximately 33%, 33% and 28% of our net sales for the years ended

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December 31, 2012, 2011 and 2010, respectively. Sales attributed to OEMs include both direct sales as well as sales that the OEMs place through EMS providers. Our customer concentration could fluctuate, depending on future customer requirements, which will depend in large part on market conditions in the electronics industry segments in which our customers participate. The loss of one or more significant customers or a decline in sales to our significant customers could harm our business, results of operations, and financial condition and lead to declines in the trading price of our common stock. In addition, we generate significant accounts receivable in connection with providing manufacturing services to our customers. If one or more of our significant customers were to become insolvent or were otherwise unable to pay for the manufacturing services provided by us, our results of operations would be harmed.

In addition, during industry downturns, we may need to reduce prices at customer requests to limit the level of order losses, and we may be unable to collect payments from our customers. There can be no assurance that key customers would not cancel orders, that they would continue to place orders with us in the future at the same levels as experienced by us in prior periods, that they would be able to meet their payment obligations, or that the end-products which use our products would be successful. This concentration of customer base may materially and adversely affect our operating results due to the loss or cancellation of business from any of these key customers, significant changes in scheduled deliveries to any of these customers, or decreases in the prices of the products sold to any of these customers.

### ***Our results can be adversely affected by rising labor costs.***

There is uncertainty with respect to rising labor costs, in particular within China, where we have most of our manufacturing facilities. In recent periods there have been regular and significant increases in the minimum wage payable in various China provinces. In addition, we have experienced very high employee turnover in our manufacturing facilities in China, and we are experiencing ongoing difficulty in recruiting employees for these facilities. Furthermore, labor disputes and strikes based partly on wages have in the past slowed or stopped production at certain manufacturers in China. In some cases, employers have responded by significantly increasing the wages of workers at such plants. Any increase in labor costs due to minimum wage laws or customer requirements about scheduling and overtime that we are unable to recover in our pricing to our customers could adversely impact our operating results. In addition, the high turnover rate and our difficulty in recruiting and retaining qualified employees and the other labor trends we are noting in China could result in production disruptions or delays or the inability to ramp production to meet increased customer orders, resulting in order cancellation or imposition of customer penalties if we are unable to timely deliver product.

To respond to competitive pressures and customer requirements, we may further expand internationally in lower cost locations. If we pursue such expansions, we may be required to make additional capital expenditures. In addition, the cost structure in certain countries that are now considered to be favorable may increase as economies develop or as such countries join multinational economic communities or organizations, causing local wages to rise. As a result, we may need to continue to seek new locations with lower costs and the employee and infrastructure base to support PCB manufacturing. We cannot assure investors that we will realize the anticipated strategic benefits of our international operations or that our international operations will contribute positively to our operating results.

In our North America operating segment rising health care costs pose a significant labor-related risk. We work with our insurance brokers and carriers to control the cost of health care for our employees. However there can be no assurance that our efforts will succeed, especially given recent pending changes in government oversight of health care.

### ***We serve customers and have manufacturing facilities outside the United States and are subject to the risks characteristic of international operations.***

We have significant manufacturing operations in Asia and sales offices located in Asia and Europe, and we continue to consider additional opportunities to make foreign investments and construct new foreign facilities. We generated 64% of our net sales from non-U.S. operations in 2012, and a significant portion of our

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manufacturing material was provided by international suppliers during this period. As a result, we are subject to risks relating to significant international operations, including but not limited to:

managing international operations;

imposition of governmental controls;

unstable regulatory environments;

compliance with employment laws;

implementation of disclosure controls, internal controls, financial reporting systems, and governance standards to comply with U.S. accounting and securities laws and regulations;

limitations on imports or exports of our product offerings;

fluctuations in the value of local currencies;

inflation or changes in political and economic conditions;

labor unrest, rising wages, difficulties in staffing and geographical labor shortages;

government or political unrest;

longer payment cycles;

language and communication barriers as well as time zone differences;

cultural differences;

increases in duties and taxation levied on our products;

other potentially adverse tax consequences;

imposition of restrictions on currency conversion or the transfer of funds;

travel restrictions;

expropriation of private enterprises; and

the potential reversal of current favorable policies encouraging foreign investment and trade.

***Our operations in China subject us to risks and uncertainties relating to the laws and regulations of China.***

Under its current leadership, the government of China has been pursuing economic reform policies, including the encouragement of foreign trade and investment and greater economic decentralization. No assurance can be given, however, that the government of China will continue to pursue such policies, that such policies will be successful if pursued, or that such policies will not be significantly altered from time to time. Despite progress in developing its legal system, China does not have a comprehensive and highly developed system of laws, particularly with respect to foreign investment activities and foreign trade. Enforcement of existing and future laws and contracts is uncertain, and implementation and interpretation thereof may be inconsistent. As the Chinese legal system develops, the promulgation of new laws, changes to existing laws and the preemption of local regulations by national laws may adversely affect foreign investors. Further, any litigation in China may be protracted and may result in substantial costs and diversion of resources and management attention. In addition, some government policies and rules are not timely published or communicated, if they are published at all. As a result, we may operate our business in violation of new rules and policies without having any knowledge of their existence. These uncertainties could limit the legal protections available to us.

***We depend on the U.S. government for a substantial portion of our business, which involves unique risks. Changes in government defense spending or regulations could have a material adverse effect on our business.***

A significant portion of our revenues is derived from products and services ultimately sold to the U.S. government by our OEM and EMS customers and is therefore affected by, among other things, the federal budget process. We are a supplier, primarily as a subcontractor, to the U.S. government and its agencies as well as foreign governments and agencies. The contracts between our direct customers and the government end user

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are subject to political and budgetary constraints and processes, changes in short-range and long-range strategic plans, the timing of contract awards, the congressional budget authorization and appropriation processes, the government's ability to terminate contracts for convenience or for default, as well as other risks such as contractor suspension or debarment in the event of certain violations of legal and regulatory requirements.

In 2012, aerospace/defense sales accounted for approximately 15% of our total net sales. The substantial majority of these sales are related to both U.S. and foreign military and defense programs. While we do not sell any significant volume of product directly to the U.S. government, we are a supplier to the U.S. government and its agencies as well as foreign governments and agencies. Consequently, our sales are affected by changes in the defense budgets of the U.S. and foreign governments. The domestic and international threat of terrorist activity, emerging nuclear states and conventional military threats have led to an increase in demand for defense products and services and homeland security solutions in the recent past. The U.S. government, however, is facing unprecedented budgeting constraints. The termination or failure to fund one or more significant contracts by the U.S. government could have a material adverse effect on our business, results of operations or prospects.

Additionally, the federal government is currently in the process of reviewing and revising the United States Munitions List. Such changes could reduce or eliminate restrictions that currently apply to some of the products we produce. If these regulations or others are changed in a manner that reduces restrictions on products being manufactured overseas, we would likely face an increase in the number of competitors and increased price competition from overseas manufacturers, who are restricted by the current export laws from manufacturing products for U.S. defense systems.

***If we are unable to maintain satisfactory capacity utilization rates, our results of operations and financial condition would be adversely affected.***

Given the high fixed costs of our operations, decreases in capacity utilization rates can have a significant effect on our business. Accordingly, our ability to maintain or enhance gross margins would continue to depend, in part, on maintaining satisfactory capacity utilization rates. In turn, our ability to maintain satisfactory capacity utilization would depend on the demand for our products, the volume of orders we receive, and our ability to offer products that meet our customers' requirements at competitive prices. If current or future production capacity fails to match current or future customer demands, our facilities would be underutilized, our sales may not fully cover our fixed overhead expenses, and we would be less likely to achieve expected gross margins. If forecasts and assumptions used to support the realizability of our long-lived assets change in the future, significant impairment charges could result that would adversely affect our results of operations and financial condition.

In addition, we generally schedule our QTA production facilities at less than full capacity to retain our ability to respond to unexpected additional quick-turn orders. However, if these orders are not received, we may forego some production and could experience continued excess capacity. If we conclude we have significant, long-term excess capacity, we may decide to permanently close one or more of our facilities, and lay off some of our employees. Closures or lay-offs could result in our recording restructuring charges such as severance, other exit costs, and asset impairments as well as potentially causing disruptions in our ability to supply customers.

***Competition in the PCB market is intense, and we could lose market share if we are unable to maintain our current competitive position in end markets using our quick-turn, high technology and high-mix manufacturing services.***

The PCB industry is intensely competitive, highly fragmented, and rapidly changing. We expect competition to continue, which could result in price reductions, reduced gross margins, and loss of market share. Our principal PCB and substrate competitors include Unimicron, Ividen, Tripod, Foxconn, Viasystems, Sanmina, Multek and Wus. Our principal backplane assembly competitors include Amphenol, Sanmina, Simclar, TT Electronics, and Viasystems. In addition, we increasingly compete on an international basis, and new and emerging technologies may result in new competitors entering our markets.

Some of our competitors and potential competitors have advantages over us, including:

greater financial and manufacturing resources that can be devoted to the development, production, and sale of their products;

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more established and broader sales and marketing channels;

more manufacturing facilities worldwide, some of which are closer in proximity to OEMs;

manufacturing facilities that are located in countries with lower production costs;

lower capacity utilization, which in peak market conditions can result in shorter lead times to customers;

ability to add additional capacity faster or more efficiently;

preferred vendor status with existing and potential customers;

greater name recognition; and

larger customer bases.

In addition, these competitors may respond more quickly to new or emerging technologies, or adapt more quickly to changes in customer requirements, and devote greater resources to the development, promotion, and sale of their products than we do. We must continually develop improved manufacturing processes to meet our customers' needs for complex products, and our manufacturing process technology is generally not subject to significant proprietary protection. During recessionary periods in the electronics industry, our strategy of providing quick-turn services, an integrated manufacturing solution, and responsive customer service may take on reduced importance to our customers. As a result, we may need to compete more on the basis of price, which could cause our gross margins to decline.

***An increase in the cost of raw materials could have an adverse impact on our business and reduce our gross margins.***

To manufacture PCBs, we use raw materials such as laminated layers of fiberglass, copper foil, chemical solutions, gold, and other commodity products, which we order from our suppliers. In the case of backplane assemblies, components include connectors, sheet metal, capacitors, resistors and diodes, many of which are custom made and controlled by our customers' approved vendors. The supply of raw materials has tightened recently, and commodities prices have risen. These increases in raw material and component prices, if sustained, can negatively affect our gross margins. In general, we are able to pass this price increase on to our customers, but we cannot be certain we will continue to be able to do so in the future.

***We rely on suppliers for the timely delivery of raw materials and components used in manufacturing our PCBs and backplane assemblies. If a raw material supplier fails to satisfy our product quality standards, it could harm our customer relationships.***

Although we have preferred suppliers for most of these raw materials, the materials we use are generally readily available in the open market, and numerous other potential suppliers exist. The components for backplane assemblies in some cases have limited or sole sources of supply. Consolidations and restructuring in our supplier base may result in adverse materials pricing due to reduction in competition among our suppliers. Furthermore, if a raw material or component supplier fails to satisfy our product quality standards, including standards relating to conflict metals (discussed further below), it could harm our customer relationships. Suppliers may from time to time extend lead times, limit supplies, or increase prices, due to capacity constraints or other factors, which could harm our ability to deliver our products on a timely basis.

***Our results of operations are often subject to demand fluctuations and seasonality. With a high level of fixed operating costs, even small revenue shortfalls would decrease our gross margins and potentially cause the trading price of our common stock to decline.***

Our results of operations fluctuate for a variety of reasons, including:

timing of orders from and shipments to major customers;

the levels at which we utilize our manufacturing capacity;

price competition;



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changes in our mix of revenues generated from quick-turn versus standard delivery time services;

expenditures, charges or write-offs, including those related to acquisitions, facility restructurings, or asset impairments; and

expenses relating to expanding existing manufacturing facilities.

A significant portion of our operating expenses is relatively fixed in nature, and planned expenditures are based in part on anticipated orders. Accordingly, unexpected revenue shortfalls may decrease our gross margins. In addition, we have experienced sales fluctuations due to seasonal patterns in the capital budgeting and purchasing cycles, as well as inventory management practices of our customers and the end markets we serve. In particular, the seasonality of the computer industry and quick-turn ordering patterns affect the overall PCB industry. These seasonal trends have caused fluctuations in our operating results in the past and may continue to do so in the future. Results of operations in any period should not be considered indicative of the results to be expected for any future period. In addition, our future quarterly operating results may fluctuate and may not meet the expectations of securities analysts or investors. If this occurs, the trading price of our common stock likely would decline.

***If we are unable to provide our customers with high-end technology, high quality products, and responsive service, or if we are unable to deliver our products to our customers in a timely manner, our results of operations and financial condition may suffer.***

In order to maintain our existing customer base and obtain business from new customers, we must demonstrate our ability to produce our products at the level of technology, quality, responsiveness of service, timeliness of delivery, and at costs that our customers require. If our products are of substandard quality, if they are not delivered on time, if we are not responsive to our customers' demands, or if we cannot meet our customers' technological requirements, our reputation as a reliable supplier of our products would likely be damaged. If we are unable to meet these product and service standards, we may be unable to obtain new contracts or keep our existing customers, and this could have a material adverse effect on our results of operations and financial condition.

***Our Asia Pacific operations could be adversely affected by a shortage of utilities or a discontinuation of priority supply status offered for such utilities.***

The manufacturing of PCBs requires significant quantities of electricity and water. Our Asia Pacific operations have historically purchased substantially all of the electrical power for their manufacturing plants in China from local power plants. Because China's economy has recently been in a state of growth, the strain on the nation's power plants is increasing, which has led to continuing power outages in various parts of the country. There may be times when our operations in China may be unable to obtain adequate sources of electricity to meet production requirements. Additionally, we would not likely maintain any back-up power generation facilities for our operations, so if we were to lose power at any of our facilities we would be required to cease operations until power was restored. Any stoppage of power could adversely affect our ability to meet our customers' orders in a timely manner, thus potentially resulting in a loss of business and increased costs of manufacturing. In addition, the sudden cessation of power supply could damage our equipment, resulting in the need for costly repairs or maintenance as well as damage to products in production, resulting in an increase in scrapped products. Similarly, the sudden cessation of the water supply to China facilities could adversely affect our ability to fulfill orders in a timely manner, potentially resulting in a loss of business and under-utilization of capacity. Various regions in China have in the past experienced shortages of both electricity and water and unexpected interruptions of power supply. From time to time, the Chinese government rations electrical power, which can lead to unscheduled production interruptions in our manufacturing facilities. There can be no assurance that our required utilities would not in the future experience material interruptions, which could have a material adverse effect on our results of operations and financial condition.

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***We are subject to risks for the use of certain metals from conflict minerals originating in the Democratic Republic of the Congo.***

During the third quarter of 2012, the SEC adopted rules implementing the Dodd-Frank Wall Street Reform and Consumer Protection Act, or Dodd-Frank. These rules impose diligence and disclosure requirements regarding the use of conflict minerals mined from the Democratic Republic of Congo and adjoining countries as required by Dodd-Frank. Compliance with these rules is likely to result in additional costs and expenses, including cost and expenses incurred for due diligence to determine and verify the sources of any conflict minerals used in our products, in addition to the costs and expenses of remediation and other changes to products, processes, or sources of supply as a consequence of such verification efforts. These rules may also affect the sourcing and availability of minerals used in the manufacture of our semiconductor devices as there may be only a limited number of suppliers offering conflict free minerals that can be used in our products. There can be no assurance that we will be able to obtain such minerals in sufficient quantities or at competitive prices. Also, since our supply chain is complex, we may, at a minimum, face reputational challenges with our customers, stockholders and other stakeholders if we are unable to sufficiently verify the origins of the minerals used in our products. We may also encounter customers who require that all of the components of our products be certified as conflict free. If we are not able to meet customer requirements, such customers may choose to disqualify us as a supplier, which could impact our sales and the value of portions of our inventory.

***Unanticipated changes in our tax rates or in our assessment of the realizability of our deferred income tax assets or exposure to additional income tax liabilities could affect our operating results and financial condition.***

We are subject to income taxes in the United States and various foreign jurisdictions. Significant judgment is required in determining our provision for income taxes and, in the ordinary course of business, there are many transactions and calculations in which the ultimate tax determination is uncertain. Our effective tax rates could be adversely affected by changes in the mix of earnings in countries and states with differing statutory tax rates, changes in the valuation of deferred income tax assets and liabilities, changes in tax laws, as well as other factors. Our tax determinations are regularly subject to audit by tax authorities, and developments in those audits could adversely affect our income tax provision. Although we believe that our tax estimates are reasonable, the final determination of tax audits or tax disputes may be different from what is reflected in our historical income tax provisions, which could affect our operating results.

***If our net earnings do not remain at or above recent levels, or we are not able to predict with a reasonable degree of probability that they will continue, we may have to record a valuation allowance against our net deferred income tax assets.***

As of December 31, 2012, we had net deferred income tax assets of approximately \$13.5 million. Based on our forecast for future taxable earnings, we believe we will utilize the deferred income tax assets in future periods. However, if our estimates of future earnings decline, we may have to increase our valuation allowance against our net deferred income tax assets, resulting in a higher income tax provision, which would reduce our earnings per share. Additionally, the ability to utilize deferred income tax assets is dependent upon the generation of taxable income in the specific tax jurisdictions that have deferred income tax assets.

***If events or circumstances occur in our business that indicate that our goodwill and definite-lived intangibles may not be recoverable, we could have impairment charges that would negatively affect our earnings.***

As of December 31, 2012, our consolidated balance sheet reflected \$49.1 million of goodwill and definite-lived intangible assets. We periodically evaluate whether events and circumstances have occurred, such that the potential for reduced expectations for future cash flows coupled with further decline in the market price of our stock and market capitalization may indicate that the remaining balance of goodwill and definite-lived intangible assets may not be recoverable. If factors indicate that assets are impaired, we would be required to reduce the carrying value of our goodwill and definite-lived intangible assets, which could harm our results during the

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periods in which such a reduction is recognized. Our goodwill and definite-lived intangible assets may increase in future periods if we consummate other acquisitions. Amortization or impairment of these additional intangibles would, in turn, reduce our earnings.

***Damage to our manufacturing facilities due to fire, natural disaster, or other events could harm our financial results.***

We have seven manufacturing and assembly facilities in the United States and eight manufacturing and assembly facilities in China. The destruction or closure of any of our facilities for a significant period of time as a result of fire, explosion, blizzard, act of war or terrorism, flood, tornado, earthquake, lightning, other natural disasters, required maintenance or other events could harm us financially, increasing our costs of doing business and limiting our ability to deliver our manufacturing services on a timely basis. Our insurance coverage with respect to damages to our facilities or our customers' products caused by natural disasters is limited and is subject to deductibles and coverage limits. Such coverage may not be adequate or continue to be available at commercially reasonable rates and terms.

In the event one or more of our facilities is closed on a temporary or permanent basis as a result of a natural disaster, required maintenance or other event, our operations could be significantly disrupted. Such events could delay or prevent product manufacturing and shipment for the time required to transfer production or repair, rebuild or replace the affected manufacturing facilities. This time frame could be lengthy and result in significant expenses for repair and related costs. While we have in place disaster recovery plans, there can be no assurance that such plans will be sufficient to allow our operations to continue in the event of every natural or man-made disaster, pandemic, required repair or other extraordinary event. Any extended inability to continue our operations at unaffected facilities following such an event would reduce our revenue and potentially damage our reputation as a reliable supplier.

***Our results may be negatively affected by changing interest rates.***

We are subject to market risk from exposure to changes in interest rates based on our financing activities. As of December 31, 2012, \$308.2 million, or 54%, of our outstanding indebtedness bore interest at a floating rate of LIBOR plus an applicable interest margin. Lines of credit we maintain at banks in mainland China used for working capital and capital investment for our mainland China facilities have interest rates tied to either LIBOR or People's Bank of China rates with a margin adjustment. There can be no assurances that interest rates will not significantly change. Should LIBOR increase substantially in the future for any reason, our interest payments on our variable interest rate debt would also increase, lowering our net income. See [Quantitative and Qualitative Disclosures About Market Risk](#).

***If we are unable to respond to rapid technological change and process development, we may not be able to compete effectively.***

The market for our manufacturing services is characterized by rapidly changing technology and continual implementation of new production processes. The future success of our business will depend in large part upon our ability to maintain and enhance our technological capabilities, to manufacture products that meet changing customer needs, and to successfully anticipate or respond to technological changes on a cost-effective and timely basis. We expect that the investment necessary to maintain our technological position will increase as customers make demands for products and services requiring more advanced technology on a quicker turnaround basis. For example, in 2013 we expect to make significant capital expenditures to expand our HDI and other advanced manufacturing capabilities. We may not be able to raise additional funds in order to respond to technological changes as quickly as our competitors.

In addition, the PCB industry could encounter competition from new or revised manufacturing and production technologies that render existing manufacturing and production technology less competitive or obsolete. We may not respond effectively to the technological requirements of the changing market. If we need new technologies and equipment to remain competitive, the development, acquisition, and implementation of those technologies and equipment may require us to make significant capital investments.

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***We are subject to the requirements of the National Industrial Security Program Operating Manual for our facility security clearance, which is a prerequisite to our ability to perform on classified contracts for the U.S. government.***

A facility security clearance is required in order to be awarded and perform on classified contracts for the DoD and certain other agencies of the U.S. government. As a cleared entity, we must comply with the requirements of the National Industrial Security Program Operating Manual, or NISPOM, and any other applicable U.S. government industrial security regulations. Further, due to the fact that a significant portion of our voting equity is owned by a non-U.S. entity, we are required to be governed by and operate in accordance with the terms and requirements of the Special Security Agreement, or the SSA, described in Business National Security Matters . The terms of the SSA have been previously disclosed in our SEC filings.

If we were to violate the terms and requirements of the SSA, the NISPOM, or any other applicable U.S. government industrial security regulations (which may apply to us under the terms of classified contracts), we could lose our security clearance. We cannot be certain that we will be able to maintain our security clearance. If for some reason our security clearance is invalidated or terminated, we may not be able to continue to perform on classified contracts and would not be able to enter into new classified contracts, which could adversely affect our revenues.

***The prominence of EMS companies as our customers could reduce our gross margins, potential sales, and customers.***

Sales to EMS companies represented approximately 40%, 42% and 45% of our net sales for the years ended December 31, 2012, 2011 and 2010, respectively. Sales to EMS providers include sales directed by OEMs as well as orders placed with us at the EMS providers' discretion. EMS providers source on a global basis to a greater extent than OEMs. The growth of EMS providers increases the purchasing power of such providers and could result in increased price competition or the loss of existing OEM customers. In addition, some EMS providers, including some of our customers, have the ability to directly manufacture PCBs and create backplane assemblies. If a significant number of our other EMS customers were to acquire these abilities, our customer base might shrink, and our sales might decline substantially. Moreover, if any of our OEM customers outsource the production of PCBs and creation of backplane assemblies to these EMS providers, our business, results of operations, and financial condition may be harmed.

***The former owners of our PCB Subsidiaries own a substantial percentage of our common stock.***

We issued a large amount of stock to the principal owners of Meadville in connection with our acquisition of our PCB Subsidiaries. As of December 31, 2012, approximately 34% of our common stock was beneficially owned by Su Sih (BVI) Limited, a company organized under the laws of the British Virgin Islands (referred to as Su Sih). Su Sih is a holding company wholly owned by Mr. Tang Hsiang Chien, a citizen of Hong Kong Special Administrative Region of the People's Republic of China and the father of our director Mr. Tang Chung Yen, Tom. Su Sih and certain affiliates of Mr. Tang Hsiang Chien, if any, who are our shareholders and party to the Shareholders Agreement dated April 9, 2010 as amended on September 14, 2012 (collectively, the Principal Shareholders), are entitled to jointly nominate one individual to our board of directors and a majority of the members of the board of directors of the PCB Subsidiaries. If our Principal Shareholders or any significant shareholder were to sell a large number of shares of our common stock, the market price of our common stock could significantly decline. In addition, our relationship with our principal lenders might be negatively impacted.

***If we are unable to manage our growth effectively, our business could be negatively affected.***

We have experienced, and expect to continue to experience, growth in the scope and complexity of our operations. This growth may strain our managerial, financial, manufacturing, and other resources. In order to manage our growth, we may be required to continue to implement additional operating and financial controls and

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hire and train additional personnel. There can be no assurance that we will be able to do so in the future, and failure to do so could jeopardize our expansion plans and seriously harm our operations. In addition, growth in our capacity could result in reduced capacity utilization and a corresponding decrease in gross margins.

*Our international sales are subject to laws relating to trade, export controls and foreign corrupt practices, the violation of which could adversely affect our operations.*

We are required to comply with all applicable domestic and foreign export control laws, including the International Traffic in Arms Regulations (ITAR) and the Export Administration Regulations (EAR). Some items manufactured by us are controlled for export by the United States Department of Commerce's Bureau of Industry and Security under the EAR. In addition, we are subject to the Foreign Corrupt Practices Act and international counterparts that bar bribes or unreasonable gifts for foreign governments and officials. Violation of any of these laws or regulations could result in significant sanctions, including large monetary penalties and suspension or debarment from participation in future government contracts, which could reduce our future revenue and net income.

*Our failure to comply with the requirements of environmental laws could result in litigation, fines, revocation of permits necessary to our manufacturing processes, or debarment from our participation in federal government contracts.*

Our operations are regulated under a number of federal, state, local, and foreign environmental and safety laws and regulations that govern, among other things, the discharge of hazardous materials into the air and water, as well as the handling, storage, and disposal of such materials. These laws and regulations include the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Superfund Amendment and Reauthorization Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Toxic Substances Control Act, and the Federal Motor Carrier Safety Improvement Act as well as analogous state, local, and foreign laws. Compliance with these environmental laws is a major consideration for us because our manufacturing processes use and generate materials classified as hazardous. Because we use hazardous materials and generate hazardous wastes in our manufacturing processes, we may be subject to potential financial liability for costs associated with the investigation and remediation of our own sites, or sites at which we have arranged for the disposal of hazardous wastes, if such sites become contaminated. Even if we fully comply with applicable environmental laws and are not directly at fault for the contamination, we may still be liable. The wastes we generate include spent ammoniacal and cupric etching solutions, metal stripping solutions, waste acid solutions, waste alkaline cleaners, waste oil, and waste waters that contain heavy metals such as copper, tin, lead, nickel, gold, silver, cyanide, and fluoride, and both filter cake and spent ion exchange resins from equipment used for on-site waste treatment.

Any material violations of environmental laws or failure to maintain required environmental permits could subject us to fines, penalties, and other sanctions, including the revocation of our effluent discharge permits, which could require us to cease or limit production at one or more of our facilities, and harm our business, results of operations, and financial condition. Even if we ultimately prevail, environmental lawsuits against us would be time consuming and costly to defend.

Environmental laws also could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violation. We operate in environmentally sensitive locations, and we are subject to potentially conflicting and changing regulatory agendas of political, business, and environmental groups. Changes or restrictions on discharge limits, emissions levels, material storage, handling, or disposal might require a high level of unplanned capital investment or global relocation. It is possible that environmental compliance costs and penalties from new or existing regulations may harm our business, results of operations, and financial condition.

We are increasingly required to certify compliance with various material content restrictions in our products based on laws of various jurisdictions or territories such as the Restriction of Hazardous Substances (RoHS) and Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) directives in the European Union and China's RoHS legislation. New York City has adopted identical RoHS restrictions, and many U.S. states are considering similar rules and legislation. In addition, we must also certify as to the non-applicability to the EU's

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Waste Electrical and Electronic Equipment directive for certain products that we manufacture. The REACH directive requires adoption of Substances of Very High Concern (SVHCs) periodically. We must survey our supply chain and certify to the non-presence or presence of SVHCs to our customers. Currently, nine lists totaling 138 SVHCs have been adopted by the EU. As with other types of product certifications that we routinely provide, we may incur liability and pay damages if our products do not conform to our certifications.

We are also subject to a variety of environmental laws and regulations in the People's Republic of China, or PRC, which impose limitations on the discharge of pollutants into the air and water and establish standards for the treatment, storage, and disposal of solid and hazardous wastes. The manufacturing of our products generates gaseous chemical wastes, liquid wastes, waste water and other industrial wastes from various stages of the manufacturing process. Production sites in China are subject to regulation and periodic monitoring by the relevant environmental protection authorities. Environmental claims or the failure to comply with current or future regulations could result in the assessment of damages or imposition of fines against us, suspension of production, or cessation of operations.

### ***Employee theft or fraud could result in loss.***

Certain of our employees have access to, or signature authority with respect to, bank accounts or other company assets, which could expose us to fraud or theft. In addition, certain employees have access to key IT infrastructure and to customer and other information that is commercially valuable. Should any employee, for any reason, compromise our IT systems, or misappropriate customer or other information, we could incur losses, including losses relating to claims by our customers against us, the willingness of customers to do business with us may be damaged and, in the case of our defense business, we could be debarred from future participation in government programs. Any such losses may not be fully covered by insurance.

### ***Because we sell on a purchase order basis, we are subject to uncertainties and variability in demand by our customers that could decrease revenues and harm our operating results.***

We generally sell to customers on a purchase order basis rather than pursuant to long-term contracts. Our quick-turn orders are subject to particularly short lead times. Consequently, our sales are subject to short-term variability in demand by our customers. Customers submitting purchase orders may cancel, reduce, or delay their orders for a variety of reasons. The level and timing of orders placed by our customers may vary due to:

customer attempts to manage inventory;

changes in customers' manufacturing strategies, such as a decision by a customer to either diversify or consolidate the number of PCB manufacturers or backplane assembly service providers used or to manufacture or assemble its own products internally;

variation in demand for our customers' products; and

changes in new product introductions.

We have periodically experienced terminations, reductions, and delays in our customers' orders. Further terminations, reductions, or delays in our customers' orders could harm our business, results of operations, and financial condition.

### ***Increasingly, our larger customers are requesting that we enter into supply agreements with them that have restrictive terms and conditions. These agreements typically include provisions that increase our financial exposure, which could result in significant costs to us.***

Increasingly, our larger customers are requesting that we enter into supply agreements with them. These agreements typically include provisions that generally serve to increase our exposure for product liability and limited sales returns, which could result in higher costs to us as a result of such claims. In addition, these agreements typically contain provisions that seek to limit our operational and pricing flexibility and extend payment terms, which can adversely impact our cash flow and results of operations.



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***Our business has benefited from OEMs deciding to outsource their PCB manufacturing and backplane assembly needs to us. If OEMs choose to provide these services in-house or select other providers, our business could suffer.***

Our future revenue growth partially depends on new outsourcing opportunities from OEMs. Current and prospective customers continuously evaluate our performance against other providers. They also evaluate the potential benefits of manufacturing their products themselves. To the extent that outsourcing opportunities are not available either due to OEM decisions to produce these products themselves or to use other providers, our financial results and future growth could be adversely affected.

***Consolidation among our customers could adversely affect our business.***

Recently, some of our large customers have consolidated, and further consolidation of customers may occur. Depending on which organization becomes the controller of the supply chain function following the consolidation, we may not be retained as a preferred or approved supplier. In addition, product duplication could result in the termination of a product line that we currently support. While there is potential for increasing our position with the combined customer, there does exist the potential for decreased revenue if we are not retained as a continuing supplier. We also face the risk of increased pricing pressure from the combined customer because of its increased market share.

***We are exposed to the credit risk of some of our customers and to credit exposures in weakened markets.***

Most of our sales are on an open credit basis, with standard industry payment terms. We monitor individual customer payment capability in granting such open credit arrangements, seek to limit such open credit to amounts we believe the customers can pay, and maintain reserves we believe are adequate to cover exposure for doubtful accounts. During periods of economic downturn in the electronics industry and the global economy, our exposure to credit risks from our customers increases. Although we have programs in place to monitor and mitigate the associated risks, such programs may not be effective in reducing our credit risks.

Our 10 largest OEM customers accounted for approximately 47%, 46% and 42% of our net sales for the years ended December 31, 2012, 2011 and 2010, respectively. Additionally, our OEM customers often direct a significant portion of their purchases through a relatively limited number of EMS companies. Our contractual relationship is often with the EMS companies, who are obligated to pay us for our products. Because we expect our OEM customers to continue to direct our sales to EMS companies, we expect to continue to be subject to this credit risk with a limited number of EMS customers. If one or more of our significant customers were to become insolvent or were otherwise unable to pay us, our results of operations would be harmed.

Some of our customers are EMS companies located abroad. Our exposure has increased as these foreign customers continue to expand. Our foreign receivables were approximately 30% and 25% of our net accounts receivable as of December 31, 2012 and 2011, respectively, and are expected to continue to grow as a percentage of our total receivables. We do not utilize credit insurance as a risk management tool.

***Our acquisition strategy involves numerous risks.***

As part of our business strategy, we expect that we will continue to grow by pursuing acquisitions of businesses, technologies, assets, or product lines that complement or expand our business. Risks related to an acquisition may include:

the potential inability to successfully integrate acquired operations and businesses or to realize anticipated synergies, economies of scale, or other expected value;

diversion of management's attention from normal daily operations of our existing business to focus on integration of the newly acquired business;

unforeseen expenses associated with the integration of the newly acquired business;

difficulties in managing production and coordinating operations at new sites;





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the potential loss of key employees of acquired operations;

the potential inability to retain existing customers of acquired companies when we desire to do so;

insufficient revenues to offset increased expenses associated with acquisitions;

the potential decrease in overall gross margins associated with acquiring a business with a different product mix;

the inability to identify certain unrecorded liabilities;

the potential need to restructure, modify, or terminate customer relationships of the acquired company;

an increased concentration of business from existing or new customers; and

the potential inability to identify assets best suited to our business plan.

Acquisitions may cause us to:

enter lines of business and/or markets in which we have limited or no prior experience;

issue debt and be required to abide by stringent loan covenants;

assume liabilities;

record goodwill and indefinite-lived intangible assets that will be subject to impairment testing and potential periodic impairment charges;

become subject to litigation and environmental issues, which include product material content certifications;

incur unanticipated costs;

incur large and immediate write-offs;

issue common stock that would dilute our current stockholders' percentage ownership; and

incur substantial transaction-related costs, whether or not a proposed acquisition is consummated. Acquisitions of high technology companies are inherently risky, and no assurance can be given that our recent or future acquisitions will be successful and will not harm our business, operating results, or financial condition. Failure to manage and successfully integrate acquisitions we make could harm our business and operating results in a material way. Even when an acquired company has already developed and marketed products, product enhancements may not be made in a timely fashion. In addition, unforeseen issues might arise with respect to such products after the acquisition.

***Products we manufacture may contain design or manufacturing defects, which could result in reduced demand for our services and liability claims against us.***

We manufacture products to our customers' specifications, which are highly complex and may contain design or manufacturing errors or failures, despite our quality control and quality assurance efforts. Defects in the products we manufacture, whether caused by a design, manufacturing, or materials failure or error, may result in delayed shipments, customer dissatisfaction, a reduction or cancellation of purchase orders, or liability claims against us. If these defects occur either in large quantities or too frequently, our business reputation may be impaired. Our sales mix has shifted towards standard delivery time products, which have larger production runs, thereby increasing our exposure to these types of defects. Since our products are used in products that are integral to our customers' businesses, errors, defects, or other performance problems could result in financial or other damages to our customers beyond the cost of the PCB, for which we may be liable. Although our invoices and sales arrangements generally contain provisions designed to limit our exposure to product liability and related claims, existing or future laws or unfavorable judicial decisions could negate these limitation of liability provisions. Product liability litigation against us, even if it were unsuccessful, would be time consuming and costly to defend. Although we maintain technology errors and omissions insurance, we cannot assure investors that we will continue to be able to purchase such insurance coverage in the future on terms that are satisfactory to us, if at all.

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***Outages, computer viruses, break-ins and similar events could disrupt our operations, and breaches of our security systems may cause us to incur significant legal and financial exposure.***

We rely on information technology networks and systems, some of which are owned and operated by third parties, to process, transmit and store electronic information. In particular, we depend on our information technology infrastructure for a variety of functions, including worldwide financial reporting, inventory management, procurement, invoicing and email communications. Any of these systems may be susceptible to outages due to fire, floods, power loss, telecommunications failures, terrorist attacks and similar events. Despite the implementation of network security measures, our systems and those of third parties on which we rely may also be vulnerable to computer viruses, break-ins and similar disruptions. If we or our vendors are unable to prevent such outages and breaches, our operations could be disrupted. If unauthorized parties gain access to our information systems or such information is used in an unauthorized manner, misdirected, lost or stolen during transmission, any theft or misuse of such information could result in, among other things, unfavorable publicity, governmental inquiry and oversight, difficulty in marketing our services, allegations by our customers that we have not performed our contractual obligations, litigation by affected parties and possible financial obligations for damages related to the theft or misuse of such information, any of which could have a material adverse effect on our results of operation and financial condition.

***Our business may suffer if any of our key senior executives discontinues employment with us or if we are unable to recruit and retain highly skilled engineering and sales staff.***

Our future success depends to a large extent on the services of our key managerial employees. We may not be able to retain our executive officers and key personnel or attract additional qualified management in the future. Our business also depends on our continuing ability to recruit, train, and retain highly qualified employees, particularly engineering and sales and marketing personnel. The competition for these employees is intense, and the loss of these employees could harm our business. Further, our ability to successfully integrate acquired companies depends in part on our ability to retain key management and existing employees at the time of the acquisition.

***Our manufacturing processes depend on the collective industry experience of our employees. If a significant number of these employees were to leave us, it could limit our ability to compete effectively and could harm our financial results.***

We have limited patent or trade secret protection for our manufacturing processes. We rely on the collective experience of our employees involved in our manufacturing processes to ensure we continuously evaluate and adopt new technologies in our industry. Although we are not dependent on any one employee or a small number of employees, if a significant number of our employees involved in our manufacturing processes were to leave our employment, and we were not able to replace these people with new employees with comparable experience, our manufacturing processes might suffer as we might be unable to keep up with innovations in the industry. As a result, we may lose our ability to continue to compete effectively.

***We may be exposed to intellectual property infringement claims by third parties that could be costly to defend, could divert management's attention and resources, and if successful, could result in liability.***

We rely on a combination of copyright, patent, trademark and trade secret laws, confidentiality procedures, contractual provisions, and other measures to protect our proprietary information. All of these measures afford only limited protection. These measures may be invalidated, circumvented, or challenged, and others may develop technologies or processes that are similar or superior to our technology. We may not have the controls and procedures in place that are needed to adequately protect proprietary information. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy our products or obtain or use information that we regard as proprietary, which could adversely impact our revenues and financial condition.

Furthermore, there is a risk that we may infringe on the intellectual property rights of others. As is the case with many other companies in the PCB industry, we from time to time receive communications from third parties asserting patent rights to our products and enter into discussions with such third parties. Irrespective of the validity or the successful assertion of such claims, we could incur costs in either defending or settling any

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intellectual property disputes alleging infringement. If any claims are brought against the customers for such infringement, whether or not these have merit, we could be required to expend significant resources in defending such claims. In the event we are subject to any infringement claims, we may be required to spend a significant amount of money to develop non-infringing alternatives or obtain licenses. We may not be successful in developing such alternatives or in obtaining such licenses on reasonable terms or at all, which could disrupt the production processes, damage our reputation, and affect our revenues and financial condition.

### ***Our business and operations could be adversely impacted by climate change initiatives.***

Our manufacturing processes require that we purchase significant quantities of energy from third parties, which results in the generation of greenhouse gases, either directly on-site or indirectly at electric utilities. Both domestic and international legislation to address climate change by reducing greenhouse gas emissions could create increases in energy costs and price volatility. Considerable international attention is now focused on development of an international policy framework to guide international action to address climate change. Proposed and existing legislative efforts to control or limit greenhouse gas emissions could affect our energy sources and supply choices as well as increase the cost of energy and raw materials derived from sources that generate greenhouse gas emissions.

### ***The economies of the countries in which we operate may be adversely affected by a recurrence of severe acute respiratory syndrome, or an outbreak of other epidemics such as H1N1 or avian flu.***

Past occurrences of epidemics or pandemics, depending on their scale of occurrence, have caused different degrees of damage to the national and local economies in the affected countries. A recurrence of SARS or an outbreak of any other epidemics or pandemics, such as the H1N1 influenza or avian flu, especially in the areas where we have operations, or where we may have operations in the future, may result in quarantines, temporary closures of offices and manufacturing facilities, travel restrictions, or the temporary or permanent loss of key personnel. The perception that an outbreak of contagious disease may occur again and may also have an adverse effect on the economic conditions of affected countries. Any of the above may cause material disruptions to our operations, which in turn may adversely affect our financial condition and results of operations.

### ***We are subject to risks of currency fluctuations.***

A portion of our cash and other current assets is held in currencies other than the U.S. dollar. As of December 31, 2012, we had an aggregate of approximately \$244.3 million in current assets denominated in Chinese RMB and the Hong Kong Dollar (HKD). Changes in exchange rates among other currencies and the U.S. dollar will affect the value of these assets as translated to U.S. dollars in our balance sheet. To the extent that we ultimately decide to repatriate some portion of these funds to the United States, the actual value transferred could be impacted by movements in exchange rates. Any such type of movement could negatively impact the amount of cash available to fund operations or to repay debt. Significant inflation or disproportionate changes in foreign exchange rates could occur as a result of general economic conditions, acts of war or terrorism, changes in governmental monetary or tax policy, or changes in local interest rates. The impact of future exchange rate fluctuations between the U.S. Dollar and the RMB and the U.S. Dollar and the HKD cannot be predicted. To the extent that we may have outstanding indebtedness denominated in the RMB or in the HKD, the appreciation of the RMB and the HKD against the U.S. Dollar will have an adverse impact on our financial condition and results of operations (including the cost of servicing, and the value in our balance sheet of, the RMB and HKD-denominated indebtedness). Further, China's government imposes controls over the convertibility of RMB into foreign currencies, which subjects us to further currency exchange risk.

### **ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

**Table of Contents****ITEM 2. PROPERTIES**

The following table describes our principal manufacturing facilities and our drilling and tooling process facility.

	Leased Square Feet	Owned Square Feet	Total Square Feet
<b>US Locations(1)</b>			
Chippewa Falls, WI		281,000	281,000
Logan, UT		124,104	124,104
San Diego, CA	37,500		37,500
Santa Ana, CA	11,775	82,600	94,375
Santa Clara, CA	18,304	45,685	63,989
Stafford, CT	21,251	156,000	177,251
Stafford Springs, CT	10,000	53,000	63,000
<b>Total</b>	<b>98,830</b>	<b>742,389</b>	<b>841,219</b>
<b>Foreign Locations(2)</b>			
Hong Kong (OPCM)	86,982		86,982
Dongguan, China (SYE)		422,971	422,971
Dongguan, China (DMC)		1,322,803	1,322,803
Guangzhou, China (GME)		968,028	968,028
Shanghai, China(1)	85,745		85,745
Shanghai, China (SME)		416,761	416,761
Shanghai, China (SMST/SP)		521,257	521,257
Shanghai, China (SKE)(3)	3,294	135,207	138,501
Suzhou, China (MAS)		1,129,690	1,129,690
<b>Total</b>	<b>176,021</b>	<b>4,916,717</b>	<b>5,092,738</b>

We maintain our properties in good operating condition. We believe that our properties are suitable and adequate for us to operate at present levels, and the productive capacity and extent of utilization of the facilities are appropriate for our existing real estate requirements.

(1) Locations pertain to our North America operating segment

(2) Foreign locations represent the following subsidiaries:

OPC Manufacturing Limited (OPCM)

Dongguan Shengyi Electronics Ltd. (SYE)

Dongguan Meadville Circuits Limited (DMC)

Guangzhou Meadville Electronics Co., Ltd. (GME)

Shanghai Meadville Electronics Co., Ltd. (SME)

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Shanghai Meadville Science & Technology Co., Ltd. (SMST/SP)

Shanghai Kaiser Electronics Co., Ltd. (SKE)

Meadville Aspocomp (Suzhou) Electronics Co., Ltd. (MAS)

(3) Drilling and tooling process facility

### **ITEM 3. LEGAL PROCEEDINGS**

From time to time, we may become a party to various legal proceedings arising in the ordinary course of our business. There can be no assurance that we will prevail in any such litigation. We believe that the amount of any reasonably possible or probable loss for known matters would not be material to our financial statements;

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however, the outcome of these actions is inherently difficult to predict. In the event of an adverse outcome, the ultimate potential loss could have a material adverse effect on our financial condition, results of operations or cash flows in a particular period.

**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****Historical Trading Price**

Our common stock has been listed on the Nasdaq Global Select Market under the symbol TTMI since September 21, 2000. The following table sets forth the quarterly high and low sales prices of our common stock as reported on the Nasdaq Global Select Market for the periods indicated.

	High	Low
<b>2012:</b>		
First Quarter	\$ 13.75	\$ 10.30
Second Quarter	\$ 12.10	\$ 8.55
Third Quarter	\$ 11.01	\$ 8.56
Fourth Quarter	\$ 10.23	\$ 8.30
<b>2011:</b>		
First Quarter	\$ 19.16	\$ 13.41
Second Quarter	\$ 19.64	\$ 12.86
Third Quarter	\$ 16.98	\$ 9.16
Fourth Quarter	\$ 11.90	\$ 8.61

As of February 26, 2013, there were approximately 290 holders of record of our common stock. The closing sale price of our common stock on the Nasdaq Global Select Market on February 26, 2013 was \$8.30.

**Dividend Policy**

We have not declared or paid any dividends since 2000, and we do not anticipate paying any cash dividends in the foreseeable future. We presently intend to retain any future earnings to finance future operations and the expansion of our business. In addition, the New Credit Agreement contains restrictions and limitations on the declaration and payment of dividends and distributions.



**Table of Contents****STOCK PRICE PERFORMANCE GRAPH**

The performance graph below compares, for the period from December 31, 2007 to December 31, 2012, the cumulative total stockholder return on our common stock against the cumulative total return of:

the NASDAQ Composite Index; and

the Dow Jones U.S. Electrical Components & Equipment Index.

The graph assumes \$100 was invested in our common stock on December 31, 2007, and an investment in NASDAQ Composite Index and the Dow Jones US Electrical Components & Equipment Index. The stock performance shown on the graph below represents historical stock performance and is not necessarily indicative of future stock performance.

**COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\***

Among TTM Technologies, Inc., The NASDAQ Composite Index and

The Dow Jones US Electrical Components & Equipment Index

\* \$100 invested on December 31, 2007 in stock or index, including reinvestment of dividends.

	12/31/07	12/31/08	12/31/09	12/31/10	12/31/11	12/31/12
<b>TTM Technologies, Inc.</b>	<b>100.00</b>	<b>44.68</b>	<b>98.89</b>	<b>127.96</b>	<b>94.00</b>	<b>78.82</b>
<b>NASDAQ Composite</b>	<b>100.00</b>	<b>59.03</b>	<b>82.25</b>	<b>97.32</b>	<b>98.63</b>	<b>110.78</b>
<b>Dow Jones US Electrical Components &amp; Equipment</b>	<b>100.00</b>	<b>51.01</b>	<b>82.84</b>	<b>106.57</b>	<b>95.48</b>	<b>116.99</b>

The performance graph above shall not be deemed filed for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section. The performance graph above will not be deemed incorporated by reference into any filing of our company under the Securities Act of 1933, as amended, or the Exchange Act.

**Table of Contents****ITEM 6. SELECTED FINANCIAL DATA**

The selected historical financial data presented below are derived from our consolidated financial statements. The selected financial data should be read in conjunction with Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and the notes thereto included elsewhere in this report.

	Year Ended December 31,				
	2012	2011	2010(1)	2009(2)	2008(2)
	(In thousands, except per share data)				
<b>Consolidated Statement of Operations Data:</b>					
Net sales	\$ 1,348,668	\$ 1,428,639	\$ 1,179,671	\$ 582,476	\$ 680,981
Cost of goods sold	1,123,669	1,127,326	925,266	479,267	543,741
Gross profit	224,999	301,313	254,405	103,209	137,240
Operating expenses:					
Selling and marketing	35,957	36,891	34,345	26,517	30,436
General and administrative	98,005	92,682	79,668	36,548	33,255
Amortization of definite-lived intangibles	14,637	17,311	13,678	3,440	3,799
Impairment of goodwill and definite-lived intangibles	200,335	15,184			117,018
Impairment of long-lived assets	18,082	48,125	766	12,761	6,304
Restructuring charges			389	5,490	
Metal reclamation					(3,700)
Total operating expenses	367,016	210,193	128,846	84,756	187,112
Operating (loss) income	(142,017)	91,120	125,559	18,453	(49,872)
Other income (expense):					
Interest expense	(25,784)	(26,504)	(22,255)	(11,198)	(11,065)
Loss on extinguishment of debt	(5,527)				
Other, net	4,956	8,616	5,333	868	(434)
Total other expense, net	(26,355)	(17,888)	(16,922)	(10,330)	(11,499)
(Loss) income before income taxes	(168,372)	73,232	108,637	8,123	(61,371)
Income tax (provision) benefit	(12,728)	(26,005)	(28,738)	(3,266)	24,460
Net (loss) income	(181,100)	47,227	79,899	4,857	(36,911)
Less: Net loss (income) attributable to the noncontrolling interest	6,505	(5,359)	(8,368)		
Net (loss) income attributable to TTM Technologies, Inc. stockholders	\$ (174,595)	\$ 41,868	\$ 71,531	\$ 4,857	\$ (36,911)
Earnings (loss) per common share attributable to TTM Technologies, Inc. stockholders:					
Basic	\$ (2.13)	\$ 0.52	\$ 1.02	\$ 0.11	\$ (0.86)
Diluted	\$ (2.13)	\$ 0.51	\$ 1.01	\$ 0.11	\$ (0.86)
Weighted average common shares:					
Basic	81,800	81,176	70,220	43,080	42,681
Diluted	81,800	81,944	70,819	43,579	42,681
<b>Other Financial Data:</b>					
Depreciation of property, plant and equipment	\$ 84,286	\$ 69,698	\$ 48,747	\$ 19,140	\$ 21,324

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- (1) Our results for the year ended December 31, 2010 include 267 days of activity of the PCB Subsidiaries, which we acquired on April 8, 2010.
  
- (2) Effective January 1, 2009, we adopted new authoritative guidance for convertible debt instruments with retrospective application to the date of the issuance of convertible debt, which for us was May 2008. The implementation of the new authoritative guidance for convertible debt instruments increased interest expense by \$2.6 million for the year ended December 31, 2008.

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	2012	2011	As of December 31, 2010 (In thousands)	2009	2008
<b>Consolidated Balance Sheet Data:</b>					
Working capital	\$ 395,732	\$ 234,394	\$ 258,299	\$ 323,112	\$ 280,362
Total assets	1,676,962	1,749,069	1,761,952	543,058	540,240
Convertible senior notes	157,533	151,153	145,283	139,882	134,914
Long-term debt, including current maturities	400,012	338,247	380,118		
TTM Technologies, Inc. stockholders' equity	653,947	808,917	728,255	340,917	330,036

	2012	2011	Year Ended December 31, 2010 (In thousands)	2009	2008
<b>Supplemental Data:</b>					
EBITDA(1)	\$ (43,618)	\$ 186,861	\$ 193,434	\$ 42,028	\$ (25,065)
Net cash provided by operating activities	182,565	179,345	125,819	73,977	75,632
Net cash (used in) provided by investing activities	(136,444)	(140,617)	32,956	(128,497)	(21,281)
Net cash provided by (used in) financing activities	45,068	(55,215)	(35,368)	440	74,793

- (1) EBITDA means earnings before interest expense, income taxes, depreciation and amortization. We present EBITDA to enhance the understanding of our operating results. EBITDA is a key measure we use to evaluate our operations. We provide our EBITDA because we believe that investors and securities analysts will find EBITDA to be a useful measure for evaluating our operating performance and comparing our operating performance with that of similar companies that have different capital structures and for evaluating our ability to meet our future debt service, capital expenditures, and working capital requirements. However, EBITDA should not be considered as an alternative to cash flows from operating activities as a measure of liquidity or as an alternative to net income as a measure of operating results in accordance with accounting principles generally accepted in the United States. The following provides a reconciliation of EBITDA to the financial information in our consolidated statement of operations.

	2012	2011	Year Ended December 31, 2010 (In thousands)	2009	2008
Net (loss) income	\$ (181,100)	\$ 47,227	\$ 79,899	\$ 4,857	\$ (36,911)
Add back items:					
Income tax provision (benefit)	12,728	26,005	28,738	3,266	(24,460)
Interest expense	25,784	26,504	22,255	11,198	11,065
Depreciation of property, plant and equipment	84,286	69,698	48,747	19,140	21,324
Amortization of definite-lived intangibles	14,684	17,427	13,795	3,567	3,917
<b>Total</b>	<b>137,482</b>	<b>139,634</b>	<b>113,535</b>	<b>37,171</b>	<b>11,846</b>
EBITDA	\$ (43,618)	\$ 186,861	\$ 193,434	\$ 42,028	\$ (25,065)

**Table of Contents****ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

This financial review presents our operating results for each of our three most recent fiscal years and our financial condition at December 31, 2012. Except for historical information contained herein, the following discussion contains forward-looking statements which are subject to known and unknown risks, uncertainties and other factors that may cause our actual results to differ materially from those expressed or implied by such forward-looking statements. We discuss such risks, uncertainties and other factors throughout this report and specifically under Item 1A of Part I of this report, Risk Factors. In addition, the following discussion should be read in connection with the information presented in our consolidated financial statements and the related notes to our consolidated financial statements.

**OVERVIEW**

We are a leading global provider of time-critical and technologically complex printed circuit board (PCB) products and backplane assemblies (PCBs populated with electronic components), which serve as the foundation of sophisticated electronic products. We provide our customers time-to-market and advanced technology products and offer a one-stop manufacturing solution to customers from engineering support to prototype development through final volume production. We serve a diversified customer base in various markets throughout the world, including manufacturers of networking/communications infrastructure products, touch screen tablets and mobile media devices (cellular phones and smartphones). We also serve high-end computing, commercial aerospace/defense, and industrial/medical industries. Our customers include both original equipment manufacturers (OEMs) and electronic manufacturing services (EMS) providers.

In April 2010, we acquired from Meadville all of the issued and outstanding capital stock of four of its subsidiaries. These four companies and their respective subsidiaries, collectively referred to as the PCB Subsidiaries, comprised Meadville's PCB manufacturing and distribution business. See Note 3 in our consolidated financial statements.

Labor expense has increased in our Asia Pacific operating segment beginning in the second quarter of 2012 due to both PRC government-mandated wage increases and additional compensation offered to our labor force as a result of a reduction of overtime hours that was implemented to meet standards required by some of our global customers. This increased labor expense reduced the gross and operating margins of our Asia Pacific operating segment in 2012. Management believes such wage increases will continue during 2013 and may further reduce gross and operating margins in Asia Pacific.

While our customers include both OEM and EMS providers, we measure customers based on OEM companies as they are the ultimate end customers. We measure customers as those companies that have placed orders of \$2,000 or more in the preceding 12-month period. As of December 31, 2012, we had approximately 1,025 customers and as of December 31, 2011, we had approximately 1,220 customers. Sales to our 10 largest customers accounted for 47%, 46% and 42% of our net sales in 2012, 2011 and 2010, respectively. We sell to OEMs both directly and indirectly through EMS companies.

The following table shows the percentage of our net sales attributable to each of the principal end markets we served for the periods indicated:

End Markets(1)	2012	2011	2010
Aerospace/Defense	15%	16%	20%
Cellular Phone <sup>(2)</sup>	14	11	10
Computing/Storage/Peripherals <sup>(2)</sup>	23	23	21
Medical/Industrial/Instrumentation/Other	8	8	9
Networking/Communications	31	36	35
Other <sup>(2)</sup>	9	6	5
Total	100%	100%	100%

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- (1) Sales to EMS companies are classified by the end markets of their OEM customers.
- (2) Smartphones are included in the Cellular Phone end market, tablet PCs are included in the Computing/Storage/Peripherals end market and other mobile devices such as e-readers are included in the Other end market.

For PCBs, we measure the time sensitivity of our products by tracking the quick-turn percentage of our work. We define quick-turn orders as those with delivery times of 10 days or less, which typically captures research and development, prototype, and new product introduction work, in addition to unexpected short-term demand among our customers. Generally, we quote prices after we receive the design specifications and the time and volume requirements from our customers. Our quick-turn services command a premium price as compared to standard lead-time products.

We also deliver a significant percentage of compressed lead-time work with lead times of 11 to 20 days. We typically receive a premium price for this work as well. Purchase orders may be cancelled prior to shipment. We charge customers a fee, based on percentage completed, if an order is cancelled once it has entered production. We derive revenues primarily from the sale of PCBs and backplane assemblies using customer-supplied engineering and design plans. We recognize revenues when persuasive evidence of a sales arrangement exists, the sales terms are fixed or determinable, title and risk of loss have transferred, and collectibility is reasonably assured generally when products are shipped to the customer. Net sales consist of gross sales less an allowance for returns, which typically has been less than 2% of gross sales. We provide our customers a limited right of return for defective PCBs and backplane assemblies. We record an estimated amount for sales returns and allowances at the time of sale based on historical information.

Cost of goods sold consists of materials, labor, outside services, and overhead expenses incurred in the manufacture and testing of our products as well as stock-based compensation expense. Many factors affect our gross margin, including capacity utilization, product mix, production volume, and yield. We generally do not participate in any significant long-term contracts with suppliers, and we believe there are a number of potential suppliers for the raw materials we use.

Selling and marketing expenses consist primarily of salaries and commissions paid to our internal sales force and independent sales representatives, salaries paid to our sales support staff, stock-based compensation expense as well as costs associated with marketing materials and trade shows. We generally pay higher commissions to our independent sales representatives for quick-turn work, which generally has a higher gross profit component than standard lead-time work.

General and administrative costs primarily include the salaries for executive, finance, accounting, information technology, facilities and human resources personnel, as well as insurance expenses, expenses for accounting and legal assistance, incentive compensation expense, stock-based compensation expense, bad debt expense, gains or losses on the sale or disposal of property, plant and equipment, and acquisition-related expenses.

**CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

Our consolidated financial statements included in this report have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, net sales and expenses, and related disclosure of contingent assets and liabilities.

A critical accounting policy is defined as one that is both material to the presentation of our consolidated financial statements and requires management to make judgments that could have a material effect on our financial condition or results of operations. These policies require us to make assumptions about matters that are highly uncertain at the time of the estimate. Different estimates we could reasonably have used, or changes in the estimates that are reasonably likely to occur, would have a material effect on our financial condition or results of operations.

Management bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the

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carrying values of assets and liabilities that are not readily apparent from other sources. Management has discussed the development, selection and disclosure of these estimates with the audit committee of our board of directors. Actual results may differ from these estimates under different assumptions or conditions.

Our critical accounting policies include asset valuation related to bad debts and inventory; sales returns and allowances; impairment of long-lived assets, including goodwill and intangible assets; derivative instruments and hedging activities; realizability of deferred tax assets; and determining self-insurance reserves.

### ***Allowance for Doubtful Accounts***

We provide customary credit terms to our customers and generally do not require collateral. We perform ongoing credit evaluations of the financial condition of our customers and maintain an allowance for doubtful accounts based upon historical collections experience and judgments as to expected collectibility of accounts. Our actual bad debts may differ from our estimates.

### ***Inventories***

In assessing the realizability of inventories, we are required to make judgments as to future demand requirements and compare these with current and committed inventory levels. When the market value of inventory is less than the carrying value, the inventory cost is written down to its estimated net realizable value, thereby establishing a new cost basis. Our inventory requirements may change based on our projected customer demand, market conditions, technological and product life cycle changes, longer or shorter than expected usage periods, and other factors that could affect the valuation of our inventories. We maintain certain finished goods inventories near certain key customer locations in accordance with agreements with those customers. Although this inventory is typically supported by valid purchase orders, should these customers ultimately not purchase these inventories, our results of operations and financial condition would be adversely affected.

### ***Sales Returns and Allowances***

We derive revenues primarily from the sale of printed circuit boards and backplane assemblies using customer-supplied engineering and design plans. We recognize revenue when persuasive evidence of a sales arrangement exists, the sales terms are fixed or determinable, title and risk of loss have transferred, and collectibility is reasonably assured generally when products are shipped to the customer. We provide our customers a limited right of return for defective printed circuit boards and backplane assemblies. We accrue an estimated amount for sales returns and allowances at the time of sale using our judgment based on historical information and anticipated returns as a result of current period sales. To the extent actual experience varies from our historical experience, revisions to these allowances may be required.

### ***Long-lived Assets***

We have significant long-lived tangible and intangible assets consisting of property, plant and equipment, definite-lived intangibles, and goodwill. We review these assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. In addition, we perform an impairment test related to goodwill at least annually. As necessary, we make judgments regarding future cash flow forecasts in the assessment of impairment.

During the fourth quarter of each year, and when events and circumstances warrant an evaluation, we perform our annual impairment assessment of goodwill, which requires the use of a fair-value based analysis. We determine the fair value of our reporting units based on discounted cash flows and market approach analyses as considered necessary. We consider factors such as the state of the economy and reduced expectations for future cash flows coupled with a decline in our market capitalization for a sustained period as indicators for potential goodwill impairment. If the reporting unit's carrying amount exceeds its estimated fair value, a second step must be performed to measure the amount of the goodwill impairment loss, if any. The second step compares the implied fair value of the reporting unit's goodwill, determined in the same manner as the amount of goodwill recognized in a business combination, with the carrying amount of such goodwill. If the carrying amount of the reporting unit's goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount equal to that excess. For the years ended December 31, 2012 and 2011, our assessment of goodwill

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impairment indicated that the carrying values of goodwill for our Asia Pacific reporting unit, in our Asia Pacific operating segment, and our Shanghai backplane assembly reporting unit, in our North America operating segment, were in excess of fair value, and therefore goodwill was impaired. See Note 5 to our consolidated financial statements.

We also assess other long-lived assets, specifically definite-lived intangibles and property, plant and equipment, for potential impairment given similar impairment indicators. When indicators of impairment exist related to our long-lived tangible assets and definite-lived intangible assets, we use an estimate of the undiscounted net cash flows in measuring whether the carrying amount of the assets is recoverable. Measurement of the amount of impairment, if any, is based upon the difference between the asset's carrying value and estimated fair value. Fair value is determined through various valuation techniques, including cost-based, market and income approaches as considered necessary, which involve judgments related to future cash flows and the application of the appropriate valuation model. During the years ended December 31, 2012 and 2011, we recorded impairment charges to reduce the carrying value of certain long-lived assets in the Asia Pacific operating segment. See Notes 5 and 6 to our consolidated financial statements.

### ***Derivative Instruments and Hedging Activities***

As a matter of policy, we use derivatives for risk management purposes, and we do not use derivatives for speculative purposes. Derivatives are typically entered into as hedges of changes in interest rates, currency exchange rates, and other risks.

When we determine to designate a derivative instrument as a cash flow hedge, we formally document the hedging relationship and its risk management objective and strategy for undertaking the hedge, the hedging instrument, the hedged item, the nature of the risk being hedged, how the hedging instrument's effectiveness in offsetting the hedged risk will be assessed, and a description of the method of measuring ineffectiveness. We also formally assess, both at the hedge's inception and on an ongoing basis, whether the derivative that is used in hedging transactions is highly effective in offsetting changes in cash flows of hedged items.

Derivative financial instruments are recognized as either assets or liabilities on the consolidated balance sheet with measurement at fair value. Fair value of the derivative instruments is determined using pricing models developed based on the underlying swap interest rate, foreign currency exchange rates, and other observable market data as appropriate. The values are also adjusted to reflect nonperformance risk of the counterparty and the Company, as necessary. For derivatives that are designated as a cash flow hedge, changes in the fair value of the derivative are recognized in accumulated other comprehensive income, to the extent the derivative is effective at offsetting the changes in cash flow being hedged until the hedged item affects earnings. To the extent there is any hedge ineffectiveness, changes in fair value relating to the ineffective portion are immediately recognized in earnings. Changes in the fair value of derivatives that are not designated as hedges are recorded in earnings each period.

### ***Income Taxes***

Deferred income tax assets are reviewed for recoverability, and valuation allowances are provided, when necessary, to reduce deferred income tax assets to the amounts that are more likely than not to be realized based on our estimate of future taxable income. Should our expectations of taxable income change in future periods, it may be necessary to establish a valuation allowance, which could affect our results of operations in the period such a determination is made. We record income tax provision or benefit during interim periods at a rate that is based on expected results for the full year. If future changes in market conditions cause actual results for the year to be more or less favorable than those expected, adjustments to the effective income tax rate could be required.

In addition, we are subject to income taxes in the United States and foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes. In the ordinary course of our business, there are many transactions for which the ultimate tax determination is uncertain. Additionally, our calculations of income taxes are based on our interpretations of applicable tax laws in the jurisdictions in which we file.



**Table of Contents****Self Insurance**

We are primarily self-insured in North America for group health insurance and worker's compensation benefits provided to our U.S. employees, and we purchase insurance to protect against annual claims at the individual and aggregate level. We estimate our exposure for claims incurred but not reported at the end of each reporting period. We use our judgment using our historical claim data and information and analysis provided by actuarial and claim advisors, our insurance carriers and brokers on an annual basis to estimate our liability for these claims. This liability is subject to individual insured stop-loss coverage for both programs, which is \$250,000 per individual. Our actual claims experience may differ from our estimates.

**RESULTS OF OPERATIONS**

Included in the consolidated statement of operations for the year ended December 31, 2010 are 267 days of results of operations for the Asia Pacific operations for the period from April 9, 2010 through December 31, 2010.

The following table sets forth the relationship of various items to net sales in our consolidated statement of operations:

	Year Ended December 31,		
	2012	2011	2010
Net sales	100.0%	100.0%	100.0%
Cost of goods sold	83.3	78.9	78.4
Gross profit	16.7	21.1	21.6
Operating expenses:			
Selling and marketing	2.7	2.5	2.9
General and administrative	7.3	6.5	6.8
Amortization of definite-lived intangibles	1.1	1.2	1.2
Impairment of goodwill and definite-lived intangibles	14.8	1.1	
Impairment of long-lived assets	1.3	3.4	0.1
Total operating expenses	27.2	14.7	11.0
Operating (loss) income	(10.5)	6.4	10.6
Other income (expense):			
Interest expense	(1.9)	(1.9)	(1.9)
Loss on extinguishment of debt	(0.4)		
Other, net	0.3	0.6	0.5
Total other expense, net	(2.0)	(1.3)	(1.4)
(Loss) income before income taxes	(12.5)	5.1	9.2
Income tax provision	(0.9)	(1.8)	(2.4)
Net (loss) income	(13.4)	3.3	6.8
Less: Net loss (income) attributable to noncontrolling interest	0.5	(0.4)	(0.7)
Net (loss) income attributable to TTM Technologies, Inc. stockholders	(12.9)%	2.9%	6.1%

We manage our worldwide operations based on two geographic operating segments: 1) Asia Pacific, which consists of the PCB Subsidiaries and their seven PCB fabrication plants, which include a substrate facility; and 2) North America, which consists of seven domestic PCB fabrication plants, including a facility that provides follow-on value-added services primarily for one of the PCB fabrication plants, and one backplane assembly plant in Shanghai, China, which is managed in conjunction with our U.S. operations. Each segment operates predominantly in the same industry with production facilities that produce similar customized products for their customers and use similar means of product

distribution.

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The following table compares net sales by reportable segment for the years ended December 31, 2012, 2011 and 2010:

	Year Ended December 31,		
	2012	2011	2010
	(In thousands)		
<b>Net Sales:</b>			
Asia Pacific	\$ 842,443	\$ 869,400	\$ 604,748
North America	509,426	565,929	581,828
Total sales	1,351,869	1,435,329	1,186,576
Inter-segment sales	(3,201)	(6,690)	(6,905)
Total net sales	\$ 1,348,668	\$ 1,428,639	\$ 1,179,671

**Net Sales**

Total net sales decreased by \$79.9 million, or 5.6%, from \$1,428.6 million for the year ended December 31, 2011 to \$1,348.7 million for the year ended December 31, 2012. Net sales for the Asia Pacific operating segment, excluding inter-segment sales, decreased by \$23.5 million, or 2.7%, from \$862.7 million for the year ended December 31, 2011 to \$839.2 million for the year ended December 31, 2012, mainly due to lower demand in our Networking/Communications and Computing end markets, partially offset by increased demand in our Cellular Phone and Other end markets. This reduction in demand, which resulted in a 14% decline in PCB shipments from the year ended December 31, 2011, was primarily due to global macroeconomic weakness as well as lower infrastructure spending by telecommunications companies. The average PCB selling price increased by 13%, which was driven primarily by the product mix shift from conventional PCBs and standard HDI PCBs toward higher priced advanced HDI PCBs. Net sales for the North America operating segment decreased by \$56.5 million, or 10.0%, from \$565.9 million for the year ended December 31, 2011 to \$509.4 million for the year ended December 31, 2012 primarily due to lower demand in our Networking/Communications and Aerospace/Defense end markets. This decrease in demand, which resulted in a 15% decline in PCB shipments from December 31, 2011, was primarily due to global macroeconomic weakness, uncertainty around potential U.S. defense spending cuts and lower telecommunications infrastructure spending. The decline was partially offset by a 7% increase in the average PCB selling price due to greater advanced technology product mix. In addition, demand for backplane assemblies, largely from Networking/Communications customers, decreased by 11% from the year ended December 31, 2011.

Total net sales increased by \$248.9 million, or 21.1%, from \$1,179.7 million for the year ended December 31, 2010 to \$1,428.6 million for the year ended December 31, 2011. Net sales for the Asia Pacific operating segment, excluding inter-segment sales, increased by \$264.9 million from \$597.8 million for the year ended December 31, 2010 to \$862.7 million for the year ended December 31, 2011. This increase was mainly due to the inclusion of a full year of Asia Pacific net sales in 2011 compared to 9 months in 2010 due to our acquisition of the PCB Subsidiaries in April 2010. In addition, we experienced an increase in PCB prices of approximately 22% resulting from a product mix shift from standard HDI and conventional PCBs to advanced HDI PCBs, partially offset by a decrease of approximately 14% in daily PCB production. Net sales from advanced HDI PCBs as a percentage of Asia Pacific net sales increased from approximately 6% for the year ended December 31, 2010 to approximately 20% for the year ended December 31, 2011. Net sales for the North America operating segment decreased by \$15.9 million, or 2.7%, from \$581.8 million for the year ended December 31, 2010 to \$565.9 million for the year ended December 31, 2011. This decline in net sales reflects a decrease in PCB sales volume of 13% and the closure of our Hayward, California backplane assembly facility, partially offset by a 9% increase in average PCB selling price and increased sales at our other backplane assembly facilities.

The inter-segment sales are sales from the Asia Pacific operating segment to the North America operating segment.

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**Table of Contents*****Cost of Goods Sold***

Cost of goods sold decreased \$3.6 million, or 0.3%, from \$1,127.3 million for the year ended December 31, 2011 to \$1,123.7 million for the year ended December 31, 2012. Cost of goods sold for the Asia Pacific operating segment increased \$29.6 million, or 4.4%, from \$677.3 million for the year ended December 31, 2011 to \$706.9 million for the year ended December 31, 2012. As a percentage of net sales, cost of goods sold for the Asia Pacific operating segment increased from 78.5% for the year ended December 31, 2011 to 84.2% for the year ended December 31, 2012, primarily due to higher labor costs in China, increased depreciation expense and lower fixed cost absorption due to the decline in net sales. The higher labor costs in our Asia Pacific operating segment were driven by both PRC government mandated wage increases and additional compensation offered to our labor force as a result of a reduction of overtime hours that was implemented to meet standards required by some of our global customers. Included in cost of goods sold for the year ended December 31, 2012 are approximately \$10.9 million of costs related to the temporary closure of our SYE facility in Dongguan, China. These costs consist primarily of labor costs and depreciation expense. Cost of goods sold for the North America operating segment decreased \$33.2 million, or 7.4%, from \$450.0 million for the year ended December 31, 2011 to \$416.8 million for the year ended December 31, 2012. As a percentage of net sales, cost of goods sold for the North America operating segment increased from 79.5% for the year ended December 31, 2011 to 81.8% for the year ended December 31, 2012, primarily due to higher labor expense as a percentage of net sales and lower fixed cost absorption due to the decline in net sales, partially offset by a lower mix of backplane assemblies, which have a higher direct material content.

Total cost of goods sold increased by \$202.0 million from \$925.3 million for the year ended December 31, 2010 to \$1,127.3 million for the year ended December 31, 2011. Cost of goods sold related to the Asia Pacific operating segment increased \$213.9 million from \$463.4 million for the year ended December 31, 2010 to \$677.3 million for the year ended December 31, 2011 primarily due to the inclusion of a full year of costs following our acquisition of the PCB Subsidiaries in April 2010. The increase in costs was also due to higher labor costs in Asia and increased overhead, mainly driven by higher depreciation expense. As a percentage of net sales, cost of goods sold related to the Asia Pacific operating segment increased from 77.5% for the year ended December 31, 2010 to 78.5% for the year ended December 31, 2011 for the reasons mentioned above. Cost of goods sold related to the North America operating segment decreased \$11.9 million from \$461.9 million for the year ended December 31, 2010 to \$450.0 million for the year ended December 31, 2011. This decrease was primarily due to lower sales volume and lower labor costs at several PCB manufacturing plants. As a percentage of net sales, cost of goods sold for the North America operating segment increased slightly from 79.4% for the year ended December 31, 2010 to 79.5% for the year ended December 31, 2011.

***Gross Profit***

As a result of the foregoing, gross profit decreased \$76.3 million, or 25.3%, from \$301.3 million for the year ended December 31, 2011 to \$225.0 million for the year ended December 31, 2012. Overall gross margin decreased from 21.1% for the year ended December 31, 2011 to 16.7% for the year ended December 31, 2012, due primarily to higher labor costs and depreciation expense, lower fixed cost absorption on lower production in our conventional PCB facilities, which has caused our capacity utilization to decline, and costs related to the temporary closure of our SYE facility in Dongguan, China.

Gross profit increased by \$46.9 million from \$254.4 million for the year ended December 31, 2010 to \$301.3 million for the year ended December 31, 2011. The overall gross margin decreased from 21.6% for the year ended December 31, 2010 to 21.1% for the year ended December 31, 2011. The decrease in gross margin was primarily due to higher labor costs in China and increases in depreciation expense in our Asia Pacific operating segment.

***Selling and Marketing Expenses***

Selling and marketing expenses decreased by \$0.9 million, or 2.4%, from \$36.9 million for the year ended December 31, 2011 to \$36.0 million for the year ended December 31, 2012, primarily due to a decrease in commission expense on lower net sales. As a percentage of net sales, selling and marketing expenses were 2.5% for the year ended December 31, 2011 compared to 2.7% for the year ended December 31, 2012. The increase in

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selling and marketing expense as a percentage of net sales is due to lower net sales and the fixed portion of selling expense, offset slightly by the decline in commission expense, as a percentage of net sales for the year ended December 31, 2012.

Selling and marketing expenses increased by \$2.6 million, or 7.6%, from \$34.3 million for the year ended December 31, 2010 to \$36.9 million for the year ended December 31, 2011. As a percentage of net sales, selling and marketing expenses were 2.9% for the year ended December 31, 2010 as compared to 2.5% for the year ended December 31, 2011. The decline in selling and marketing expense for the year ended December 31, 2011 as a percentage of net sales is due to the inclusion of a full year of results for the Asia Pacific operating segment, which has lower selling expenses than our North America operating segment.

***General and Administrative Expense***

General and administrative expenses increased \$5.3 million from \$92.7 million, or 6.5% of net sales, for the year ended December 31, 2011 to \$98.0 million, or 7.3% of net sales, for the year ended December 31, 2012. The increase in expense primarily relates to higher bad debt expense, increased stock-based compensation expense as well as increased labor costs partially offset by lower incentive bonus compensation expense. As a percentage of net sales, general and administrative expenses increased due to increased expense and a decline in net sales for the year ended December 31, 2012.

General and administrative expenses increased \$13.0 million from \$79.7 million, or 6.8% of net sales, for the year ended December 31, 2010 to \$92.7 million, or 6.5% of net sales, for the year ended December 31, 2011. The increase in expense for the year ended December 31, 2011 primarily relates to inclusion of a full year of results for the Asia Pacific operating segment. The decrease in general and administrative expense as a percentage of sales is related primarily to \$9.2 million of acquisition-related costs incurred in 2010.

***Amortization of Definite-Lived Intangibles***

Intangible amortization expense decreased by \$2.7 million from \$17.3 million, or 1.2% of net sales, for the year ended December 31, 2011 to \$14.6 million, or 1.1% of net sales, for the year ended December 31, 2012 due to the \$28.9 million impairment of customer relationships in the third quarter of 2012. See explanation below for Impairment of Goodwill and Definite-lived Intangibles.

Intangible amortization expense increased by \$3.6 million from \$13.7 million, or 1.2% of net sales, for the year ended December 31, 2010 to \$17.3 million, or 1.2% of net sales, for the year ended December 31, 2011 due to the inclusion of a full year of results for the Asia Pacific operating segment.

Identifiable intangible assets include customer relationships, trade name and licensing agreements.

***Impairment of Goodwill and Definite-lived Intangibles***

During the third quarter of 2012, we performed an interim evaluation of goodwill and definite-lived intangibles as we believed there were impairment triggering events and circumstances which warranted an evaluation. These circumstances included continued decreases in operating profit due to softer revenues and shifts in product mix when compared with projected results. These factors led to weaker performance than we expected for the year ended December 31, 2012. As a result, we recorded a charge for the impairment of goodwill and definite-lived intangibles in the amount of \$200.3 million for the year ended December 31, 2012, consisting of charges of \$171.4 million for goodwill and \$28.9 million for definite-lived intangibles related to our Asia Pacific reporting unit. If the market outlook and operating performance of our Asia Pacific reporting unit does not recover to expected levels in future quarters, further goodwill impairment may be warranted. At December 31, 2012, the carrying value of goodwill in our Asia Pacific reporting unit amounted to approximately \$12.1 million.

Additionally, during the fourth quarter of 2011, we recorded a goodwill impairment charge of \$15.2 million related to our Shanghai backplane assembly facility, which was part of our 2006 acquisition of Tyco's PCB business. As a result of our annual goodwill impairment testing, giving consideration to factors such as

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weakening demand for this facility's products, as well as price pressure from a key telecommunications infrastructure customer and reduced expectations for future cash flows as indicators for potential goodwill impairment, we determined that the carrying value of our Shanghai backplane assembly reporting unit, which is included as a part of our North America operating segment, exceeded its implied fair value, resulting in an impairment charge.

***Impairment of Long-Lived Assets***

During the third quarter of 2012, in conjunction with the evaluation of goodwill and definite-lived intangibles, we believed there were impairment triggering events and circumstances which warranted an evaluation of certain long-lived assets. These circumstances included continued decreases in operating profitability due to softer revenues and shifts in product mix when compared with projected results. These factors led to weaker performance than we expected for the year ended December 31, 2012. Specifically, two real estate assets in the Asia Pacific operating segment were evaluated for impairment due to current and expected underutilization and limited market demand. Accordingly, we recorded an impairment charge in the Asia Pacific operating segment for the two manufacturing buildings in the amount of \$18.1 million for the year ended December 31, 2012 to reduce the carrying value to its fair value.

During the year ended December 31, 2011, we recorded an impairment charge in the amount of \$48.1 million to reduce the carrying value of certain long-lived assets in the Asia Pacific operating segment. The impairment charge includes \$39.8 million related to manufacturing equipment held for use at a plant acquired by Meadville in 2007. We had previously reduced the carrying value for some of these assets during our purchase price allocation related to the acquisition of the PCB Subsidiaries. Weaker than expected operating performance at this manufacturing plant in the first six months of 2011, resulting from a downturn in the profitability of its products as well as a reduction in expected future demand for these products, resulted in an asset impairment during the second quarter of 2011. Based on the undiscounted cash flows for this plant, an impairment of the manufacturing assets was indicated. In addition, the manufacturing equipment at this plant cannot be used at our other manufacturing sites. The fair value of these manufacturing assets was determined using a discounted cash flow model over their remaining useful life with the impairment being the difference between the carrying value and fair value of the asset group. The impairment charge also includes \$8.3 million related to manufacturing equipment that, due to the change in market conditions noted above, has become or is expected to become technologically obsolete. Accordingly, during the year ended December 31, 2011, we revised our classification of these assets to assets held for sale or disposal. The fair value of these assets was determined using third party quotes or other estimates of salvage value, and the assets' carrying value was written down to salvage value. The new carrying value of the assets held for sale or disposal is approximately \$1.0 million, which is included in machinery and equipment in property, plant and equipment, net in the accompanying consolidated condensed balance sheet.

***Other Income (Expense)***

Other expense, net increased \$8.5 million from \$17.9 million for the year ended December 31, 2011 to \$26.4 million for the year ended December 31, 2012. The increase in other expense, net was primarily due to a \$5.5 million loss on extinguishment of debt related to the recent refinancing of our long-term debt; a decrease in foreign currency transaction and derivative gains of approximately \$1.9 million; and the absence of the \$1.7 million realized gain for the early settlement of a related party financing obligation related to the remaining 20% interest in Meadville Aspocomp (BVI) Holdings Ltd., which occurred in 2011. These increased expenses were partially offset by a \$0.8 million realized gain on the sale of securities in 2012.

Total other expense, net increased by \$1.0 million from \$16.9 million for the year ended December 31, 2010 to \$17.9 million for the year ended December 31, 2011. The increase in total other expense, net for the year ended December 31, 2011 was primarily due to interest expense related to the debt assumed at the date of acquisition of the PCB Subsidiaries, partially offset by a realized gain of \$1.7 million related to the early settlement of a related party financing obligation related to the remaining 20% interest in Meadville Aspocomp (BVI) Holdings Ltd., as well as approximately \$5.3 million of foreign currency transaction gains.

**Table of Contents*****Income Taxes***

The provision for income taxes decreased \$13.3 million from \$26.0 million for the year ended December 31, 2011 to \$12.7 million for the year ended December 31, 2012. The tax provision reductions were primarily due to lower pre-tax income, exclusive of impairment charges, for which a tax benefit was not recorded. Our effective tax rate was (7.6)% and 35.5% for the years ended December 31, 2012 and 2011, respectively. The Company's effective tax rate changed due to the impact of impairment charges in 2012 and 2011, for which a tax benefit was not recorded. Our effective tax rate is primarily impacted by the U.S. federal income tax rate, apportioned state income tax rates, generally lower tax rates in China and Hong Kong, generation of other credits and deductions available to us, and certain non-deductible items. Certain foreign losses generated are not more than likely to be realizable, and thus no income tax benefit has been recognized on these losses. Additionally, as of December 31, 2012 and 2011, we had net deferred income tax assets of approximately \$13.5 million and \$14.0 million, respectively, where we believe it is more likely than not that we will utilize the deferred income tax assets in future periods. As of December 31, 2012 and 2011, we also had full valuation allowances on certain foreign and United States deferred tax assets amounting to \$41.8 million and \$33.6 million, respectively, where we have determined that it is not more likely than not that the underlying deferred tax assets will be realized.

The provision for income taxes decreased \$2.7 million from \$28.7 million for the year ended December 31, 2010 to \$26.0 million for the year ended December 31, 2011. Our effective tax rate was 35.5% and 26.5% for the years ended December 31, 2011 and 2010, respectively. Our effective tax rate increased in 2011 primarily due to the impairment of long-lived assets, for which a tax benefit was not recorded, partially offset by an increase in total earnings generated in lower-tax jurisdictions, which have a lower effective tax rate than our North America operations. In addition, our 2011 tax rate benefited from research and development credits in our North America operations. Our effective tax rate is primarily impacted by the U.S. federal income tax rate, apportioned state income tax rates, tax rates in China and Hong Kong, generation of other credits and deductions available to us, and certain non-deductible items. Certain foreign losses generated are not more than likely to be realizable, and thus no income tax benefit has been recognized on these losses. Additionally, as of December 31, 2011 and 2010, we had net deferred income tax assets of approximately \$14.0 million and \$18.3 million, respectively. Based on our forecast for future taxable earnings, we believe it is more likely than not that we will utilize the deferred income tax assets in future periods.

***Liquidity and Capital Resources***

Our principal sources of liquidity have been cash provided by operations and the issuance of term and revolving debt and Convertible Notes. Our principal uses of cash have been to finance capital expenditures, meet debt service requirements, fund working capital requirements and finance acquisitions. We anticipate that servicing debt, financing capital expenditures, funding working capital requirements, and acquisitions will continue to be the principal demands on our cash in the future.

As of December 31, 2012, we had net working capital of approximately \$395.7 million compared to \$234.4 million as of December 31, 2011. This increase in working capital is primarily attributable to proceeds from the refinancing of debt during the year ended December 31, 2012.

As of December 31, 2012, we had cash and cash equivalents of approximately \$285.4 million, of which approximately \$92.3 million was held by our foreign subsidiaries. Of the cash and cash equivalents held by our foreign subsidiaries as of December 31, 2012, \$90.9 million was located in Asia and \$1.4 million was located in European countries. Cash and cash equivalents located in our Asia Pacific operating segment are expected to remain for use in local operations. Cash and cash equivalents located in our backplane assembly facility in Shanghai, China, as well as in Europe, which are managed in conjunction with our U.S. operations, are expected to be repatriated and will be subject to U.S. income tax. As of December 31, 2012, approximately \$9.5 million of cash and cash equivalents was located in our Shanghai, China backplane assembly plant. Other than the cash and cash equivalents located in our Shanghai backplane assembly and our European locations, we do not currently expect to repatriate earnings from our other foreign subsidiaries.

Our 2013 capital expenditure plan is expected to total approximately \$100.0 million (of which approximately \$83.0 million relates to our Asia Pacific operating segment). It will fund capital equipment

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purchases to increase production capacity, especially for substrate and rigid flex PCB manufacturing, expand our technological capabilities, comply with increased environmental regulations and replace aging equipment.

During the year ended December 31, 2012, one of our majority owned foreign subsidiaries declared a dividend in the amount of approximately \$47.6 million, which includes \$9.5 million paid to its noncontrolling interest shareholder during the year ended December 31, 2012.

Based on our current level of operations, we believe that cash generated from operations, cash on hand and cash available from borrowings under our existing credit arrangements will be adequate to meet our currently anticipated capital expenditure, debt service, working capital, and acquisition needs for the next 12 months. We believe that there is minimal risk of not being in compliance with our existing financial covenants so as to accelerate the maturity of the New Credit Agreement.

### ***Credit Agreement***

We are party to a new facility agreement (New Credit Agreement) consisting of a \$370.0 million senior secured Term Loan, a \$90.0 million senior secured Revolving Loan and a secured \$80.0 million Letters of Credit Facility. The Term Loan and Letters of Credit Facility will mature on September 14, 2016, and the Revolving Loan will mature on March 14, 2016. The New Credit Agreement is secured by substantially all of the assets of our Asia Pacific operating segment and is senior to all our other debt, including the Convertible Notes. We have fully and unconditionally guaranteed the full and punctual payment of all obligations of the Asia Pacific operating segment under the New Credit Agreement.

Borrowings under the New Credit Agreement bear interest at a floating rate of LIBOR (term election by us) plus an applicable interest margin. Borrowings bear interest at a rate of LIBOR plus 2.38% under the Term Loan and Revolving Loan. At December 31, 2012, the weighted average interest rate on the outstanding borrowings under the New Credit Agreement was 2.59%.

Borrowings under the New Credit Agreement are subject to certain financial and operating covenants that include maintaining maximum total leverage ratios and minimum net worth, current assets, and interest coverage ratios for both us and our Asia Pacific operating segment. In addition, our New Credit Agreement includes a covenant that the Principal Shareholders (as defined in the Shareholders Agreement dated April 9, 2010 as amended on September 14, 2012) will not reduce their shareholding below 15 percent of TTM's issued shares. At December 31, 2012, we were in compliance with the covenants.

We are required to pay a commitment fee of 0.50% per annum on any unused portion of the loans and letters of credit facility granted under the New Credit Agreement. We incurred \$0.3 million for the year ended December 31, 2012 in commitment fees related to the unused portion of any loan or facility under the New Credit Agreement and the recently terminated credit agreement entered into on November 16, 2009. As of December 31, 2012, the Term Loan of \$370.0 million, which is included as long-term debt, was outstanding, \$30.0 million of the Revolver was outstanding, and \$52.5 million of Letters of Credit were outstanding. Available borrowing capacity under the Revolving Loan was \$60.0 million as of December 31, 2012.

### ***Convertible Notes***

In May 2008, we issued \$175.0 million of Convertible Notes. The Convertible Notes bear interest at a rate of 3.25% per annum. Interest is payable semiannually in arrears on May 15 and November 15 of each year. The Convertible Notes are senior unsecured obligations and rank equally to our future unsecured senior indebtedness and senior in right of payment to any of our future subordinated indebtedness. Offering expenses are being amortized to interest expense over the term of the Convertible Notes.

At any time prior to November 15, 2014, holders may convert their Convertible Notes into cash and, if applicable, into shares of our common stock based on a conversion rate of 62.6449 shares of our common stock per \$1,000 principal amount of Convertible Notes, subject to adjustment, under the following circumstances: (1) during any calendar quarter beginning after June 30, 2008 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days during the 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the applicable conversion price on each applicable trading day of such preceding calendar quarter; (2) during the five business day period after any 10 consecutive trading day period in which the trading price per note for each



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day of that 10 consecutive trading day period is less than 98% of the product of the last reported sale price of our common stock and the conversion rate on such day; or (3) upon the occurrence of specified corporate transactions described in the prospectus supplement related to the Convertible Notes, which can be found on the SEC's website at [www.sec.gov](http://www.sec.gov). As of December 31, 2012, none of the conversion criteria had been met.

On or after November 15, 2014 until the close of business on the third scheduled trading day preceding the May 15, 2015 maturity of the Convertible Notes, holders may convert their notes at any time, regardless of the foregoing circumstances. Upon conversion, for each \$1,000 principal amount of notes, we will pay cash for the lesser of the conversion value or \$1,000 and shares of our common stock, if any, based on a daily conversion value calculated on a proportionate basis for each day of the applicable 60 trading day observation period.

The maximum number of shares issuable upon conversion, subject to certain conversion rate adjustments, would be approximately 14 million shares.

We are not permitted to redeem the notes at any time prior to maturity. In the event of a fundamental change or certain default events, as defined in the prospectus supplement, holders may require us to repurchase for cash all or a portion of their notes at a price equal to 100% of the principal amount, plus any accrued and unpaid interest.

In connection with the issuance of the Convertible Notes, we entered into a convertible note hedge and warrant transaction (Call Spread Transaction), with respect to our common stock. This option expires on May 15, 2015 and can only be executed upon the conversion of the Convertible Notes. Additionally, we sold warrants for the option to purchase 11.0 million shares of our common stock at a price of \$18.15 per share. The Call Spread Transaction has no effect on the terms of the Convertible Notes and reduces potential dilution by effectively increasing the conversion price of the Convertible Notes to \$18.15 per share of our common stock.

**Other Letters of Credit**

In addition to the letters of credit obtained pursuant to the New Credit Agreement, we maintain several unused letters of credit: a \$2.4 million standby letter of credit expiring on December 31, 2013 associated with its insured workers compensation program; and two standby letters of credit in the amount of \$1.1 million in aggregate expiring on December 31, 2013 and February 28, 2014 related to the lease of two of its production facilities; and one other letter of credit in the amount of \$0.2 million related to purchases of machinery and equipment, which expired in February 2013.

**Contractual Obligations and Commitments**

The following table provides information on our contractual obligations as of December 31, 2012:

Contractual Obligations(1)(2)	Total	Less Than 1 Year	1 -	4 -	After
			3 Years	5 Years	5 Years
(In thousands)					
Long-term debt obligations	\$ 400,012	\$ 30,004	\$ 192,408	\$ 177,600	\$
Convertible debt obligations	175,000		175,000		
Interest on debt obligations	41,478	16,184	22,648	2,646	
Interest rate swap liabilities	620	620			
Foreign currency forward contract liabilities	949	865	84		
Equipment payables	58,361	44,289	14,072		
Purchase obligations	42,007	22,258	19,749		
Operating lease commitments	8,933	2,771	3,303	1,944	915
<b>Total contractual obligations</b>	<b>\$ 727,360</b>	<b>\$ 116,991</b>	<b>\$ 427,264</b>	<b>\$ 182,190</b>	<b>\$ 915</b>

(1) Unrecognized uncertain tax benefits of \$2.4 million are not included in the table above as we are not sure when the amount will be paid.



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(2) Estimated environmental liabilities of \$0.5 million, not included in the table above, are accrued and recorded as liabilities in our consolidated balance sheet as of December 31, 2012.

### **Off Balance Sheet Arrangements**

We do not currently have, nor have we ever had, any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. In addition, we do not engage in trading activities involving non-exchange traded contracts. As a result, we are not materially exposed to any financing, liquidity, market, or credit risk that could arise if we had engaged in these relationships.

### **Seasonality**

As a result of the product and customer mix of our Asia Pacific operating segment, a portion of our revenue is subject to seasonal fluctuations. These fluctuations include seasonal patterns in the computer and cellular phone industry, which together have become a significant portion of the end markets that we serve. This seasonality typically results in higher net sales in the third and fourth quarters due to end customer demand for fourth quarter sales of consumer electronics products. Seasonal fluctuations also include the Chinese New Year holidays in the first quarter, which typically results in lower net sales. In addition, our accounting calendar causes the first quarter of the fiscal year to have fewer days than the other quarters, especially the fourth quarter. In some cases, the number of days can differ by as many as twelve days between the first and fourth quarters, which can cause significantly lower first quarter sales. Subsequent to December 31, 2012 we will modify our accounting calendar so that the first quarter ends on the Monday closest to April 1 and the last quarter always ends on December 31, reducing the difference in the number of days between the first and fourth quarters.

### **Impact of Inflation**

We believe that our results of operations are not materially impacted by moderate changes in the inflation rate as we expect that we generally will be able to continue to pass along component price increases to our customers. Severe increases in inflation, however, could affect the global and U.S. economies and have an adverse impact on our business, financial condition and results of operations. In addition, we may not be able to pass along to our major customers significant increases in the costs of gold, copper and other commodities used in our products, which could have a material adverse impact on our gross profit margins.

### **Recently Issued Accounting Standards**

In February 2013, the Financial Accounting Standards Board (FASB) issued an update that would require that an entity provide information about the amounts reclassified out of accumulated other comprehensive income by component. In addition, an entity is required to present, either on the face of the statement where net income is presented or in the notes, significant amounts reclassified out of accumulated other comprehensive income by the respective line items of net income, but only if the amount reclassified is required under accounting principles generally accepted in the United States of America (U.S. GAAP) to be reclassified to net income in its entirety in the same reporting period. For other amounts that are not required under U.S. GAAP to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures required under U.S. GAAP that provide additional detail about those amounts.

This update does not change the current requirements for reporting net income or other comprehensive income in financial statements and is effective for interim and annual periods beginning after December 15, 2012, with early adoption permitted. We adopted the amendment on January 1, 2013, and our adoption is not expected to have a material impact on our financial statements.

In July 2012, the FASB issued an update to an accounting standard related to testing indefinite-lived intangible assets for impairment, whereby an entity has the option first to assess qualitative factors to determine whether the existence of events and circumstances indicates that it is more likely than not that the indefinite-lived

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intangible asset is impaired. The amendments are effective for interim and annual impairment tests performed for fiscal years beginning after September 15, 2012, and early adoption is permitted. We adopted the amendments in conjunction with our annual impairment test performed for fiscal year 2012. Our adoption did not have a material impact on our financial statements.

In September 2011, the FASB issued an update to an accounting standard related to testing goodwill for impairment whereby an entity has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. The amendments are effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011 and early adoption is permitted. We adopted the amendments on January 1, 2012, and our adoption did not have a material impact on our financial statements.

In June 2011, the FASB issued an update to an accounting standard related to comprehensive income, whereby an entity has the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The amendments are effective for fiscal years beginning after December 15, 2011, and early adoption is permitted. We adopted the amendments on January 1, 2012, and our adoption did not have a material impact on our financial statements.

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

In the normal course of business operations we are exposed to risks associated with fluctuations in interest rates and foreign currency exchange rates. We address these risks through controlled risk management that includes the use of derivative financial instruments to economically hedge or reduce these exposures. We do not enter into derivative financial instruments for trading or speculative purposes.

We have not experienced any losses to date on any derivative financial instruments due to counterparty credit risk.

To ensure the adequacy and effectiveness of our interest rate and foreign exchange hedge positions, we continually monitor our interest rate swap positions and foreign exchange forward positions, both on a stand-alone basis and in conjunction with their underlying interest rate and foreign currency exposures, from an accounting and economic perspective. However, given the inherent limitations of forecasting and the anticipatory nature of the exposures intended to be hedged, we cannot assure that such programs will offset more than a portion of the adverse financial impact resulting from unfavorable movements in either interest or foreign exchange rates. In addition, the timing of the accounting for recognition of gains and losses related to mark-to-market instruments for any given period may not coincide with the timing of gains and losses related to the underlying economic exposures and, therefore, may adversely affect our consolidated operating results and financial position.

#### **Interest rate risk**

Our business is exposed to interest rate risk resulting from fluctuations in interest rates. Our interest expense is more sensitive to fluctuations in the general level of LIBOR interest rates than to changes in rates in other markets. Increases in interest rates would increase interest expenses relating to the outstanding variable rate borrowings of certain foreign subsidiaries and increase the cost of debt. Fluctuations in interest rates can also lead to significant fluctuations in the fair value of the debt obligations.

In conjunction with the November 16, 2009 credit agreement, we entered into a two-year pay-fixed, receive floating (1-month LIBOR), amortizing interest rate swap arrangement with an initial notional amount of \$146.5 million, for the period beginning April 18, 2011 and ending on April 16, 2013. The interest rate swap applied a fixed interest rate against the first interest payments of a portion of the \$350.0 million term loan related to the November 16, 2009 credit agreement, over the term of the interest rate swap. The notional amount of the interest rate swap decreases to zero over its term, consistent with our risk management objectives. Under the terms of the interest rate swap, we would pay a fixed rate of 2.50% and would receive floating 1-month LIBOR during the swap period. We had designated this interest rate swap as a cash flow hedge, and during the years ended

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December 31, 2012 and 2011, the interest rate swap increased interest expense by \$1.9 million and \$2.2 million, respectively. There was no impact to interest expense for the year ended December 31, 2010 as the interest rate swap did not hedge interest payments until the period beginning April 18, 2011.

As of December 31, 2012, we no longer designated this interest rate swap as a cash flow hedge as the borrowings attributable to this interest rate swap were paid in full during the year ended December 31, 2012. The notional value underlying the swap at December 31, 2012 was \$91.8 million. As of December 31, 2012 and 2011, the fair value of the swap was recorded as a liability of \$0.6 million in other accrued liabilities and \$2.7 million in other long-term liabilities, respectively. The change in the fair value of this interest rate swap is recorded as other, net in the consolidated statement of operations.

As of December 31, 2012, approximately 46.4% of our long term debt was based on fixed rates, including notional amounts related to interest rate swaps. Based on our borrowings as of December 31, 2012, an assumed 1% change in variable rates would cause our annual interest cost to change by \$3.1 million.

**Foreign currency risks**

We are subject to risks associated with transactions that are denominated in currencies other than our functional currencies, as well as the effects of translating amounts denominated in a foreign currency to the U.S. Dollar as a normal part of the reporting process. Our Asia Pacific operations utilize the Chinese Renminbi (RMB) and the Hong Kong Dollar (HKD) as the functional currencies, which results in us recording a translation adjustment that is included as a component of accumulated other comprehensive income. Our foreign exchange exposure results primarily from employee-related and other costs of running operations in foreign countries, foreign currency denominated purchases and translation of balance sheet accounts denominated in foreign currencies. Our primary foreign exchange exposure is to the RMB. We do not generally engage in hedging to manage foreign currency risk related to revenue and expenses denominated in RMB and HKD nor do we currently use derivative instruments to reduce exposure to foreign currency risk for loans due from our foreign subsidiaries. However, we may consider the use of derivatives in the future. In general, our PRC customers pay us in RMB, which partially mitigates this foreign currency exchange risk.

We enter into foreign currency forward contracts to mitigate the impact of changes in foreign currency exchange rates and to reduce the volatility of purchases and other obligations generated in currencies other than the functional currencies. Our foreign subsidiaries may at times purchase forward exchange contracts to manage their foreign currency risks in relation to certain purchases of machinery denominated in foreign currencies other than our foreign functional currency. The notional amount of the foreign exchange contracts at December 31, 2012 and 2011 was approximately \$28.3 million and \$44.7 million, respectively. We have designated certain of these foreign exchange contracts as cash flow hedges.

The table below presents information about certain of the foreign currency forward contracts at December 31, 2012 and 2011:

	As of December 31, 2012		As of December 31, 2011	
	Notional Amount (In thousands in USD)	Average Contract Rate or Strike Amount	Notional Amount (In thousands in USD)	Average Contract Rate or Strike Amount
<b>Receive foreign currency/pay USD</b>				
Euro	\$ 17,621	1.33	\$ 41,196	1.36
Japanese Yen	10,638	0.01	3,511	0.01
	\$ 28,259		\$ 44,707	
Estimated fair value, net liability	\$ (829)		\$ (1,750)	

**Table of Contents****Debt Instruments**

The table below presents information about certain of our debt instruments (bank borrowings) as of December 31, 2012 and 2011.

	December 31, 2012					Fair Market Value	Weighted Average Interest Rate
	2013	2014	2015	2016	Total		
	(In thousands)						
Variable Rate:							
US\$	\$ 30,000	\$ 96,200	\$ 96,200	\$ 177,600	\$ 400,000	\$ 400,000	2.59%
Total Variable Rate	30,000	96,200	96,200	177,600	400,000	400,000	
Fixed Rate:							
US\$	4	4	175,004		175,012	176,692	3.25%
Total Fixed Rate	4	4	175,004		175,012	176,692	
Total	\$ 30,004	\$ 96,204	\$ 271,204	\$ 177,600	\$ 575,012	\$ 576,692	

	December 31, 2011					Fair Market Value	Weighted Average Interest Rate
	2012	2013	2014	2015	Total		
	(In thousands)						
Variable Rate:							
US\$	\$ 117,000	\$ 192,500	\$	\$	\$ 309,500	\$ 308,554	2.26%
RMB	3,958	24,852			28,810	28,810	6.14%
Total Variable Rate	120,958	217,352			338,310	337,364	
Fixed Rate:							
US\$	4	4	4	175,005	175,017	182,017	3.25%
Total Fixed Rate	4	4	4	175,005	175,017	182,017	
Total	\$ 120,962	\$ 217,356	\$ 4	\$ 175,005	\$ 513,327	\$ 519,381	

**Interest Rate Swap Contracts**

The table below presents information regarding our interest rate swaps (in thousands) as of December 31, 2012.

	2013	Fair Market Value
Average interest payout rate	2.50%	
Interest payout amount	(676)	
Average interest received rate	0.21%	
Interest received amount	56	
Fair value loss at December 31, 2012		(620)



**Table of Contents****ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

For 2012, the first and fourth quarters contained 86 and 98 days, respectively, and for 2011, the first and fourth quarters contained 87 and 96 days, respectively. The second and third quarters in both 2012 and 2011 contained 91 days each. Beginning in fiscal year 2013, we will use a 13-week fiscal quarter accounting period with the first quarter ending on the Monday closest to April 1 and the fourth quarter ending on December 31, reducing the difference in the number of days between the first and fourth quarters.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(In thousands, except per share data)			
<b>Year Ended December 31, 2012 (a):</b>				
Net sales	\$ 300,499	\$ 327,423	\$ 339,011	\$ 381,735
Gross profit	56,478	54,691	52,316	61,514
Income (loss) before income taxes	16,975	11,560	(213,514)	16,607
Net income (loss)	12,332	7,551	(212,664)	11,681
Net income (loss) attributable to TTM Technologies, Inc. stockholders	12,595	7,410	(208,342)	13,742
Earnings (loss) per share attributable to TTM Technologies, Inc. stockholders:				
Basic	\$ 0.15	\$ 0.09	\$ (2.54)	\$ 0.17
Diluted	\$ 0.15	\$ 0.09	\$ (2.54)	\$ 0.17
<b>Year Ended December 31, 2011: (b)</b>				
Net sales	\$ 342,801	\$ 366,117	\$ 358,261	\$ 361,460
Gross profit	81,926	77,335	70,674	71,378
Income (loss) before income taxes	40,370	(11,794)	30,968	13,688
Net income (loss)	29,088	(20,268)	26,047	12,360
Net income (loss) attributable to TTM Technologies, Inc. stockholders	27,123	(20,903)	24,478	11,170
Earnings (loss) per share attributable to TTM Technologies, Inc. stockholders:				
Basic	\$ 0.34	\$ (0.26)	\$ 0.30	\$ 0.14
Diluted	\$ 0.33	\$ (0.26)	\$ 0.30	\$ 0.14

(a) Includes goodwill and definite-lived intangible impairment charge of \$200.3 million, a long-lived asset impairment charge of \$18.1 million and a \$5.5 million loss on extinguishment of debt in the third quarter.

(b) Includes long-lived asset impairment charges of \$48.1 million in the second quarter and a goodwill impairment charge of \$15.2 million in the fourth quarter.

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

Not applicable.

**ITEM 9A. CONTROLS AND PROCEDURES****Evaluation of Disclosure Controls and Procedures**

Our management, under the supervision and with the participation of our Chief Executive Officer ( CEO ) and Chief Financial Officer ( CFO ), has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e)



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and 15d-15(e)) as of December 31, 2012. Based on this evaluation, our CEO and CFO have concluded that, as of December 31, 2012, such disclosure controls and procedures were effective such that information required to be disclosed by us in reports that we file and submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

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### **Management's Report on Internal Control Over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles (GAAP). Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of management and the board of directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Under the supervision of and with the participation of our CEO and CFO, management conducted an assessment of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management concluded that our internal control over financial reporting was effective as of December 31, 2012.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2012 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which appears under the heading Report of Independent Registered Public Accounting Firm on page 61 of this report.

### **Inherent Limitations on Effectiveness of Controls**

A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. 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. Further, because of the inherent limitations, internal control over financial reporting may not prevent or detect misstatements due to error or fraud. 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. Controls also can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on 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. Projections of any evaluation of controls effectiveness to future periods are subject to risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

### **Changes in Internal Control Over Financial Reporting**

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2012 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

### **ITEM 9B. OTHER INFORMATION**

Not Applicable.

## **PART III**

### **ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE**

The information required by this Item relating to our directors is incorporated herein by reference to the definitive Proxy Statement to be filed pursuant to Regulation 14A of the Exchange Act for our 2013 Annual Meeting of Stockholders.

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**ITEM 11. EXECUTIVE COMPENSATION**

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement to be filed pursuant to Regulation 14A of the Exchange Act for our 2013 Annual Meeting of Stockholders.

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

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement to be filed pursuant to Regulation 14A of the Exchange Act for our 2013 Annual Meeting of Stockholders.

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

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement to be filed pursuant to Regulation 14A of the Exchange Act for our 2013 Annual Meeting of Stockholders.

**ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The information required by this Item is incorporated herein by reference to the definitive Proxy Statement to be filed pursuant to Regulation 14A of the Exchange Act for our 2013 Annual Meeting of Stockholders.

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**PART IV**

**ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

(a) *Financial Statements*

- (1) Financial Statements are listed in the Index to Consolidated Financial Statements and Schedule on page 60 of this Report.
- (2) Other schedules are omitted because they are not applicable, not required, or because required information is included in the consolidated financial statements or notes thereto.

(b) *Exhibits*

**Exhibit**

<b>Number</b>	<b>Exhibits</b>
1.1	Underwriting Agreement, dated May 8, 2008, among the Registrant, J.P. Morgan Securities Inc. and UBS Securities LLC(1)
3.1	Registrant's Certificate of Incorporation, as amended(2)
3.2	Registrant's Fourth Amended and Restated Bylaws(3)
4.1	Indenture, dated as of May 14, 2008, between the Registrant and American Stock Transfer and Trust Company(1)
4.2	Supplemental Indenture, dated as of May 14, 2008, between the Registrant and American Stock Transfer and Trust Company(1)
4.3	Form of Registrant's common stock certificate(2)
4.4	Sell-Down Registration Rights Agreement, dated December 23, 2009, by and among Meadville Holdings Limited, MTG Investment (BVI) Limited, and TTM Technologies, Inc.(4)
4.5	Registration Rights Agreement, dated as of April 9, 2010, by and among Tang Hsiang Chien, Su Sih (BVI) Limited, and the Registrant(5)
4.6	Shareholders Agreement, dated as of April 9, 2010, by and among Meadville Holdings Limited; Su Sih (BVI) Limited; Tang Hsiang Chien; Tang Chung Yen, Tom; Tang Ying Ming, Mai; and the Registrant(5)
4.7	First Amendment to Shareholders Agreement, dated September 14, 2012, by and among Tang Hsiang Chien; Su Sih (BVI) Limited; Tang Chung Yen, Tom; Tang Ying Ming, Mai; and the Registrant(17)
10.1	Call Option Transaction Confirmation, dated as of May 8, 2008, between the Registrant and JPMorgan Chase Bank, National Association(1)
10.2	Warrant Transaction Confirmation, dated as of May 8, 2008, between the Registrant and JPMorgan Chase Bank, National Association(1)
10.3	Call Option Transaction Confirmation, dated as of May 8, 2008, between the Registrant and UBS AG(1)
10.4	Warrant Transaction Confirmation, dated as of May 8, 2008, between the Registrant and UBS AG(1)
10.5	Call Option Transaction Confirmation, dated as of May 16, 2008, between the Registrant and JPMorgan Chase Bank, National Association(6)

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- 10.6 Warrant Transaction Confirmation, dated as of May 16, 2008, between the Registrant and JPMorgan Chase Bank, National Association(6)
- 10.7 Call Option Transaction Confirmation, dated as of May 16, 2008, between the Registrant and UBS AG(6)

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**Exhibit**

<b>Number</b>	<b>Exhibits</b>
10.8	Warrant Transaction Confirmation, dated as of May 16, 2008, between the Registrant and UBS AG(6)
10.9*	Restated Employment Agreement, dated as of March 19, 2010, between the Registrant and Kenton K. Alder(7)
10.10	Amendment No. 1 to Restated Employment Agreement, dated as of January 16, 2012, by and between Kenton K. Alder and the Registrant (8)
10.11	Reserved
10.12*	2006 Incentive Compensation Plan(9)
10.13*	Form of Stock Option Agreement(9)
10.14*	Form of Restricted Stock Unit Award Agreement(9)
10.15	Form of Indemnification Agreement with directors(10)
10.16	Stock Purchase Agreement, dated November 16, 2009, by and among Meadville Holdings Limited, MTG Investment (BVI) Limited, the Registrant, TTM Technologies International, Inc., and TTM Hong Kong Limited (now known as TTM Technologies (Asia Pacific) Limited).(11)
10.17*	Form of Executive Change in Control Severance Agreement(8)
10.18*	Form of Performance-Based Restricted Unit Award Agreement(12)
10.19	Reserved
10.20	Reserved
10.21	Credit Agreement, dated November 16, 2009, as amended on March 30, 2010 and further amended on August 3, 2010 and July 22, 2011, respectively, by and among certain PCB Subsidiaries, the Registrant, the Lenders, and the other parties named therein(13)
10.22	Waiver and Amendment Letter with The Hongkong and Shanghai Banking Corporation Limited, dated August 3, 2010(13)
10.23	Special Security Agreement(14)
10.24	Amendment Letter with The HongKong and Shanghai Banking Corporation Limited, dated July 22, 2011(15)
10.25*	Executive Director Deferred Compensation Plan(16)
10.26	Facility Agreement, dated September 14, 2012, by and among the PCB Subsidiaries, the lenders, and the other parties named therein(17)
21.1	Subsidiaries of the Registrant(18)
23.1	Consent of KPMG LLP, independent registered public accounting firm(18)
23.2	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm(18)
31.1	Certification of Chief Executive Officer(18)
31.2	Certification of Chief Financial Officer(18)
32.1	Certification of Chief Executive Officer(18)
32.2	Certification of Chief Financial Officer(18)
101.INS	XBRL Instance Document(18)

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**Exhibit**

<b>Number</b>	<b>Exhibits</b>
101.SCH	XBRL Taxonomy Extension Schema Document(18)
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document(18)
101.LAB	XBRL Taxonomy Extension Label Linkbase Document(18)
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document(18)

- (1) Incorporated by reference to the Registrant's Form 8-K as filed with the Securities and Exchange Commission (the Commission) on May 14, 2008.
- (2) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on June 6, 2011.
- (3) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on March 2, 2011.
- (4) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on December 23, 2009.
- (5) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on April 13, 2010.
- (6) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on May 22, 2008.
- (7) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on March 24, 2010.
- (8) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on January 19, 2012.
- (9) Incorporated by reference to the Registrant's Form 10-K as filed with the Commission on March 16, 2007.
- (10) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on June 2, 2010.
- (11) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on November 16, 2009.
- (12) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on March 30, 2010.
- (13) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on August 5, 2010.

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- (14) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on October 22, 2010.
  - (15) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on July 27, 2011.
  - (16) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on September 19, 2011.
  - (17) Incorporated by reference to the Registrant's Form 8-K as filed with the Commission on September 19, 2012.
  - (18) Filed herewith
- \* Management contract or Compensation Plan



**Table of Contents****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.

TTM TECHNOLOGIES, INC.

By: /s/ Kenton K. Alder  
Kenton K. Alder

*Chief Executive Officer*

Date: March 1, 2013

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

Name	Title	Date
/s/ Kenton K. Alder	Chief Executive Officer	March 1, 2013
Kenton K. Alder	(Principal Executive Officer) and Director	
/s/ Thomas T. Edman	President and Director	March 1, 2013
Thomas T. Edman		
/s/ Steven W. Richards	Executive Vice President, Chief Financial Officer and Secretary (Principal Financial Officer and Principal Accounting Officer)	March 1, 2013
Steven W. Richards		
/s/ Robert E. Klatell	Chairman of the Board	March 1, 2013
Robert E. Klatell		
/s/ James K. Bass	Director	March 1, 2013
James K. Bass		
/s/ Philip G. Franklin	Director	March 1, 2013
Philip G. Franklin		
/s/ Jacques S. Gansler	Director	March 1, 2013
Jacques S. Gansler		
/s/ Ronald W. Iverson	Director	March 1, 2013

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Ronald W. Iverson		
/s/ John G. Mayer	Director	March 1, 2013
John G. Mayer		
/s/ Tom Chung Yen Tang	Director	March 1, 2013
Tom Chung Yen Tang		
/s/ Dov S. Zakheim	Director	March 1, 2013
Dov S. Zakheim		

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**TTM TECHNOLOGIES, INC.**

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**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of TTM Technologies, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows present fairly, in all material respects, the financial position of TTM Technologies, Inc. and its subsidiaries at December 31, 2012 and December 31, 2011, and the results of their operations and their cash flows for the years ended December 31, 2012 and December 31, 2011 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these 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 Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. 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.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ PricewaterhouseCoopers LLP

Irvine, California

March 1, 2013

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**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders

TTM Technologies, Inc.:

We have audited the accompanying consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows of TTM Technologies, Inc. and subsidiaries (the Company) for the year ended December 31, 2010. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the results of operations and cash flows of the Company for the year ended December 31, 2010, in conformity with U.S. generally accepted accounting principles.

/s/ KPMG LLP

Salt Lake City, Utah

March 15, 2011

**Table of Contents****TTM TECHNOLOGIES, INC.****Consolidated Balance Sheets**

	<b>As of December 31,</b>	
	<b>2012</b>	<b>2011</b>
	<b>(In thousands)</b>	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 285,433	\$ 196,052
Available for sale securities	390	3,566
Accounts and notes receivable, net	301,557	316,568
Inventories	146,012	129,430
Prepaid expenses and other current assets	24,547	19,001
Deferred income taxes	7,673	6,917
<b>Total current assets</b>	<b>765,612</b>	<b>671,534</b>
Property, plant and equipment, net	833,678	766,800
Deferred income taxes	15,263	21,798
Goodwill	12,120	183,320
Definite-lived intangibles, net	36,984	80,508
Deposits and other non-current assets	13,305	25,109
	<b>\$ 1,676,962</b>	<b>\$ 1,749,069</b>
<b>LIABILITIES AND EQUITY</b>		
Current liabilities:		
Short-term debt, including current portion of long-term debt, net of discount	\$ 30,004	\$ 120,882
Accounts payable	186,745	149,055
Accounts payable due to related parties	34,520	36,851
Accrued salaries, wages and benefits	43,282	48,345
Equipment payable	44,289	55,099
Other accrued expenses	31,040	26,908
<b>Total current liabilities</b>	<b>369,880</b>	<b>437,140</b>
Convertible senior notes, net of discount	157,533	151,153
Long-term debt	370,008	217,365
Deferred income taxes	9,441	14,718
Other long-term liabilities	17,270	6,023
<b>Total long-term liabilities</b>	<b>554,252</b>	<b>389,259</b>
Commitments and contingencies (Note 14)		
Equity:		
Common stock, \$0.001 par value; 200,000 shares authorized, 81,937 and 81,339 shares issued and outstanding in 2012 and 2011, respectively	82	81
Additional paid-in capital	546,029	535,558
Retained earnings	45,921	228,661
Statutory surplus reserve	15,166	7,021
Accumulated other comprehensive income	46,749	37,596
<b>Total TTM Technologies, Inc. stockholders' equity</b>	<b>653,947</b>	<b>808,917</b>
Noncontrolling interest	98,883	113,753

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Total equity	752,830	922,670
	\$ 1,676,962	\$ 1,749,069

See accompanying notes to consolidated financial statements.

**Table of Contents****TTM TECHNOLOGIES, INC.****Consolidated Statements of Operations**

	Year Ended December 31,		
	2012	2011	2010
	(In thousands, except per share data)		
Net sales	\$ 1,348,668	\$ 1,428,639	\$ 1,179,671
Cost of goods sold	1,123,669	1,127,326	925,266
<b>Gross profit</b>	<b>224,999</b>	<b>301,313</b>	<b>254,405</b>
Operating expenses:			
Selling and marketing	35,957	36,891	34,345
General and administrative	98,005	92,682	79,668
Amortization of definite-lived intangibles	14,637	17,311	13,678
Impairment of goodwill and definite-lived intangibles	200,335	15,184	
Impairment of long-lived assets	18,082	48,125	766
Restructuring charges			389
<b>Total operating expenses</b>	<b>367,016</b>	<b>210,193</b>	<b>128,846</b>
Operating (loss) income	(142,017)	91,120	125,559
Other income (expense):			
Interest expense	(25,784)	(26,504)	(22,255)
Loss on extinguishment of debt	(5,527)		
Other, net	4,956	8,616	5,333
<b>Total other expense, net</b>	<b>(26,355)</b>	<b>(17,888)</b>	<b>(16,922)</b>
(Loss) Income before income taxes	(168,372)	73,232	108,637
Income tax provision	(12,728)	(26,005)	(28,738)
Net (loss) income	(181,100)	47,227	79,899
Less: Net loss (income) attributable to the noncontrolling interest	6,505	(5,359)	(8,368)
Net (loss) income attributable to TTM Technologies, Inc. stockholders	\$ (174,595)	\$ 41,868	\$ 71,531
Earnings (loss) per share attributable to TTM Technologies, Inc. stockholders:			
Basic (loss) earnings per share	\$ (2.13)	\$ 0.52	\$ 1.02
Diluted (loss) earnings per share	\$ (2.13)	\$ 0.51	\$ 1.01

See accompanying notes to consolidated financial statements.



**Table of Contents****TTM TECHNOLOGIES, INC.****Consolidated Statements of Comprehensive Income (Loss)**

	Year Ended December 31,		
	2012	2011	2010
	(In thousands)		
Net (loss) income	\$ (181,100)	\$ 47,227	\$ 79,899
Other comprehensive income, net of tax:			
Foreign currency translation adjustment, net	8,140	25,131	18,058
Net unrealized gains (losses) on cash flow hedges:			
Unrealized gain (loss) on effective cash flow hedges during the year, net	2,405	(263)	(3,121)
Less: reclassification into earnings, net of tax	842	122	
<b>Net</b>	<b>3,247</b>	<b>(141)</b>	<b>(3,121)</b>
Net unrealized gains (losses) on available for sale securities:			
Unrealized gain (loss) on available for sale securities during the year	(186)	1,208	
Less: gains realized into earnings	(912)	(121)	
<b>Net</b>	<b>(1,098)</b>	<b>1,087</b>	
Other comprehensive income, net of tax	10,289	26,077	14,937
<b>Comprehensive (loss) income, net of tax</b>	<b>(170,811)</b>	<b>73,304</b>	<b>94,836</b>
Less: comprehensive (loss) income attributable to the noncontrolling interest	(5,369)	9,150	11,125
<b>Comprehensive (loss) income attributable to TTM Technologies, Inc. stockholders</b>	<b>\$ (165,442)</b>	<b>\$ 64,154</b>	<b>\$ 83,711</b>

See accompanying notes to consolidated financial statements.



**Table of Contents****TTM TECHNOLOGIES, INC.****Consolidated Statements of Cash Flows**

	<b>For the Year Ended December 31,</b>		
	<b>2012</b>	<b>2011</b>	<b>2010</b>
	<b>(In thousands)</b>		
<b>Cash flows from operating activities:</b>			
Net (loss) income	\$ (181,100)	\$ 47,227	\$ 79,899
<b>Adjustments to reconcile net income to net cash provided by operating activities:</b>			
Depreciation of property, plant and equipment	84,286	69,698	48,747
Amortization of definite-lived intangible assets	14,684	17,427	13,795
Amortization of convertible notes discount, debt discount and debt issuance costs	7,893	7,584	6,780
Non-cash interest imputed on other long-term liabilities and related party financing obligation	63	671	1,084
Income tax benefit from restricted stock units released and common stock options exercised	(622)	(1,734)	(506)
Deferred income taxes	78	5,903	16,400
Stock-based compensation	10,266	8,075	6,913
Impairment of goodwill and definite-lived intangibles	200,335	15,184	
Impairment of long-lived assets	18,082	48,125	766
Loss on extinguishment of debt	5,527		
Realized gain on early payment of related party financing obligation		(1,659)	
Realized gain on sale of securities	(816)	(147)	
Net loss on sale of property, plant and equipment and other	1,344	703	437
Net unrealized loss (gain) on derivative assets and liabilities	352	1,074	(801)
Unrealized foreign currency exchange loss	44	1,787	500
<b>Changes in operating assets and liabilities, net of acquisition:</b>			
Accounts and notes receivable, net	(20,927)	(27,993)	(79,920)
Inventories	(16,581)	6,273	(8,830)
Prepaid expenses and other current assets	(5,679)	4,538	(10,394)
Accounts payable	65,923	(17,843)	23,400
Accrued salaries, wages and benefits and other accrued expenses	(587)	(5,548)	27,549
<b>Net cash provided by operating activities</b>	<b>182,565</b>	<b>179,345</b>	<b>125,819</b>
<b>Cash flows from investing activities:</b>			
Purchase of property, plant and equipment and equipment deposits	(139,550)	(142,750)	(68,489)
Proceeds from sale of property, plant and equipment and assets held for sale	208	1,745	8,623
Acquisition of PCB Subsidiaries, net of cash acquired			(28,529)
Restricted cash used for acquisition			120,000
Proceeds from the sale of securities / redemption of short-term investments	2,898	388	1,351
<b>Net cash (used in) provided by investing activities</b>	<b>(136,444)</b>	<b>(140,617)</b>	<b>32,956</b>
<b>Cash flows from financing activities:</b>			
Proceeds from long-term borrowings	473,823	24,438	387,980
Repayment of long-term debt borrowings	(442,180)	(67,122)	
Repayment of assumed long-term debt in acquisition			(387,980)
Net borrowings (repayment) of revolving loan	30,000		(37,987)
Payment of debt issuance costs	(7,787)		
Settlement of related party financing obligation		(20,528)	
Dividends paid to noncontrolling interest shareholder	(9,501)		
Proceeds from exercise of stock options	91	6,263	2,113
Excess tax benefits from stock awards exercised or released	622	1,734	506
<b>Net cash provided (used in) by financing activities</b>	<b>45,068</b>	<b>(55,215)</b>	<b>(35,368)</b>
Effect of foreign currency exchange rates on cash and cash equivalents	(1,808)	(3,539)	(1,676)
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>89,381</b>	<b>(20,026)</b>	<b>121,731</b>

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Cash and cash equivalents at beginning of year	196,052	216,078	94,347
Cash and cash equivalents at end of year	\$ 285,433	\$ 196,052	\$ 216,078

Supplemental cash flow information:

Cash paid for interest	\$ 19,476	\$ 19,352	\$ 14,995
Cash paid, net for income taxes	15,520	19,209	15,569

Supplemental disclosures of noncash investing and financing activities:

During 2010, the Company issued common stock and replacement awards with a fair value of \$294,382 in connection with the PCB Subsidiaries acquisition, (as defined in the accompanying notes.) See Note 3.

At December 31, 2012, 2011 and 2010 accrued purchases of equipment totaled \$59,402, \$56,063 and \$75,397, respectively.

During the year ended December 31, 2012, the Company utilized \$5,293 of its notes receivable to purchase property, plant and equipment.

See accompanying notes to consolidated financial statements.

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**TTM TECHNOLOGIES, INC.**

**Notes to Consolidated Financial Statements**

**(Dollars and shares in thousands, except per share data)**

**(1) Nature of Operations and Basis of Presentation**

TTM Technologies, Inc. (the Company or TTM) is a leading global provider of time-critical and technologically complex printed circuit board (PCB) products and backplane assemblies (PCBs populated with electronic components), which serve as the foundation of sophisticated electronic products. The Company provides advanced technology products and offers a one-stop manufacturing solution to customers from engineering support to prototype development through final volume production. The Company serves a diversified customer base in various markets throughout the world, including manufacturers of networking/communications infrastructure products, touch screen tablets and mobile media devices (cellular phones and smartphones). The Company also serves high-end computing, commercial aerospace/defense, and industrial/medical industries. The Company's customers include both original equipment manufacturers (OEMs) and electronic manufacturing services (EMS) providers.

In April 2010, the Company acquired from Meadville Holdings Limited (Meadville) all of the issued and outstanding capital stock of four of its subsidiaries. These four companies and their respective subsidiaries, collectively referred to as the PCB Subsidiaries, comprised Meadville's PCB manufacturing and distribution business. See Note 3.

**(2) Summary of Significant Accounting Policies**

***Use of Estimates***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Such estimates include the sales return reserve; accounts receivable; inventories; goodwill; intangible assets and other long-lived assets; self insurance reserves; derivative instruments and hedging activities; asset retirement obligations; environmental liabilities; legal contingencies; assumptions used in the calculation of stock-based compensation and income taxes; and others. These estimates and assumptions are based on management's best estimates and judgment. Management evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors, including the economic environment, which management believes to be reasonable under the circumstances. Management adjusts such estimates and assumptions when facts and circumstances dictate. Unpredictable spending by OEM and EMS companies has also increased the uncertainty inherent in such estimates and assumptions. As future events and their effects cannot be determined with precision, actual results could differ from those estimates.

***Principles of Consolidation***

The consolidated financial statements include the accounts of TTM Technologies, Inc. and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

***Foreign Currency Translation and Transactions***

The functional currency of certain of the Company's subsidiaries is either the Chinese RMB or the Hong Kong Dollar. Accordingly, assets and liabilities are translated into U.S. dollars using period-end exchange rates. Sales and expenses are translated at the average exchange rates in effect during the period. The resulting translation gains or losses are recorded as a component of accumulated other comprehensive income in the consolidated statement of stockholders' equity and the consolidated statement of comprehensive income (loss). Net gains resulting from foreign currency transactions are included in income as a component of other, net in the consolidated statements of operations and totaled \$3,581, \$5,286 and \$3,174 for the years ended December 31, 2012, 2011 and 2010, respectively.



**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)*****Cash Equivalents***

The Company considers highly liquid investments with insignificant interest rate risk and original maturities to the Company of three months or less to be cash equivalents. Cash equivalents consist primarily of interest-bearing bank accounts and money market funds.

The Company considers highly liquid investments with an effective maturity to the Company of more than three months and less than one year to be short-term investments.

***Available for Sale Securities***

Available for sale securities comprise 180 shares of a Helsinki Stock Exchange traded Finnish company. The Company recorded these securities as available for sale securities, and at December 31, 2012 such securities had a fair value of \$390. The Company has classified this investment as available for sale as it has a readily determinable fair value and is not being held for trading purposes. Unrealized holding gains and losses on available for sale securities are recorded as a component of accumulated other comprehensive income in the consolidated balance sheet.

***Accounts and Notes Receivable, Allowance for Doubtful Accounts and Factoring Arrangements******Accounts Receivable***

Accounts receivable are reflected at estimated net realizable value, do not bear interest and do not generally require collateral. The Company performs credit evaluations of its customers and adjusts credit limits based upon payment history and the customer's current creditworthiness. The Company maintains an allowance for doubtful accounts based upon a variety of factors. The Company reviews all open accounts and provides specific reserves for customer collection issues when it believes the loss is probable, considering such factors as the length of time receivables are past due, the financial condition of the customer, and historical experience. The Company also records a reserve for all customers, excluding those that have been specifically reserved for, based upon evaluation of historical losses.

Additionally, in the normal course of business, the Company's foreign subsidiaries utilize accounts receivable factoring arrangements. Under these arrangements, the Company's foreign subsidiaries may sell certain of their accounts receivable to financial institutions, which are accounted for as a sale, at a discount ranging from 1% to 2% of the accounts receivable. In all arrangements there is no recourse against the Company for its customers' failure to pay. The Company sold \$3,941, \$68,802 and \$49,372 of accounts receivable for the years ended December 31, 2012, 2011 and 2010, respectively.

***Allowance for Doubtful Accounts***

The following summarizes the activity in the Company's allowance for doubtful accounts for the years ended December 31, 2012, 2011 and 2010:

	<b>For the Year Ended December 31,</b>		
	<b>2012</b>	<b>2011</b>	<b>2010</b>
	<b>(In thousands)</b>		
Balance at beginning of year	\$ 1,294	\$ 1,827	\$ 1,015
Additions charged to expense	648	118	852
Deductions	(275)	(724)	(109)
Effect of foreign currency exchange rates	13	73	69
<b>Balance at end of year</b>	<b>\$ 1,680</b>	<b>\$ 1,294</b>	<b>\$ 1,827</b>





**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)***Notes Receivable*

Notes receivable represent short-term trade notes received from financial institutions on behalf of certain of the Company's customers for the sale of PCBs and are reflected at estimated net realizable value, do not bear interest and do not generally require collateral. The Company does not maintain an allowance for doubtful accounts on these trade notes as the financial institution bears the risk of loss for uncollectibility. At December 31, 2012 and 2011, the Company had \$5,902 and \$24,474 of notes receivable, respectively.

Additionally, in the normal course of business, the Company's foreign subsidiaries may sell certain of their notes receivable at an effective discount ranging from 1% to 3% of the notes receivable. The Company's foreign subsidiaries sold \$36,468, \$57,124, and \$78,416 of notes receivable for the years ended December 31, 2012, 2011 and 2010, respectively.

*Inventories*

Inventories are stated at the lower of cost (determined on a first-in, first-out and weighted average basis) or market. Assessments to value the inventory at the lower of the actual cost to purchase and / or manufacture the inventory, or the current estimated market value of the inventory, are based upon assumptions about future demand and market conditions. As a result of the Company's assessments, when the market value of inventory is less than the carrying value, the inventory cost is written down to the market value and the write down is recorded as a charge to cost of goods sold.

*Property, Plant and Equipment, Net*

Property, plant and equipment are recorded at cost. Depreciation expense is computed using the straight-line method over the estimated useful lives of the assets. Assets recorded under leasehold improvements are amortized using the straight-line method over the lesser of their useful lives or the related lease term. The Company uses the following estimated useful lives:

Land use rights	50-99 years
Buildings and improvements	7-40 years
Machinery and equipment	3-12 years
Furniture and fixtures	3-7 years
Automobiles	5 years

Upon retirement or other disposition of property, plant and equipment, the cost and related accumulated depreciation are removed from the accounts. The resulting gain or loss is included in the determination of operating income in the period incurred. Depreciation and amortization expense on property, plant and equipment was \$84,286, \$69,698 and \$48,747, for the years ended December 31, 2012, 2011 and 2010, respectively.

The Company capitalizes interest on borrowings during the active construction period of major capital projects. Capitalized interest is amortized over the average useful lives of such assets, which primarily consist of buildings and machinery and equipment. The Company capitalized interest costs of \$1,774, \$1,828 and \$1,522 during the years ended December 31, 2012, 2011 and 2010, respectively, in connection with various capital projects.

Major renewals and betterments are capitalized and depreciated over their estimated useful lives while minor expenditures for maintenance and repairs are included in operating income as incurred.

*Goodwill*

Goodwill represents the excess of purchase price of an acquisition over the fair value of net assets acquired. Goodwill is not amortized but instead is tested for impairment, at a reporting unit level, annually and when



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**TTM TECHNOLOGIES, INC.**

**Notes to Consolidated Financial Statements (Continued)**

events and circumstances warrant an evaluation. The Company evaluates goodwill on an annual basis, as of the end of the fourth quarter, and whenever events and changes in circumstances indicate that there may be a potential impairment. In making this assessment, management relies on a number of factors, including operating results, business plans, economic projections, anticipated future cash flows, business trends and market conditions.

The Company has two operating segments consisting of three reporting units. See Note 5 for information regarding the impairment of goodwill for the years ended December 31, 2012 and 2011.

***Intangible Assets***

Intangible assets include customer relationships, trade name and licensing agreements, which are being amortized over their estimated useful lives using straight-line and accelerated methods. The estimated useful lives of such intangibles range from 3 years to 15 years. Amortization expense related to acquired licensing agreements is classified as a component of cost of goods sold. Also see discussion below of impairment of long-lived assets, which includes definite-lived intangible assets.

***Impairment of Long-lived Assets***

Long-lived tangible assets, including property, plant and equipment, assets held for sale, and definite-lived intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of the asset or asset groups may not be recoverable. The Company regularly evaluates whether events or circumstances have occurred that indicate possible impairment and relies on a number of factors, including operating results, business plans, economic projections, and anticipated future cash flows. The Company uses an estimate of the future undiscounted net cash flows of the related asset or asset group over the remaining life in measuring whether the assets are recoverable. Measurement of the amount of impairment, if any, is based upon the difference between the asset's carrying value and estimated fair value. Fair value is determined through various valuation techniques, including cost-based, market and income approaches as considered necessary. See Notes 5 and 6 for information regarding the impairment of definite-lived intangibles and long-lived assets during the years ended December 31, 2012, 2011 and 2010.

The Company classifies assets to be sold as assets held for sale when (i) Company management has approved and commits to a plan to sell the asset, (ii) the asset is available for immediate sale in its present condition and is ready for sale, (iii) an active program to locate a buyer and other actions required to sell the asset have been initiated, (iv) the sale of the asset is probable, (v) the asset is being actively marketed for sale at a price that is reasonable in relation to its current fair value, and (vi) it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn. Assets classified as held for sale are recorded at the lower of the carrying amount or fair value less the cost to sell and are a component of prepaid expenses and other current assets in the consolidated balance sheets.

***Revenue Recognition***

The Company derives its revenue primarily from the sale of PCBs using customer supplied engineering and design plans and recognizes revenue when: (i) persuasive evidence of a sales arrangement exists, (ii) the sales terms are fixed or determinable, (iii) title and risk of loss have transferred, and (iv) collectibility is reasonably assured generally when products are shipped to the customer, except in situations in which title passes upon receipt of the products by the customer. In this case, revenues are recognized upon notification that customer receipt has occurred. The Company does not have customer acceptance provisions, but it does provide its customers a limited right of return for defective PCBs. The Company accrues an estimated amount for sales returns and allowances related to defective PCBs at the time of sale based on its ability to estimate sales returns and allowances using historical information. The reserve for sales returns and allowances is included as a reduction to accounts receivable, net. Shipping and handling fees and related freight costs and supplies associated with shipping products to customers are included as a component of cost of goods sold.

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The following summarizes the activity in the Company's allowance for sales returns and allowances for the years ended December 31, 2012, 2011 and 2010:

	For the Year Ended December 31,		
	2012	2011	2010
	(In thousands)		
Balance at beginning of year	\$ 6,279	\$ 4,380	\$ 2,636
Additions charged to expense	24,798	19,910	11,663
Deductions	(21,764)	(18,045)	(9,933)
Effect of foreign currency exchange rates	7	34	14
Balance at end of year	\$ 9,320	\$ 6,279	\$ 4,380

**Stock-Based Compensation**

The Company recognizes stock-based compensation expense in its consolidated financial statements for its incentive compensation plan awards and acquired foreign employee stock awards.

The incentive compensation plan awards include performance-based restricted stock units, restricted stock units, and stock options and the associated compensation expense is based on the grant date fair value of the awards, net of estimated forfeitures, as well as an assessment of probability of the performance-based awards vesting. Compensation expense for the incentive compensation plan awards is recognized on a straight line basis over the vesting period of the awards. The fair value of performance-based restricted stock units is estimated on the grant date using a Monte Carlo simulation model based on the underlying common stock closing price as of the date of grant, the expected term, stock price volatility, and risk-free interest rates. The fair value of restricted stock units is measured on the grant date based on the quoted closing market price of the Company's common stock. The fair value of the stock options is estimated on the grant date using the Black-Scholes option pricing model based on the underlying common stock closing price as of the date of grant, the expected term, stock price volatility, and risk-free interest rates.

In conjunction with the acquisition of foreign subsidiaries in April 2010, existing foreign employee share awards were replaced with fractional shares of TTM common stock plus cash. See Note 15. The fair value of the foreign employee share awards was estimated based on the closing price of TTM's common stock on the effective date of the acquisition plus cash equivalent in an amount to have been received by the foreign subsidiaries' shareholders as a dividend after the close of the acquisition, net of forfeitures. Compensation expense for the foreign employee share awards is recognized on a straight line basis over the vesting period of the awards.

**Income Taxes**

Income taxes are accounted for under the asset and liability method. Deferred income tax assets or liabilities 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 and operating loss and tax credit carryforwards. Deferred income 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 settled or realized. The effect on deferred income tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Deferred income tax assets are reviewed for recoverability, and the Company records a valuation allowance to reduce its deferred income tax assets when it is more likely than not that all or some portion of the deferred income tax assets will not be realized.

The Company has various foreign subsidiaries formed or acquired to conduct or support its business outside the United States. The Company does not provide for U.S. income taxes on undistributed earnings for its Asia



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**TTM TECHNOLOGIES, INC.**

**Notes to Consolidated Financial Statements (Continued)**

Pacific operating segment as the foreign earnings will be permanently reinvested in such foreign jurisdictions. For certain subsidiaries within the Asia Pacific operating segment, permanent investment of undistributed earnings has not been asserted and therefore, a deferred tax liability has been recorded on the undistributed earnings of these subsidiaries. For the Company's backplane assembly plant in Shanghai, China, which is managed in conjunction with the Company's U.S. operations, earnings are expected to be repatriated and therefore the Company has provided U.S. income taxes on undistributed earnings.

The Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50 percent likely to be realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. Estimated interest and penalties related to underpayment of income taxes are recorded as a component of income tax provision in the consolidated statement of operations.

***Self Insurance***

The Company is primarily self insured in North America for group health insurance and workers compensation benefits provided to U.S. employees. The Company also purchases stop loss insurance to protect against annual claims per individual and at an aggregate level. The individual insured stop loss on the Company's self insurance for each program is \$250 per individual. Self insurance liabilities are estimated for claims incurred but not paid based on judgment, using our historical claim data and information and analysis provided by actuarial and claim advisors, our insurance carrier and brokers. The Company has accrued \$3,909 and \$4,562 for self insurance liabilities at December 31, 2012 and 2011, respectively, and these amounts are reflected within accrued salaries, wages and benefits in the consolidated balance sheets.

Group health insurance and workers compensation benefits for the Company's Asia Pacific operating segment are fully insured.

***Derivative Instruments and Hedging Activities***

Derivative financial instruments are recognized as either assets or liabilities in the consolidated balance sheets at their respective fair values. As a matter of policy, the Company uses derivatives for risk management purposes. The Company does not use derivatives for speculative purposes.

Derivatives are typically entered into as hedges for changes in interest rates, currency exchange rates, and other risks. When the Company determines to designate a derivative instrument as a cash flow hedge, the Company formally documents the hedging relationship and its risk management objective and strategy for undertaking the hedge, the hedging instrument, the hedged item, the nature of the risk being hedged, how the hedging instrument's effectiveness in offsetting the hedged risk will be assessed, and a description of the method of measuring ineffectiveness. The Company also formally assesses, both at the hedge's inception and on an ongoing basis, whether the derivative that is used in hedging transactions is highly effective in offsetting changes in cash flows of hedged items.

Fair value of the derivative instruments is determined using pricing models developed based on the underlying swap interest rate, foreign currency exchange rates, and other observable market data as appropriate. The values are also adjusted to reflect nonperformance risk of the counterparty and the Company, as necessary. For derivatives that are designated as a cash flow hedge, changes in the fair value of the derivative are recognized in accumulated other comprehensive income, to the extent the derivative is effective at offsetting the changes in cash flow being hedged until the hedged item affects earnings. To the extent there is any hedge ineffectiveness, changes in fair value relating to the ineffective portion are immediately recognized in earnings. Changes in the fair value of derivatives that are not designated as hedges are recorded in earnings each period.

***Value Added and Sales Tax Collected from Customers***

As a part of the Company's normal course of business, value added and sales taxes are collected from customers. Such taxes collected are remitted, in a timely manner, to the appropriate governmental tax authority on behalf of the customer. The Company's policy is to present revenue and costs, net of value added and sales taxes.



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**TTM TECHNOLOGIES, INC.**

**Notes to Consolidated Financial Statements (Continued)**

***Fair Value Measures***

The Company measures at fair value certain of its financial and non-financial assets and liabilities by using a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, essentially an exit price, based on the highest and best use of the asset or liability. The levels of the fair value hierarchy are:

Level 1 Quoted market prices in active markets for identical assets or liabilities;

Level 2 Significant other observable inputs (e.g. quoted prices for similar items in active markets, quoted prices for identical or similar items in markets that are not active, inputs other than quoted prices that are observable, such as interest rate and yield curves, and market-corroborated inputs); and

Level 3 Unobservable inputs in which there is little or no market data, which require the reporting unit to develop its own assumptions.

***Asset Retirement Obligations***

The Company accounts for asset retirement obligations by recognizing a liability for the fair value of legally required asset retirement obligations associated with long-lived assets in the period in which the retirement obligations are incurred and the liability can be reasonably estimated. The Company capitalizes the associated asset retirement costs as part of the carrying amount of the long-lived asset. The liability is initially measured at fair value and subsequently is adjusted for accretion expense and changes in the amount or timing of the estimated cash flows. Accretion expense is recorded as a component of general and administrative expense in the consolidated statement of operations.

***Environmental Accrual***

Accruals for estimated costs for environmental obligations generally are recognized no later than the date when the Company identifies what cleanup measures, if any, are likely to be required to address the environmental conditions. Included in such obligations are the estimated direct costs to investigate and address the conditions, and the associated engineering, legal and consulting costs. In making these estimates, the Company considers information that is currently available, existing technology, enacted laws and regulations, and its estimates of the timing of the required remedial actions. Such accruals are initially measured on a discounted basis and are adjusted as further information becomes available or circumstances change and are accreted to the payable amount over time.

***Earnings Per Share***

Basic earnings per common share excludes dilution and is computed by dividing net income attributable to TTM Technologies, Inc. stockholders by the weighted average number of common shares outstanding during the period. Diluted earnings per common share reflect the potential dilution that could occur if stock options or other common stock equivalents were exercised or converted into common stock. The dilutive effect of stock options or other common stock equivalents is calculated using the treasury stock method.

***Comprehensive Income (Loss)***

Comprehensive income (loss) includes changes to equity accounts that were not the result of transactions with stockholders. Comprehensive income (loss) is comprised of net income (loss), changes in the cumulative foreign currency translation adjustments and realized and unrealized gains or losses on hedged derivative instruments and available for sale securities.



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**TTM TECHNOLOGIES, INC.**

**Notes to Consolidated Financial Statements (Continued)**

***Loss Contingencies***

The Company establishes an accrual for an estimated loss contingency when it is both probable that an asset has been impaired or that a liability has been incurred and the amount of the loss can be reasonably estimated. Any legal fees expected to be incurred in connection with a contingency are expensed as incurred.

***Recently Adopted and Issued Accounting Standards***

In February 2013, the Financial Accounting Standards Board (FASB) issued an update that would require that an entity provide information about the amounts reclassified out of accumulated other comprehensive income by component. In addition, an entity is required to present, either on the face of the statement where net income is presented or in the notes, significant amounts reclassified out of accumulated other comprehensive income by the respective line items of net income, but only if the amount reclassified is required under U.S. GAAP to be reclassified to net income in its entirety in the same reporting period. For other amounts that are not required under U.S. GAAP to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures required under U.S. GAAP that provide additional detail about those amounts.

This update does not change the current requirements for reporting net income or other comprehensive income in financial statements and is effective for interim and annual periods beginning after December 15, 2012, with early adoption permitted. The Company adopted the amendment on January 1, 2013, and its adoption is not expected to have a material impact on our financial statements.

In July 2012, the FASB issued an update to an accounting standard related to testing indefinite-lived intangible assets for impairment, whereby an entity has the option first to assess qualitative factors to determine whether the existence of events and circumstances indicates that it is more likely than not that the indefinite-lived intangible asset is impaired. The amendments are effective for interim and annual impairment tests performed for fiscal years beginning after September 15, 2012, and early adoption is permitted. We adopted the amendments in conjunction with the Company's annual impairment test performed for fiscal year 2012. The Company's adoption did not have a material impact on our financial statements.

In September 2011, the FASB issued an update to an accounting standard related to testing goodwill for impairment whereby an entity has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. The amendments are effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011, and early adoption is permitted. The Company adopted the amendments on January 1, 2012, and adoption did not have a material impact.

In June 2011, the FASB issued an update to an accounting standard related to comprehensive income, whereby an entity has the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The amendments are effective for fiscal years beginning after December 15, 2011, and early adoption is permitted. The Company adopted the amendments on January 1, 2012, and adoption did not have a material impact.

**(3) Acquisition of PCB Subsidiaries**

In April 2010, the Company acquired from Meadville all of the issued and outstanding capital stock of four of its subsidiaries. These four companies, through their respective subsidiaries, engage in the business of manufacturing and distributing printed circuit boards, including circuit design, quick turnaround services, and drilling and routing services. Subsequent to the acquisition, these four companies and their subsidiaries, collectively the PCB Subsidiaries, are subsidiaries of the Company and represent the Asia Pacific operating segment of the Company.



**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)**

The Company purchased the PCB Subsidiaries for a total consideration of \$408,416, consisting of \$114,034 in cash and 36,334 shares of TTM common stock valued at \$9.06 per share, the closing price of the Company's common stock on the date of acquisition. After taking into account the 36,334 shares of TTM common stock issued in the acquisition and based on the number of shares outstanding at the date of acquisition, approximately 45% of TTM common stock outstanding was held by Meadville, its shareholders, or their transferees.

Bank fees and legal and accounting costs associated with the acquisition of the PCB Subsidiaries of \$9,170 for the year ended December 31, 2010 were expensed and recorded as general and administrative expense in the consolidated statement of operations in accordance with ASC Topic 805, *Business Combinations*. There were no bank fees or legal and accounting costs associated with the acquisition of the PCB Subsidiaries subsequent to December 31, 2010.

For the year ended December 31, 2010, net sales of \$597,842 and net income of \$58,586 from the PCB Subsidiaries' operations were included in the consolidated statement of operations. Unaudited pro forma operating results for the Company, assuming the acquisition of the PCB Subsidiaries occurred on January 1, 2010 is as follows:

	<b>For the Year Ended December 31, 2010 (In thousands, except per share data)</b>
Net sales	\$ 1,362,515
Net income	\$ 78,072
Basic earnings per share	\$ 0.98
Dilutive earnings per share	\$ 0.97

The pro forma information is not necessarily indicative of the actual results that would have been achieved had the PCB Subsidiaries acquisition occurred as of January 1, 2010, or the results that may be achieved in future periods.

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)****(4) Composition of Certain Consolidated Financial Statement Captions**

	December 31,	
	2012	2011
	(In thousands)	
<b>Inventories:</b>		
Raw materials	\$ 46,893	\$ 44,340
Work-in-process	45,822	46,945
Finished goods	53,297	38,145
	\$ 146,012	\$ 129,430
<b>Property, plant and equipment, net:</b>		
Land and land use rights	\$ 37,904	\$ 37,549
Buildings and improvements	236,925	217,628
Machinery and equipment	765,776	627,361
Construction-in-progress	62,198	78,068
Furniture and fixtures and other	11,619	10,493
	1,114,422	971,099
Less: Accumulated depreciation	(280,744)	(204,299)
	\$ 833,678	\$ 766,800
<b>Other accrued expenses:</b>		
Interest	\$ 1,063	\$ 1,019
Income taxes payable	3,910	4,037
Other	26,067	21,852
	\$ 31,040	\$ 26,908

The Company recorded impairment charges in the amount of \$18,082 and \$48,125 to reduce the carrying values of certain long-lived assets in the Asia Pacific operating segment for the years ended December 31, 2012 and 2011, respectively, and an impairment charge of \$766 for the year ended December 31, 2010 related to an asset held for sale in the North America operating segment. See Note 6.

**(5) Goodwill and Definite-lived Intangibles**

During the year ended December 31, 2012, the Company recorded a charge for the impairment of goodwill and definite-lived intangibles in the amount of \$200,335 related to the Asia Pacific reporting unit, which is also the Asia Pacific operating segment, consisting of a goodwill charge of \$171,400 and a definite-lived intangibles impairment charge of \$28,935. The goodwill and definite-lived intangibles impairment charge was incurred when the operating segment's carrying value exceeded its fair value. The Company performed its evaluation of goodwill and definite-lived intangibles when it believed there were impairment triggering events and circumstances which warranted an evaluation. These circumstances included continued decreases in operating profit due to softer revenues and shifts in product mix when compared with projected results. The decline in revenue was primarily due to global macroeconomic weakness and lower telecommunications infrastructure spending. Profit margins and cash flow also decreased due to higher labor costs driven by both PRC government mandated wage increases and additional compensation offered to the Company's labor force as a result of a reduction of overtime hours that was implemented to meet standards required by some of the Company's global customers. These factors led to weaker performance than the Company expected for the year ended



**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)**

December 31, 2012. This operating performance also has caused the Company's market capitalization to decline significantly due to a reduction in the trading price of the Company's common stock.

**Goodwill**

As of December 31, 2012 and 2011 goodwill by operating segment was as follows:

	<b>Asia Pacific</b>	<b>North America (In thousands)</b>	<b>Total</b>
<b>Balance as of December 31, 2010</b>			
Goodwill	\$ 183,176	\$ 131,650	\$ 314,826
Accumulated impairment losses		(117,018)	(117,018)
	183,176	14,632	197,808
<b>Impairment losses during the year</b>			
Foreign currency translation adjustment during the year	144	636	780
<b>Balance as of December 31, 2011</b>			
Goodwill	\$ 183,320	\$ 132,286	\$ 315,606
Accumulated impairment losses		(132,286)	(132,286)
	\$ 183,320	\$	\$ 183,320
<b>Balance as of December 31, 2011</b>			
Goodwill	\$ 183,320	\$ 132,286	\$ 315,606
Accumulated impairment losses		(132,286)	(132,286)
	183,320		183,320
<b>Impairment losses during the year</b>			
Foreign currency translation adjustment during the year	(171,400)		(171,400)
	200		200
<b>Balance as of December 31, 2012</b>			
Goodwill	\$ 183,520	\$ 132,286	\$ 315,806
Accumulated impairment losses	(171,400)	(132,286)	(303,686)
	\$ 12,120	\$	\$ 12,120

The December 31, 2012 and 2011 goodwill balances include foreign currency translation adjustments related to foreign subsidiaries which operate in currencies other than the U.S. Dollar.

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As mentioned above, the Company performed an interim evaluation of goodwill in the third quarter of 2012 as the Company believed there were impairment triggering events and circumstances which warranted an evaluation. Given the triggering events and circumstances, the Company performed step one of the impairment test for goodwill and determined that the fair value of the Asia Pacific operating segment, which was based on a combination of discounted cash flow analysis and market approach, was lower than the carrying value.

The failure of step one of the goodwill impairment test triggered a step two impairment analysis. As a result of that analysis, an impairment charge of \$171,400 for goodwill was recognized during the third quarter of 2012.

During the fourth quarter of 2012, the Company performed the required annual goodwill impairment analysis of its remaining goodwill at the Asia Pacific reporting unit. This analysis, which was based on a combination of the income approach utilizing discounted cash flow analysis and the market approach, concluded

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)**

that Asia Pacific reporting unit's goodwill was not further impaired. The excess of fair value over carrying value of the Asia Pacific reporting unit's equity as of December 31, 2012, the annual testing date, was approximately 5.3% of carrying value.

The key variables that drive the cash flow of the reporting unit are estimated revenue growth rates, levels of profitability, the terminal value growth rate assumption, and the weighted average cost of capital (WACC) rate applied. These assumptions are subject to uncertainty, including the ability to increase revenue and improve profitability levels. For the remaining \$12,120 of Asia Pacific reporting unit goodwill, a decline in future performance and cash flow or a small change in other key assumptions, including increases to its WACC, may result in the recognition of a goodwill impairment charge. For example, keeping all other variables constant, a 64 basis point increase in the WACC applied would require that the Company perform the second step of the goodwill impairment test. In addition, keeping all other variables constant, a more than 100 basis point decrease in terminal value growth rates would require that the Company perform the second step of the goodwill impairment test.

The Company will continue to evaluate its goodwill on an annual basis during its fourth fiscal quarter and whenever events or changes in circumstances such as significant adverse changes in business climate or operating results, changes in management strategy or further significant declines in the trading price of the Company's common stock indicate that there may be a potential impairment.

For the year ended December 31, 2011, the Company completed its annual goodwill impairment analysis of its reporting units and determined that an impairment of its Shanghai backplane assembly reporting unit which was part of the 2006 acquisition of Tyco's PCB business and is included in the North America operating segment had occurred. Based on the Company's analysis, it recorded an impairment charge in the amount of \$15,184 for the full amount of goodwill in the Shanghai backplane assembly reporting unit. In conjunction with the assessment, the Company considered factors such as a weakening demand for this facility's products, price pressure from a key telecommunications infrastructure customer and reduced expectations for future cash flows as indicators for potential goodwill impairment.

In performing the impairment test for the year ended December 31, 2011, the fair value of the Company's reporting units were determined using a combination of the income approach and the market approach as considered necessary. Under the income approach, the fair value of each reporting unit is calculated based on the present value of estimated future net cash flows. Under the market approach, fair value is estimated based on market multiples of earnings or similar measures for comparable companies and market transactions, when available.

There was no impairment of goodwill for the year ended December 31, 2010.

***Definite-lived Intangibles***

As of December 31, 2012 and 2011, the components of definite-lived intangibles were as follows:

	Gross Amount	Accumulated Amortization	Accumulated Impairment (In thousands)	Foreign Currency Translation Adjustment	Net Carrying Amount	Weighted Average Amortization Period (years)
<b>December 31, 2012:</b>						
Strategic customer relationships	\$ 120,427	\$ (60,322)	\$ (28,935)	\$ 415	\$ 31,585	9.2
Trade name	10,302	(4,915)		12	5,399	6.0
Licensing agreements	350	(350)				3.0
	\$ 131,079	\$ (65,587)	\$ (28,935)	\$ 427	\$ 36,984	



**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)**

	<b>Gross Amount</b>	<b>Accumulated Amortization</b>	<b>Accumulated Impairment (In thousands)</b>	<b>Foreign Currency Translation Adjustment</b>	<b>Net Carrying Amount</b>	<b>Weighted Average Amortization Period (years)</b>
<b>December 31, 2011:</b>						
Strategic customer relationships	\$ 120,427	\$ (47,450)	\$	\$ 291	\$ 73,268	9.2
Trade name	10,302	(3,106)		(4)	7,192	6.0
Licensing agreements	350	(302)			48	3.0
	\$ 131,079	\$ (50,858)	\$	\$ 287	\$ 80,508	

The December 31, 2012 and 2011 definite-lived intangible balances include foreign currency translation adjustments related to foreign subsidiaries which operate in currencies other than the U.S. Dollar.

As mentioned above and in conjunction with interim evaluation of goodwill in the third quarter of 2012, the Company also performed an evaluation of definite-lived intangibles as the Company believed there were impairment triggering events and circumstances which warranted an evaluation. Based on the undiscounted cash flows for the Asia Pacific operating segment, the Company determined that the carrying amounts were not recoverable. In performing the impairment test for definite-lived intangibles, the Company recorded a charge in the amount of \$28,935 for the year ended December 31, 2012 to reduce the carrying value of strategic customer relationships in the Asia Pacific operating segment to fair value, which was determined using the discounted cash flow method.

Definite-lived intangibles are generally amortized using the straight line method of amortization over the useful life, with the exception of the strategic customer relationship intangibles, which are amortized using an accelerated method of amortization based on estimated cash flows. Amortization expense was \$14,684, \$17,427 and \$13,795 for the years ended December 31, 2012, 2011 and 2010, respectively. Amortization expense related to acquired licensing agreements is classified as cost of goods sold.

Estimated aggregate amortization for definite-lived intangible assets for the next five years is as follows:

	<b>(In thousands)</b>
2013	\$ 9,317
2014	8,372
2015	7,483
2016	4,124
2017	3,901
	\$ 33,197

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)****(6) Impairment of Long-lived Assets**

Impairment of long-lived assets was as follows for the years ended December 31, 2012, 2011 and 2010:

	<b>For the Year Ended December 31,</b>		
	<b>2012</b>	<b>2011</b>	<b>2010</b>
	<b>(In thousands)</b>		
<b>Asia Pacific</b>			
Real estate assets	\$ 18,082	\$	\$
Manufacturing equipment held for use		39,850	
Manufacturing equipment technologically obsolete		8,275	
<b>North America</b>			
Asset held for sale			766
	<b>\$ 18,082</b>	<b>\$ 48,125</b>	<b>\$ 766</b>

During the year ended December 31, 2012, in conjunction with the evaluation of goodwill and definite-lived intangibles described in Note 5, the Company believed there were impairment triggering events and circumstances which warranted an evaluation of the recoverability of other long-lived assets. These circumstances included continued decreases in operating profitability due to softer revenues and shifts in product mix when compared with projected results. The decline in revenue was primarily due to global macroeconomic weakness and lower telecommunications infrastructure spending. Profit margins and cash flow also decreased due to higher labor costs driven by both PRC government mandated wage increases and additional compensation offered to the Company's labor force as a result of a reduction of overtime hours that was implemented to meet standards required by some of the Company's global customers. These factors led to weaker performance in the Asia Pacific operating segment than the Company expected for the year ended December 31, 2012. Specifically, two real estate assets in the Asia Pacific operating segment were evaluated for impairment due to current and expected underutilization and limited market demand. Accordingly, the Company recorded an impairment charge in the Asia Pacific operating segment for the two manufacturing buildings in the amount of \$18,082 to reduce the carrying value to its fair value. The fair value of the manufacturing buildings was determined using a cost-based approach with adjustment for functional and external obsolescence. The cost-based approach was used as the two buildings did not generate cash flows, and market comparables were not available. After the impairment charge, the Company believes the manufacturing buildings are reflected at fair value.

During the year ended December 31, 2011, the Company recorded an impairment charge in the amount of \$48,125 to reduce the carrying value of certain long-lived assets in the Asia Pacific operating segment. The impairment charge was comprised of \$39,850 related to manufacturing equipment held for use at a plant acquired by Meadville in 2007. The Company had previously reduced the carrying value of certain of these assets in 2010 during its purchase price allocation related to the acquisition of the PCB Subsidiaries. Weaker than expected operating performance at this manufacturing plant in the first six months of 2011 resulting from a decrease in the profitability of its products as well as, a reduction in expected future demand for its products resulted in a triggering event during the second quarter of 2011. Based on the undiscounted cash flows for this plant, an impairment of the manufacturing assets was indicated. The Company's asset grouping for the impairment test was the manufacturing plant because the manufacturing equipment at this plant is specific to the products produced with separately identifiable cash flows. In addition, the manufacturing equipment at this plant cannot be used at the Company's other manufacturing sites. The fair value of these manufacturing assets was determined using a discounted cash flow model over their remaining useful life with the impairment being the difference between the carrying value and the fair value of the asset group. The impairment charge is also comprised of \$8,275 related to manufacturing equipment that, due to the change in market conditions noted above, has become or is expected to become technologically obsolete. The fair value of these assets was determined using third party

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quotes or other estimates of salvage value, and the assets carrying value was written down to salvage value. The carrying value of the assets held for sale or disposal as of December 31, 2011 was approximately \$1,003, which is included in machinery and equipment in property, plant and equipment, net in the accompanying consolidated condensed balance sheet.

For the year ended December 31, 2010 the Company reduced the carrying value of an asset held for sale to its estimated fair value less costs to sell, resulting in an impairment of \$766 due to a depressed real estate market.

**(7) Long-term Debt and Letters of Credit**

The following table summarizes the long-term debt of the Company as of December 31, 2012 and 2011.

	Average Effective Interest Rate as of December 31, 2012	December 31, 2012	Average Effective Interest Rate as of December 31, 2011	December 31, 2011
			(In thousands)	
Term loan due September 2016	2.59%	\$ 370,000		\$
Term loan due November 2013			2.30%	297,500
Revolving loan due March 2016	2.59%	30,000		
Bank loans, due various dates through May 2014			4.72%	40,810
Other	6.00%	12	6.00%	17
		400,012		338,327
Less: Unamortized discount				(80)
		400,012		338,247
Less: current maturities		(30,004)		(120,882)
Long-term debt, less current maturities		\$ 370,008		\$ 217,365

The maturities of long-term debt through 2016 are as follows:

	(In thousands)
2013	\$ 30,004
2014	96,204
2015	96,204
2016	177,600
	\$ 400,012

On September 14, 2012, the Company became a party to a new facility agreement (New Credit Agreement) with a syndicate of eight banks led by The Hongkong and Shanghai Banking Corporation Limited as Facility Agent. The Company entered into the New Credit Agreement in order

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to refinance and pay in full the outstanding loans borrowed under the then existing November 16, 2009 credit agreement, which was also entered into with a syndicate of banks led by The Hongkong and Shanghai Banking Corporation Limited as Facility Agent. Under the provisions of ASC 470-50, *Debt-Modifications and Extinguishment*, the Company evaluated and concluded that, given the substantial modification in terms of the New Credit Agreement, consisting of a 10% or more change in the present value of the cash flows, increased borrowing capacity and significant changes in other terms, the refinancing would be accounted for as an extinguishment of debt.

As of December 31, 2012, the November 16, 2009 credit agreement had been terminated and all outstanding loans borrowed under this agreement were paid in full. Additionally, the Company recognized \$5,527 as a loss

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)**

on the extinguishment of debt resulting from certain remaining unamortized debt issuance costs associated with the terminated November 16, 2009 credit agreement and certain additional lender fees paid in connection with the New Credit Agreement.

The New Credit Agreement consists of a \$370,000 senior secured term loan (Term Loan), a \$90,000 senior secured revolving loan (Revolving Loan), and a secured \$80,000 letters of credit facility (Letters of Credit Facility). The Term Loan and Letters of Credit Facility will mature on September 14, 2016. The Revolving Loan will mature on March 14, 2016. The New Credit Agreement is secured by substantially all of the assets of the Company's Asia Pacific operating segment and is senior to all other Company debt, including the Convertible Senior Notes. See Note 8. The Company has fully and unconditionally guaranteed the full and punctual payment of all obligations of its Asia Pacific operating segment under the New Credit Agreement.

Borrowings under the New Credit Agreement bear interest at a floating rate of LIBOR (term election by the Company) plus an applicable interest margin. Borrowings under the Term Loan and the Revolving Loan bear interest at a rate of LIBOR plus 2.38%. There is no provision, other than an event of default, for these interest margins to increase. At December 31, 2012, the weighted average interest rate on the outstanding borrowings under the New Credit Agreement was 2.59%.

The Company is required to make scheduled payments of the outstanding Term Loan balance beginning in 2014, while the Revolving Loan is due on March 14, 2016. Any other outstanding balances under the New Credit Agreement are due at the maturity date of September 14, 2016. Borrowings under the New Credit Agreement are subject to certain financial and operating covenants that include, among other provisions, limitations on dividends or other distributions, maintaining maximum total leverage ratios and minimum net worth, current assets, and interest coverage ratios at both the Company and at the Asia Pacific operating segment level. In addition, the Company's New Credit Agreement includes a covenant that the Principal Shareholders (as defined in the Shareholders Agreement dated April 9, 2010 as amended on September 14, 2012) will not reduce their shareholding below 15 percent of TTM's issued shares. At December 31, 2012, the Company is in compliance with the covenants.

At December 31, 2012, the remaining unamortized debt issuance costs included in other non-current assets was \$2,755 and is amortized to interest expense over the term of the New Credit Agreement using the effective interest rate method. At December 31, 2012, the remaining amortization period for the unamortized debt issuance costs was 3.5 years.

The Company is also required to pay a commitment fee of 0.50% per annum on any unused portion of the loans and letters of credit facility granted under the New Credit Agreement. The Company incurred commitment fees related to unused borrowing availability of \$305, \$314 and \$260 for the years ended December 31, 2012, 2011 and 2010, respectively, related to the New Credit Agreement as well as the recently terminated November 16, 2009 credit agreement. As of December 31, 2012, all of the Term Loan, which is included as long-term debt, was outstanding; \$30,000 of the Revolver was outstanding, and \$52,523 of the Letters of Credit Facility was outstanding. Available borrowing capacity under the Revolving Loan was \$60,000 at December 31, 2012.

Bank loans were made up of bank lines of credit in mainland China and were used for working capital and capital investment for the Company's mainland China facilities. These facilities were denominated in either U.S. Dollars or Chinese Renminbi (RMB), with interest rates tied to either LIBOR or People's Bank of China rates. As of December 31, 2012, the Company had paid in full all remaining bank loans.

***Other Letters of Credit***

In addition to the letters of credit obtained pursuant to the New Credit Agreement, the Company maintains several unused letters of credit: a \$2,394 standby letter of credit expiring on December 31, 2013 associated with its insured workers compensation program and two standby letters of credit in the amount of \$1,060 in aggregate expiring on December 31, 2013 and February 28, 2014, respectively, related to the lease of two of the Company's production facilities; and one other letter of credit in the amount of \$214 related to purchases of machinery and equipment, which expired in February 2013.

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In May 2008, the Company issued 3.25% Convertible Senior Notes (Convertible Notes) due May 15, 2015, in a public offering for an aggregate principal amount of \$175,000. The Convertible Notes bear interest at a rate of 3.25% per annum. Interest is payable semiannually in arrears on May 15 and November 15 of each year. The Convertible Notes are senior unsecured obligations and rank equally to the Company's future unsecured senior indebtedness and senior in right of payment to any of the Company's future subordinated indebtedness. The liability and equity components of the Convertible Notes are separately accounted for in a manner that reflects the Company's non-convertible debt borrowing rate when interest costs are recognized.

The Company has allocated the Convertible Notes offering costs to the liability and equity components in proportion to the allocation of proceeds and accounted for them as debt issuance costs and equity issuance costs, respectively. At December 31, 2012 and 2011, the following summarizes the liability and equity components of the Convertible Notes:

	December 31, 2012	December 31, 2011
	(In thousands)	
<b>Liability components:</b>		
Convertible Notes	\$ 175,000	\$ 175,000
Less: Convertible Notes unamortized discount	(17,467)	(23,847)
Convertible Notes, net of discount	\$ 157,533	\$ 151,153
<b>Equity components:</b>		
Additional paid-in capital:		
Embedded conversion option - Convertible Notes	\$ 43,000	\$ 43,000
Embedded conversion option - Convertible Notes issuance costs	(1,413)	(1,413)
	\$ 41,587	\$ 41,587

At December 31, 2012 and 2011, remaining unamortized debt issuance costs included in other non-current assets were \$1,762 and \$2,406, respectively. The debt issuance costs and debt discount are being amortized to interest expense over the term of the Convertible Notes using the effective interest rate method. At December 31, 2012, the remaining amortization period for the unamortized Convertible Note discount and debt issuance costs was 2.4 years.

The components of interest expense resulting from the Convertible Notes for the years ended December 31, 2012, 2011 and 2010 are as follows:

	For the Year Ended December 31,		
	2012	2011	2010
	(In thousands)		
Contractual coupon interest	\$ 5,688	\$ 5,688	\$ 5,688
Amortization of Convertible Notes debt discount	6,380	5,870	5,400
Amortization of debt issuance costs	644	592	545
	\$ 12,712	\$ 12,150	\$ 11,633

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For the years ended December 31, 2012, 2011 and 2010, the amortization of the Convertible Notes debt discount and debt issuance costs is based on an effective interest rate of 8.37%.

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**TTM TECHNOLOGIES, INC.**

**Notes to Consolidated Financial Statements (Continued)**

***Conversion***

At any time prior to November 15, 2014, holders may convert their Convertible Notes into cash and, if applicable, into shares of the Company's common stock based on a conversion rate of 62.6449 shares of the Company's common stock per \$1 principal amount of Convertible Notes, subject to adjustment, under the following circumstances: (1) during any calendar quarter beginning after June 30, 2008 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days during the 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the applicable conversion price on each applicable trading day of such preceding calendar quarter; (2) during the five business day period after any 10 consecutive trading day period in which the trading price per note for each day of that 10 consecutive trading day period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on such day; or (3) upon the occurrence of specified corporate transactions described in the prospectus supplement. As of December 31, 2012, none of the conversion criteria had been met.

On or after November 15, 2014 until the close of business on the third scheduled trading day preceding the maturity date, holders may convert their notes at any time, regardless of the foregoing circumstances. Upon conversion, for each \$1 principal amount of notes, the Company will pay cash for the lesser of the conversion value or \$1 and shares of our common stock, if any, based on a daily conversion value calculated on a proportionate basis for each day of the 60 trading day observation period. Additionally, in the event of a fundamental change as defined in the prospectus supplement, or other conversion rate adjustments such as share splits or combinations, other distributions of shares, cash or other assets to stockholders, including self-tender transactions (Other Conversion Rate Adjustments), the conversion rate may be modified to adjust the number of shares per \$1 principal amount of the notes. As of December 31, 2012, none of the criteria for a fundamental change or a conversion rate adjustment had been met.

The maximum number of shares issuable upon conversion, including the effect of a fundamental change and subject to Other Conversion Rate Adjustments, would be 13,978.

***Note Repurchase***

The Company is not permitted to redeem the Convertible Notes at any time prior to maturity. In the event of a fundamental change or certain default events, as defined in the prospectus supplement, holders may require the Company to repurchase for cash all or a portion of their Convertible Notes at a price equal to 100% of the principal amount, plus any accrued and unpaid interest.

***Convertible Note Hedge and Warrant Transaction***

In connection with the issuance of the Convertible Notes, the Company entered into a convertible note hedge and warrant transaction (Call Spread Transaction), with respect to the Company's common stock. The hedge expires on May 15, 2015 and can only be executed upon the conversion of the above mentioned Convertible Notes. Additionally, the Company sold warrants to purchase 10,963 shares of its common stock at a price of \$18.15 per share. The warrants expire ratably beginning August 2015 through February 2016. The Call Spread Transaction has no effect on the terms of the Convertible Notes and reduces potential dilution by effectively increasing the conversion price of the Convertible Notes to \$18.15 per share of the Company's common stock.



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The components of income before income taxes for the years ended December 31, 2012, 2011 and 2010 are:

	<b>For the Year Ended December 31,</b>		
	<b>2012</b>	<b>2011</b>	<b>2010</b>
	<b>(In thousands)</b>		
United States	\$ 20,827	\$ 40,138	\$ 32,275
Foreign	(189,199)	33,094	76,362
<b>(Loss) income before income taxes</b>	<b>\$ (168,372)</b>	<b>\$ 73,232</b>	<b>\$ 108,637</b>

The Company's foreign earnings attributable to the Asia Pacific operating segment will be permanently reinvested in such foreign jurisdictions and, therefore, no deferred tax liabilities for U.S. income taxes on undistributed earnings are recorded. The determination of the unrecognized deferred tax liability for the temporary difference related to these undistributed earnings is not practicable. At December 31, 2012 there were no undistributed earnings. For certain subsidiaries within the Asia Pacific operating segment, permanent investment of undistributed earnings has not been asserted and therefore, a deferred tax liability has been recorded on the undistributed earnings of these subsidiaries.

Foreign earnings attributable to its backplane assembly facility in Shanghai, China, which is managed in conjunction with the U.S. operations, will be repatriated to the Company and therefore a deferred tax liability for U.S. income taxes on undistributed earnings has been recorded.

The components of income tax (provision) benefit for the years ended December 31, 2012, 2011 and 2010 are:

	<b>For the Year Ended December 31,</b>		
	<b>2012</b>	<b>2011</b>	<b>2010</b>
	<b>(In thousands)</b>		
<b>Current (provision) benefit:</b>			
Federal	\$ (2,124)	\$ (7,390)	\$ 90
State	(479)	(85)	(409)
Foreign	(10,164)	(13,326)	(12,215)
<b>Total current</b>	<b>(12,767)</b>	<b>(20,801)</b>	<b>(12,534)</b>
<b>Deferred (provision) benefit:</b>			
Federal	(3,105)	(3,615)	(12,640)
State	(515)	(269)	(2,045)
Foreign	3,659	(1,320)	(1,519)
<b>Total deferred</b>	<b>39</b>	<b>(5,204)</b>	<b>(16,204)</b>
<b>Total provision</b>	<b>\$ (12,728)</b>	<b>\$ (26,005)</b>	<b>\$ (28,738)</b>

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)**

The following is a reconciliation between the statutory federal income tax rates and the Company's effective income tax rates for the years ended December 31, 2012, 2011 and 2010, which are derived by dividing the income tax (provision) benefit by the income (loss) before income taxes:

	<b>For the Year Ended December 31,</b>		
	<b>2012</b>	<b>2011</b>	<b>2010</b>
Statutory federal income tax rate	(34.0)%	(35.0)%	(34.0)%
State income taxes, net of federal benefit and state tax credits	0.2	2.1	(1.5)
Domestic production activities deduction	(0.2)	0.7	0.1
Foreign tax differential on foreign earnings	2.7	23.7	11.7
Change in valuation allowance	4.9	(19.5)	(0.3)
Non-deductible goodwill impairment	34.6	(7.3)	
Other	(0.6)	(0.2)	(2.5)
<b>Total provision for income taxes</b>	<b>7.6%</b>	<b>(35.5)%</b>	<b>(26.5)%</b>

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities or financial reporting purposes and the amounts used for income tax purposes. The significant components of the net deferred income tax assets as of December 31, 2012 and 2011 are as follows:

	<b>December 31,</b>	
	<b>2012</b>	<b>2011</b>
<b>(In thousands)</b>		
<b>Deferred income tax assets:</b>		
Goodwill and intangible amortization	\$ 12,384	\$ 10,564
Reserves and accruals	10,053	6,902
Net operating loss carryforwards	16,783	13,245
State tax credit carryforwards, net of federal benefit	6,071	5,515
Stock-based compensation	4,237	3,055
Original issue discount on Convertible Notes	5,652	7,760
Property, plant and equipment basis differences	12,089	13,981
Other deferred income tax assets		2,344
	67,269	63,366
Less: valuation allowance	(41,790)	(33,583)
	25,479	29,783
<b>Deferred income tax liabilities:</b>		
Discount on Convertible Notes	(6,511)	(8,889)
Unrealized gain on currency translation	(2,959)	(2,877)
Repatriation of foreign earnings	(2,431)	(4,020)
Other	(83)	
<b>Net deferred income tax assets</b>	<b>\$ 13,495</b>	<b>\$ 13,997</b>
<b>Deferred income tax assets, net:</b>		
Current deferred income taxes	\$ 7,673	\$ 6,917

Noncurrent deferred income taxes	5,822	7,080
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**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)**

At December 31, 2012 the Company's foreign and multiple state net operating loss carryforwards for income tax purposes were approximately \$68,727 and \$67, respectively. If not utilized, the foreign and state net operating loss carryforwards will begin to expire in 2013 and 2018, respectively. At December 31, 2012, the Company's state tax credit carryforwards were approximately \$9,334, of which \$6,929 have no expiration date.

A valuation allowance is provided when it is more likely than not that all or some portion of the deferred income tax assets will not be realized. Certain subsidiaries within the Asia Pacific operating segment continue to have net operating loss carryforwards in various tax jurisdictions that the Company has determined are not more likely than not to be utilized. Additionally, there are certain subsidiaries within the Asia Pacific operating segment that had been profitable prior to 2012, but have begun to generate net operating loss carryforwards in 2012. Based on historical performance and future expectations of these subsidiaries, the Company does not anticipate sufficient taxable income to utilize these net operating loss carryforwards. As a result, a full valuation allowance has been recorded for these subsidiaries at December 31, 2012. For the remaining net deferred income tax asset, management has determined that it is more likely than not that the results of future operations will generate sufficient taxable income to realize the net deferred tax asset.

The following summarizes the activity in the Company's valuation allowance for the years ended December 31, 2012, 2011 and 2010:

	<b>For the Year Ended December 31,</b>		
	<b>2012</b>	<b>2011</b>	<b>2010</b>
	<b>(In thousands)</b>		
Balance at beginning of year	\$ 33,583	\$ 19,285	\$
Additions charged to expense	8,207	14,298	373
Additions for acquisition of PCB Subsidiaries			18,912
Deductions			
Balance at end of year	\$ 41,790	\$ 33,583	\$ 19,285

Certain entities within the Asia Pacific operating segment operated under the high technology enterprise (HNTE) and tax holidays in China, which were effective for the three years ended December 31, 2012. The HNTE and tax holidays decreased China taxes by \$4,694, \$7,685 and \$5,650, which increased both basic and dilutive earnings per share by \$0.06, \$0.09 and \$0.08 for the years ended December 31, 2012, 2011 and 2010, respectively. The Company will continue to file for the favorable reduced rates related to HNTE for the foreseeable future.

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

	<b>2012</b>	<b>2011</b>	<b>2010</b>
	<b>(In thousands)</b>		
Balance at January 1	\$ 887	\$ 112	\$ 112
Additions based on tax positions related to the current year	49	181	
Additions for tax positions of prior years	1,488	624	
Reductions for tax positions of prior years			
Lapse of statute		(30)	
Settlements			
Balance at December 31	\$ 2,424	\$ 887	\$ 112

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At December 31, 2012 and 2011, the Company classified \$446 and \$469, respectively, of total unrecognized tax benefits which include accrued interest and penalties of \$39 and \$32, net of tax benefits for 2012 and

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2011, respectively as a component of other long-term liabilities. Additionally, the Company reduced its income tax assets by \$1,278 and \$450 of total unrecognized tax benefits at December 31, 2012 and 2011, respectively, and recorded a current liability for \$739 of total unrecognized tax benefits at December 31, 2012. The amount of unrecognized tax benefits that would, if recognized, reduce the Company's effective income tax rate in any future periods is \$2,424. The Company expects its unrecognized tax benefits to decrease by \$739 over the next 12 months due to a pending settlement of a foreign examination.

The Company and its subsidiaries are subject to U.S. federal, state, local, and/or foreign income tax, and in the normal course of business its income tax returns are subject to examination by the relevant taxing authorities. As of December 31, 2012, the 2005-2011 tax years remain subject to examination in the U.S. federal tax, various state tax and foreign jurisdictions. As of December 31, 2012, the Company's 2009 and 2010 tax years are under examination by the Internal Revenue Service.

**(10) Financial Instruments*****Derivatives******Interest Rate Swaps***

The Company's business is exposed to interest rate risk resulting from fluctuations in interest rates on certain variable rate LIBOR debt. Increases in interest rates would increase interest expenses relating to the outstanding variable rate borrowings of certain foreign subsidiaries and increase the cost of debt. Fluctuations in interest rates can also lead to significant fluctuations in the fair value of the debt obligations.

In conjunction with the November 16, 2009 credit agreement, the Company entered into a two-year pay-fixed, receive floating (1-month LIBOR), amortizing interest rate swap arrangement with an initial notional amount of \$146,500, for the period beginning April 18, 2011 and ending on April 16, 2013. The interest rate swap applied a fixed interest rate against the first interest payments of a portion of the \$350,000 term loan related to the November 16, 2009 credit agreement, over the term of the interest rate swap.

The notional amount of the interest rate swap decreases to zero over its term, consistent with the Company's risk management objectives. Under the terms of the interest rate swap, the Company would pay a fixed rate of 2.50% and would receive floating 1-month LIBOR during the swap period. The Company had designated this interest rate swap as a cash flow hedge and, during the years ended December 31, 2012 and 2011, the interest rate swap increased interest expense by \$1,908 and \$2,220, respectively. There was no impact to interest expense for the year ending December 31, 2010 as the interest rate swap did not hedge interest rate cash flows until the period beginning April 18, 2011.

As of December 31, 2012, the Company no longer designates this interest rate swap as a cash flow hedge as the borrowings attributable to this interest rate swap were paid in full during the third quarter of 2012. The notional value underlying the swap at December 31, 2012 was \$91,800. As of December 31, 2012 and 2011, the fair value of the swap was recorded as a liability of \$620 in other accrued expenses and \$2,721 in other long-term liabilities, respectively. The change in the fair value of this interest rate swap is recorded as other, net in the consolidated statement of operations.

Additionally, the Company, through its acquisition of the Asia Pacific operating segment in 2010, assumed a long-term pay-fixed, receive floating (1-month LIBOR), amortizing interest rate swap arrangement with an initial notional amount of \$40,000, for the period beginning October 8, 2008 and ending on July 30, 2012. As of December 31, 2012, this arrangement had expired and was settled. As the borrowings attributable to this interest rate swap were paid upon acquisition, the Company did not designate this interest rate swap as a cash flow hedge. The change in the fair value of this interest rate swap is recorded as other, net in the consolidated statement of operations.

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)***Foreign Exchange Contracts*

The Company enters into foreign currency forward contracts to mitigate the impact of changes in foreign currency exchange rates and to reduce the volatility of purchases and other obligations generated in currencies other than the functional currencies. The Company's foreign subsidiaries may at times purchase forward exchange contracts to manage their foreign currency risks in relation to certain purchases of machinery denominated in foreign currencies other than the Company's foreign functional currency. The notional amount of the foreign exchange contracts at December 31, 2012 and 2011 was approximately \$28,259 and \$44,707, respectively. The Company has designated certain of these foreign exchange contracts as cash flow hedges.

The fair values of derivative instruments in the consolidated balance sheet are as follows:

	Balance Sheet Location	Asset / (Liability) Fair Value at December 31,	
		2012	2011
(In thousands)			
<b>Cash flow derivative instruments designated as hedges:</b>			
Foreign exchange contracts	Deposits and other non-current assets	\$ 103	\$
Foreign exchange contracts	Other accrued expenses	(34)	
Foreign exchange contracts	Other long-term liabilities	(84)	(1,111)
Interest rate swap	Other long-term liabilities		(2,721)
<b>Cash flow derivative instruments not designated as hedges:</b>			
Foreign exchange contracts	Prepaid expenses and other current assets	17	89
Foreign exchange contracts	Other accrued expenses	(831)	(631)
Foreign exchange contracts	Other long-term liabilities		(97)
Interest rate swap	Other accrued expenses	(620)	(314)
		\$ (1,449)	\$ (4,785)

The following tables provide information about the amounts recorded in accumulated other comprehensive income related to derivatives designated as cash flow hedges, as well as the amounts recorded in each caption in the consolidated statement of operations when derivative amounts are reclassified out of accumulated other comprehensive income for the years ended December 31, 2012, 2011 and 2010:

Financial Statement Caption	December 31, 2012			For the Year Ended December 31, 2011			December 31, 2010		
	Effective Portion Gain/(Loss) Recognized in Other Comprehensive Income	Gain/(Loss) Reclassified into Income	Ineffective Portion Gain/ (Loss) Recognized into Income	Effective Portion Gain/(Loss) Recognized in Other Comprehensive Income	Ineffective Portion Gain/(Loss) Recognized into Income	Effective Portion Gain/(Loss) Recognized in Other Comprehensive Income	Ineffective Portion Gain/(Loss) Recognized into Income	Effective Portion Gain/(Loss) Recognized in Other Comprehensive Income	Ineffective Portion Gain/(Loss) Recognized into Income
<b>Cash flow hedge:</b>									
Interest rate swap	Interest expense	\$ 1,563	\$ (1,908)	\$	\$ 700	\$ 2,220	\$	\$ (3,421)	\$

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Interest rate swap	Other, net			(1,158)					
Foreign currency forward	Other, net	1,096			(847)		(264)		
		\$ 2,659	\$ (1,908)	\$ (1,158)	\$ (147)	\$ 2,220	\$ (3,685)	\$	\$



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The following provides a summary of the activity associated with the designated cash flow hedges reflected in accumulated other comprehensive income for the years ended December 31, 2012, 2011 and 2010:

	For the year ended December 31,		
	2012	2011	2010
	(In thousands)		
Beginning balance, net of tax	\$ (3,262)	\$ (3,121)	\$
Changes in fair value loss, net of tax	2,405	(263)	(3,121)
Reclassification to earnings, net of tax	842	122	
Ending balance, net of tax	\$ (15)	\$ (3,262)	\$ (3,121)

The amounts recorded in accumulated other comprehensive income for the cash flow hedge primarily are related to the change in the fair value of the interest rate swap and were reclassified into Other, net during the year ended December 31, 2012. As the borrowings underlying the interest rate swap were fully paid off during the year ended December 31, 2012, the Company no longer designates this interest rate swap as a cash flow hedge. The Company expects that the entire amount in accumulated other comprehensive income will be reclassified into the statement of operations, net of tax, in the next 12 months.

The net gain (loss) recognized in other, net in the consolidated statement of operations on derivative instruments not designated as hedges is as follows for the years ended December 31, 2012, 2011 and 2010:

	For the year ended December 31,		
	2012	2011	2010
	(In thousands)		
<b>Derivative instruments not designated as hedges:</b>			
Interest rate swap	\$ (306)	\$ 892	\$ 489
Foreign exchange contracts	(239)	(24)	437
	\$ (545)	\$ 868	\$ 926

**Other Financial Instruments**

The carrying amount and estimated fair value of the Company's financial instruments at December 31, 2012 and 2011 were as follows:

	December 31, 2012		December 31, 2011	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
	(In thousands)			
Available for sale securities	\$ 390	\$ 390	\$ 3,566	\$ 3,566
Derivative assets, current	17	17	89	89
Derivative assets, non-current	103	103		
Derivative liabilities, current	1,485	1,485	945	945
Derivative liabilities, non-current	84	84	3,929	3,929

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Long-term debt	400,012	400,012	338,247	337,381
Convertible senior notes	157,533	176,680	151,153	182,000

The fair value of available for sale securities was determined using quoted market prices for the securities on an active exchange.

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The fair value of the derivative instruments was determined using pricing models developed based on the LIBOR swap rate, foreign currency exchange rates, and other observable market data, including quoted market prices, as appropriate. The values were adjusted to reflect nonperformance risk of the counterparty and the Company, as necessary.

The fair value of the long-term debt was estimated based on discounting the par value of the debt over its life for the difference between the debt stated interest rate and current market rates for similar debt at December 31, 2012 and 2011.

The fair value of the convertible senior notes was estimated based on quoted market prices of the securities on an active exchange, which are considered Level 1 inputs.

At December 31, 2012 and 2011, the Company's financial instruments also included cash and cash equivalents, accounts receivable, notes receivable, accounts payable and equipment payables. Due to short-term maturities, the carrying amount of these instruments approximates fair value.

**(11) Accumulated Other Comprehensive Income**

The following provides a summary of the components of accumulated other comprehensive income, net of tax, as of December 31, 2012 and 2011:

	December 31, 2012	December 31, 2011
	(In thousands)	
Foreign currency translation, net of taxes of \$2,959 for 2012 and \$2,872 for 2011	\$ 46,777	\$ 39,772
Unrealized losses related to cash flow hedges, net of tax benefit of \$0 for 2012 and \$449 for 2011	(15)	(3,262)
Unrealized (losses) gains related to available for sale securities	(13)	1,086
	\$ 46,749	\$ 37,596

**(12) Significant Customers and Concentration of Credit Risk**

In the normal course of business, the Company extends credit to its customers, which are concentrated primarily in the computer and networking and communications and aerospace/defense industries, and most are located outside the United States. The Company performs ongoing credit evaluations of customers, does not require collateral and considers the credit risk profile of the entity from which the receivable is due in further evaluating collection risk.

As of December 31, 2012 and 2011, the Company's 10 largest customers in the aggregate accounted for 54% and 53%, respectively, of total accounts receivable. If one or more of the Company's significant customers were to become insolvent or were otherwise unable to pay for the manufacturing services provided, it would have a material adverse effect on the Company's financial condition and results of operations.

The Company's customers include both OEMs and EMS companies. The Company's OEM customers often direct a significant portion of their purchases through EMS companies. While the Company's customers include both OEM and EMS providers, the Company measures customer concentration based on OEM companies, as they are the ultimate end customers.

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For the years ended December 31, 2012 and 2011, one customer, Apple, accounted for approximately 14% and 11%, respectively, of the Company's net sales. For the year ended December 31, 2010, there were no customers which accounted for 10% or greater of the Company's net sales. The loss of one or more major customers or a decline in sales to the Company's major customers would have a material adverse effect on the Company's financial condition and results of operation.

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)****(13) Fair Value Measures**

The Company measures at fair value its financial and non-financial assets by using a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, essentially an exit price, based on the highest and best use of the asset or liability.

At December 31, 2012 and 2011, the following financial assets and liabilities were measured at fair value on a recurring basis using the type of inputs shown:

	December 31, 2012	Fair Value Measurements Using:		
		Level 1 Inputs (In thousands)	Level 2 Inputs	Level 3 Inputs
Money market funds	\$ 132,242	\$ 132,242		
Available for sale securities	390	390		
Foreign exchange derivative assets	120		\$ 120	
Interest rate swap derivative liabilities	620		620	
Foreign exchange derivative liabilities	949		949	

	December 31, 2011	Fair Value Measurements Using:		
		Level 1 Inputs (In thousands)	Level 2 Inputs	Level 3 Inputs
Money market funds	\$ 89,404	\$ 89,404		
Available for sale securities	3,566	3,566		
Foreign exchange derivative assets	89		\$ 89	
Interest rate swap derivative liabilities	3,035		3,035	
Foreign exchange derivative liabilities	1,839		1,839	

There were no transfers of financial assets or liabilities between Level 1 and Level 2 inputs for the years ended December 31, 2012 and 2011.

The following is a summary of activity for fair value measurements using Level 3 inputs for the year ended December 31, 2010:

Fair Value Measurement using Significant Unobservable Inputs (Level 3)	For the Year Ended December 31, 2010	
	(In thousands)	
Beginning balance	\$	1,351
Transfers to level 3		
Settlement		(1,351)
Changes in fair value included in earnings		
Ending balance	\$	

There was no activity for fair value measurement using Level 3 inputs for the years ended December 31, 2012 and 2011.



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The majority of the Company's non-financial assets and liabilities, which include goodwill, intangible assets, inventories, and property, plant and equipment, are not required to be carried at fair value on a recurring basis. However, if certain triggering events occur (or tested at least annually for goodwill) such that a non-financial instrument is required to be evaluated for impairment, based upon a comparison of the non-financial instrument's fair value to its carrying value, an impairment is recorded to reduce the carrying value to the fair value, if the carrying value exceeds the fair value.

For the years ended December 31, 2012, 2011 and 2010, the following non-financial instruments were measured at fair value on a nonrecurring basis using the type of inputs shown:

	December 31, 2012	Fair Value Measurements Using:			Total Losses for the Year Ended December 31, 2012
		Level 1 Inputs	Level 2 Inputs (In thousands)	Level 3 Inputs	
Goodwill	\$ 12,120			\$ 12,120	\$ 171,400
Definite-lived intangible assets	36,984			36,984	28,935
Long-lived assets	38,100		\$ 38,100		18,082
					\$ 218,417

	December 31, 2011	Fair Value Measurements Using:			Total Losses for the Year Ended December 31, 2011
		Level 1 Inputs	Level 2 Inputs (In thousands)	Level 3 Inputs	
Long-lived assets	\$ 19,331		\$ 19,331		\$ 48,125
Goodwill					15,184
					\$ 63,309

	December 31, 2010	Fair Value Measurements Using:			Total Losses for the Year Ended December 31, 2010
		Level 1 Inputs	Level 2 Inputs (In thousands)	Level 3 Inputs	
Asset held for sale					\$ 766

The fair value of goodwill and definite-lived intangible assets was determined using a combination of the income approach utilizing discounted cash flow analysis and the market approach as considered necessary, which are considered to be Level 3 inputs. The key variables that drive the discounted cash flow analysis are estimated revenue growth rates, levels of profitability, the terminal value growth rate assumption, and the weighted average cost of capital rate applied.

The fair values of long-lived assets held and used and the asset held for sale were primarily determined using appraisals and comparable prices of similar assets, which are considered to be Level 2 inputs.

**(14) Commitments and Contingencies**

*Operating Leases*

The Company leases some of its manufacturing and assembly plants, a sales office and equipment under noncancellable operating leases that expire at various dates through 2020. Certain real property leases contain renewal provisions at the Company's option. Most of the leases require the Company to pay for certain other costs such as property taxes and maintenance. Certain leases also contain rent escalation clauses (step rents) that



**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)**

require additional rental amounts in the later years of the term. Rent expense for leases with step rents is recognized on a straight-line basis over the minimum lease term.

The following is a schedule of future minimum lease payments as of December 31, 2012:

	<b>Operating Leases (In thousands)</b>
2013	\$ 2,771
2014	2,054
2015	1,249
2016	1,211
2017	733
Thereafter	915
<b>Total minimum lease payments</b>	<b>\$ 8,933</b>

Total rent expense for the years ended December 31, 2012, 2011 and 2010 was approximately \$3,101, \$2,981 and \$3,129, respectively.

**Legal Matters**

The Company is subject to various legal matters, which it considers normal for its business activities. While the Company currently believes that the amount of any reasonably possible or probable loss for known matters would not be material to the Company's consolidated financial statements, the outcome of these actions is inherently difficult to predict. In the event of an adverse outcome, the ultimate potential loss could have a material adverse effect on the Company's financial condition, results of operations or cash flows in a particular period. The Company has accrued amounts for its loss contingencies which are probable and estimable at December 31, 2012 and 2011. However, these amounts are not material to the consolidated financial statements of the Company.

**Environmental Matters**

The process to manufacture PCBs requires adherence to city, county, state, federal and foreign jurisdiction environmental regulations regarding the storage, use, handling and disposal of chemicals, solid wastes and other hazardous materials as well as air quality standards. Management believes that its facilities comply in all material respects with environmental laws and regulations. The Company has in the past received certain notices of violations and has implemented certain required minor corrective activities. There can be no assurance that violations will not occur in the future.

The Company is involved in various stages of investigation and cleanup of two sites in Connecticut and one in California related to environmental remediation matters. The ultimate cost of site cleanup for the two Connecticut sites and one California site is difficult to predict given the uncertainties regarding the extent of the required cleanup, the interpretation of applicable laws and regulations, and alternative cleanup methods.

The Company concluded that it was probable that it would incur remediation and monitoring costs for the three sites of approximately \$533 and \$628 as of December 31, 2012 and 2011, respectively, the liability for which is included in other long-term liabilities. The Company estimates that it will incur the remediation costs over the next 12 to 84 months. This accrual was discounted at 8% per annum to determine the Company's best estimate of the liability, which the Company estimated as ranging from \$764 to \$1,274 on an undiscounted basis.

The liabilities recorded do not take into account any claims for recoveries from insurance or third parties, and none are anticipated. These costs are mostly comprised of estimated consulting costs to evaluate potential remediation requirements, completion of the remediation, and

monitoring of results achieved. Subject to the

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**TTM TECHNOLOGIES, INC.**

**Notes to Consolidated Financial Statements (Continued)**

imprecision in estimating future environmental remediation costs, the Company does not expect the outcome of the environmental remediation matters, either individually or in the aggregate, to have a material adverse effect on its financial position, results of operations, or cash flow.

**(15) Stock-Based Compensation**  
***Incentive Compensation Plan***

The Company maintains the 2006 Incentive Compensation Plan (the Plan), which allows for the issuance of up to 6,873 shares through its expiration date of June 2016.

The Plan provides for the grant of incentive stock options and nonqualified stock options to our key employees, non-employee directors and consultants. Other types of awards such as performance-based restricted stock units (PRUs), restricted stock units (RSUs), and stock appreciation rights are also permitted. The exercise price for options and awards is determined by the compensation committee of the Board of Directors and, for options intended to qualify as incentive stock options, may not be less than the fair market value as determined by the closing stock price at the date of the grant. Each option and award shall vest and expire as determined by the compensation committee, with options, PRUs and RSUs generally vesting over three years for employees and one year for non-employee directors. Options, PRUs and RSUs do not have voting rights. Options expire no later than ten years from the grant date. All grants provide for accelerated vesting if there is a change in control, as defined in the Plan. Upon the exercise of outstanding stock options or vesting of RSUs and PRUs, the Company's practice is to issue new registered shares that are reserved for issuance under the Plan.

As of December 31, 2012, 267 PRUs, 1,362 RSUs and 1,151 stock options were outstanding under the Plan. Included in the 267 PRUs outstanding as of December 31, 2012 are 104 vested but not yet released. Included in the 1,362 RSUs outstanding as of December 31, 2012 are 159 vested but not yet released associated with non-employee directors. These RSUs vest over one year with release of the underlying shares of common stock deferred until retirement from the board of directors.

***Performance-based Restricted Stock Units***

In 2010, the Company implemented a long-term incentive program for executives that provides for the issuance of PRUs, representing hypothetical shares of the Company's common stock that may be issued. Under the PRU program, a target number of PRUs is awarded at the beginning of each three-year performance period. The number of shares of common stock released at the end of the performance period will range from zero to 2.4 times the target number depending on performance during the period. The performance metrics of the PRU program are based on (a) annual financial targets, which are based on revenue and EBITDA (earnings before interest, tax, depreciation, and amortization expense), each equally weighted, and (b) an overall modifier based on the Company's total stockholder return (TSR) relative to the S&P SmallCap 600 over the three-year performance period.

Under the PRU program, financial goals are set at the beginning of each fiscal year and performance is reviewed at the end of that year. The percentage to be applied to each participant's target award ranges from zero to 160% based upon the extent to which the annual financial performance goals are achieved. If specific performance threshold levels for the annual financial goals are met, the amount earned for that element will be applied to one-third of the participant's PRU award to determine the number of units earned.

At the end of the three-year performance period, the total units earned, if any, are adjusted by applying a modifier, ranging from zero to 150% based on the Company's TSR based on stock price changes relative to the TSR of S&P SmallCap 600 companies for the same three-year period.

The TSR modifier is intended to ensure that there are limited or no payouts under the PRU program if the Company's stock performance is significantly below the median TSR of S&P SmallCap 600 companies for the three-year performance period. Where the annual financial goals have been met and where there has been strong relative TSR performance over the three-year performance period, the PRU program may provide substantial



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rewards to participants with a maximum payout of 2.4 times the initial PRU award. However, even if all of the annual financial metric goals are achieved in each of the three years, there will be no payouts if the Company's stock performance is below that of the 20th percentile of S&P SmallCap 600 companies.

Recipients of PRU awards generally must remain employed by the Company on a continuous basis through the end of the three-year performance period in order to receive any amount of the PRUs covered by that award. Target shares subject to PRU awards do not have voting rights of common stock until earned and issued following the end of the three-year performance period.

The Company records stock-based compensation expense for PRU awards granted based on management's periodic assessment of the probability of the PRU awards vesting. For the year ended December 31, 2012, management determined that vesting of the PRU awards was probable. PRU activity for the year ended December 31, 2012 was as follows:

	<b>Shares (In thousands)</b>
Outstanding target shares at December 31, 2011	158
Granted:	
Third tranche of 2010 grant	46
Second tranche of 2011 grant	63
First tranche of 2012 grant	81
Vested	(104)
Change in units due to annual performance and market condition achievement	(81)
Forfeited	
 Outstanding target shares at December 31, 2012	 163

The fair value of PRUs granted is calculated using a Monte Carlo simulation model, as the TSR modifier contains a market condition. For the years ended December 31, 2012, 2011 and 2010, the following assumptions were used in determining the fair value:

	<b>December 31, 2012(1)</b>	<b>December 31, 2011(2)</b>	<b>December 31, 2010(3)</b>
Weighted-average fair value	\$ 12.51	\$ 22.74	\$ 10.11
Risk-free interest rate	0.3%	1.0%	1.3%
Dividend yield			
Expected volatility	55%	59%	65%
Expected term in months	23	28	33

(1) Reflects the weighted-averages for the third year of the three-year performance period applicable to PRUs granted in 2010, second year of the three-year performance period applicable to PRUs granted in 2011 and for the first year of the three-year performance period applicable to PRUs granted in 2012.

(2) Reflects the weighted-averages for the second year of the three-year performance period applicable to PRUs granted in 2010 and for the first year of the three-year performance period applicable to PRUs granted in 2011.

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(3) Reflects the first year of the three-year performance period applicable to PRUs granted in 2010.

The expected term of the PRUs reflects the performance period for the PRUs granted. Expected volatility is calculated using the Company's historical stock price. The risk-free interest rate for the expected term of PRUs is based on the U.S Treasury yield curve in effect at the time of grant.

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)****Restricted Stock Units**

RSU activity for the year ended December 31, 2012 was as follows:

	Shares	Weighted Average Grant-Date Fair Value
	(In thousands)	
Non-vested RSUs outstanding at December 31, 2011	1,160	\$ 12.68
Granted	712	11.89
Vested	(603)	10.73
Forfeited	(66)	13.57
Non-vested RSUs outstanding at December 31, 2012	1,203	\$ 13.15
Vested and expected to vest at December 31, 2012	1,303	\$ 12.95

The fair value of the Company's RSUs is determined based upon the closing common stock price on the grant date. The total fair value of RSUs vested for the years ended December 31, 2012, 2011 and 2010 was \$6,467, \$5,090 and \$4,562, respectively.

**Stock Options**

Stock option awards granted were estimated to have a weighted average fair value per share of \$7.17 for the year ended December 31, 2010. The Company did not grant any stock option awards during the years ended December 31, 2012 or 2011.

The fair value calculation is based on stock options granted during the period using the Black-Scholes option-pricing model on the date of grant. For the year ended December 31, 2010 the following weighted average assumptions were used in determining the fair value:

	2010
Risk-free interest rate	2.5%
Dividend yield	%
Expected volatility	68%
Expected term in months	96

The Company determines the expected term of its stock option awards by periodic review of its historical stock option exercise experience. This calculation excludes pre-vesting forfeitures and uses assumed future exercise patterns to account for option holders' expected exercise and post-vesting termination behavior for outstanding stock options over their remaining contractual terms. Expected volatility is calculated using the Company's historical stock price. The risk-free interest rate for the expected term of each option granted is based on the U.S. Treasury yield curve in effect at the time of grant with a period that approximates the expected term of the option.

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Option activity under the Plan for the year ended December 31, 2012, was as follows:

	Options (In thousands)	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (In years)	Aggregate Intrinsic Value (In thousands)
Outstanding at December 31, 2011	1,167	\$ 12.05	4.0	
Granted				
Exercised	(15)	6.37		
Forfeited/expired	(1)	16.82		
Outstanding at December 31, 2012	1,151	\$ 12.11	3.1	\$ 271
Vested and expected to vest at December 31, 2012	1,151	\$ 12.11	3.1	\$ 271
Exercisable at December 31, 2012	1,111	\$ 12.17	2.9	\$ 271

The aggregate intrinsic values in the table above represent the total pretax intrinsic value (the difference between Company's closing stock price on the last trading day of 2012 and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on December 31, 2012. This amount changes based on the fair market value of the Company's stock. The total intrinsic value of options exercised for the years ended December 31, 2012, 2011 and 2010 was \$58, \$3,119 and \$973, respectively. The total fair value of the options vested for the years ended December 31, 2012, 2011 and 2010 was \$325, \$575 and \$1,608, respectively.

**Foreign Employee Share Awards**

Prior to the Company's acquisition from Meadville of the Asia Pacific operating segment in April 2010, there already existed a share award plan comprising Meadville shares for the employees of the Asia Pacific operating segment. Following the acquisition, the unvested Meadville shares under the plan were converted to an equivalent amount of shares of TTM common stock plus cash. These awards vest over five tranches. Three tranches have vested as of December 31, 2012, and the remaining two tranches will vest annually thereafter, through 2014. The fair value, after adjustment for estimated forfeiture, that is attributed to post-combination service is recognized as an expense over the remaining vesting period and is included as a component of total stock-based compensation expense.

Foreign employee share award activity for the year ended December 31, 2012 was as follows:

	Shares (In thousands)	Weighted Average Grant-Date Fair Value
Non-vested share awards outstanding at December 31, 2011	50	\$ 12.40
Vested	(17)	
Forfeited	(1)	



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Non-vested share awards outstanding at December 31, 2012	32	
Vested and expected to vest at December 31, 2012	32	\$ 12.40

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For the years ended December 31, 2012, 2011 and 2010, the amounts recognized in the consolidated financial statements with respect to the stock-based compensation plan are as follows:

	Year Ended December 31,		
	2012	2011	2010
	(In thousands)		
Cost of goods sold	\$ 1,094	\$ 940	\$ 1,272
Selling and marketing	471	417	428
General and administrative	8,701	6,718	5,213
Stock-based compensation expense recognized	10,266	8,075	6,913
Income tax benefit recognized	(2,482)	(2,162)	(2,054)
Total stock-based compensation expense after income taxes	\$ 7,784	\$ 5,913	\$ 4,859

The Company may become entitled to a deduction in its tax returns upon the future exercise of incentive stock options under certain circumstances; however, the value of this deduction will be recorded as an increase to additional paid-in capital and not as an income tax benefit. For the years ended December 31, 2012, 2011 and 2010, a net tax benefit of \$112, \$2,169 and \$218, respectively, related to fully vested stock option awards exercised and vested restricted stock units was recorded as an increase to additional paid-in capital.

The following is a summary of total unrecognized compensation costs as of December 31, 2012:

	Unrecognized Stock-Based Compensation Cost (In thousands)	Remaining Weighted Average Recognition Period (In years)
PRU awards	\$ 1,369	1.41
RSU awards	9,266	1.27
Stock option awards	232	1.25
Foreign employee share awards	79	0.60
	\$ 10,946	

**(16) Employee Benefit and Deferred Compensation Plans**

The Company has three separate retirement benefit plans: one in North America and two in Asia Pacific. In North America, the Company has a 401(k) savings plan in which eligible full-time employees can participate and contribute a percentage of compensation subject to the maximum allowed by the Internal Revenue Service. The Savings Plan provides for a matching contribution of employee contributions up to 5% (100% up to the first 3% and 50% of the following 2% of employee contributions). In Asia Pacific, the Company contributes to either separate trust-administered funds or various government sponsored pension plans on a mandatory basis. For all retirement plans, the Company has no further payment obligation once the compulsory contributions have been made. The Company recorded contributions to retirement benefit plans of \$14,452, \$11,216 and \$7,162 during the years ended December 31, 2012, 2011 and 2010, respectively.

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On October 1, 2011, the Company adopted a deferred compensation plan (the Compensation Plan). The Compensation Plan is an unfunded, nonqualified deferred compensation plan and is limited to selected employees, including our named executive officers and our directors. The Compensation Plan allows participants to defer between five percent and 50% of their annual base salary, up to 100% of their annual bonus, and between five percent and 100% of their annual director fees. Amounts deferred under the Compensation Plan will be credited to accounts maintained by the Company for each participant and will be credited or debited with the participant's proportionate share of any gains or losses attributable to the performance of investment options selected by the participant.

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The Company has recorded estimated asset retirement obligations related to the restoration of its leased manufacturing facilities to shell condition upon termination of the leases in place at those facilities and for removal of asbestos at its owned Stafford, Connecticut and Santa Clara, California manufacturing plants.

Activity related to asset retirement obligations for the years ended December 31, 2012 and 2011, consists of the following and is included in other long-term liabilities:

	<b>(In thousands)</b>
Asset retirement obligations at December 31, 2010	\$ 983
Adjustment to estimate	(10)
Accretion expense	26
Settlement of asset retirement obligations	(75)
Asset retirement obligations at December 31, 2011	924
Adjustment to estimate	58
Accretion expense	13
Settlement of asset retirement obligations	(3)
Asset retirement obligations at December 31, 2012	\$ 992

**(18) Preferred Stock**

The board of directors has the authority, without action to stockholders, to designate and issue preferred stock in one or more series. The board of directors may also designate the rights, preferences and privileges of each series of preferred stock, any or all of which may be superior to the rights of the common stock. As of December 31, 2012, no shares of preferred stock are outstanding.

**(19) Distribution of profits**

As stipulated by the relevant laws and regulations of the People's Republic of China (PRC) applicable to the Company's subsidiaries in the PRC, each of such subsidiaries is required to make appropriations from its net income as determined in accordance with accounting principles and the relevant financial regulations of the PRC (PRC GAAP) to a non-distributable reserve, also referred to as statutory surplus reserve. The appropriations to the statutory surplus reserve are required to be made at not less than 10% of the profit after tax as determined under PRC GAAP and required until the balance reaches 50% of its registered capital. The statutory surplus reserve is used to offset future or past losses. These PRC subsidiaries may, upon a resolution passed by the shareholders, convert the statutory surplus reserve into their capital.

There were appropriations of approximately \$8,145 and \$7,021 to the statutory surplus reserve of these PRC subsidiaries for the years ended December 31, 2012 and 2011, respectively. There were no appropriations to such reserve for the year ended December 31, 2010.

**(20) Segment Information**

The operating segments reported below are the Company's segments for which separate financial information is available and upon which operating results are evaluated by the chief operating decision maker to assess performance and to allocate resources. The Company manages its

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worldwide operations based on two geographic operating segments: 1) Asia Pacific, which consists of the PCB Subsidiaries and their seven PCB fabrication plants, which include a substrate facility; and 2) North America, which consists of seven domestic PCB fabrication plants, including a facility that provides follow-on value-added services primarily for one of the PCB fabrication plants, and one backplane assembly plant in Shanghai, China, which is managed in conjunction

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with the Company's U.S. operations. Each segment operates predominantly in the same industry with production facilities that produce similar customized products for its customers and use similar means of product distribution.

The Company evaluates segment performance based on operating segment income, which is operating income before amortization of intangibles. Interest expense and interest income are not presented by segment since they are not included in the measure of segment profitability reviewed by the chief operating decision maker. All inter-segment transactions have been eliminated. Reportable segment assets exclude short-term investments, which are managed centrally.

	Year Ended December 31,		
	2012	2011	2010
	(In thousands)		
<b>Net Sales:</b>			
Asia Pacific	\$ 842,443	\$ 869,400	\$ 604,748
North America	509,426	565,929	581,828
Total sales	1,351,869	1,435,329	1,186,576
Inter-segment sales	(3,201)	(6,690)	(6,905)
Total net sales	\$ 1,348,668	\$ 1,428,639	\$ 1,179,671
<b>Operating Segment Income (Loss):</b>			
Asia Pacific	\$ (165,183)	\$ 63,010	\$ 86,239
North America	37,803	45,421	52,998
Total operating segment (loss) income	(127,380)	108,431	139,237
Amortization of definite-lived intangibles	(14,637)	(17,311)	(13,678)
Total operating (loss) income	(142,017)	91,120	125,559
Total other expense, net	(26,355)	(17,888)	(16,922)
(Loss) income before income taxes	\$ (168,372)	\$ 73,232	\$ 108,637
<b>Depreciation Expense:</b>			
Asia Pacific	\$ 67,790	\$ 54,324	\$ 33,219
North America	16,496	15,374	15,528
Total depreciation expense	\$ 84,286	\$ 69,698	\$ 48,747
<b>Capital Expenditures:</b>			
Asia Pacific	\$ 142,424	\$ 104,544	\$ 100,831
North America	18,130	16,546	14,298
Total capital expenditures	\$ 160,554	\$ 121,090	\$ 115,129

**Table of Contents****TTM TECHNOLOGIES, INC.****Notes to Consolidated Financial Statements (Continued)**

	2012	December 31, 2011 (In thousands)	2010
<b>Segment Assets:</b>			
Asia Pacific	\$ 1,207,206	\$ 1,323,932	\$ 1,348,766
North America	469,366	421,571	413,186
Unallocated corporate assets	390	3,566	
<b>Total assets</b>	<b>\$ 1,676,962</b>	<b>\$ 1,749,069</b>	<b>\$ 1,761,952</b>

The Company accounts for inter-segment sales and transfers as if the sale or transfer were to third parties: at arms length and consistent with the Company's revenue recognition policy. The inter-segment sales are sales from the Asia Pacific operating segment to the North America operating segment.

During the year ended December 31, 2012, the Company recorded an impairment charge for goodwill and definite-lived intangibles of \$200,335 and a charge of \$18,082 for the impairment of long-lived assets related to its Asia Pacific operating segment. Additionally, during the year ended December 31, 2011, the Company recorded a charge of \$15,184 for the impairment of goodwill for its North America operating segment and a charge of \$48,125 for the impairment of long-lived assets related to its Asia Pacific operating segment. See Note 5 for additional information regarding the impairment of goodwill and definite-lived intangibles and Note 6 for additional information regarding the impairment of long-lived assets.

The Company markets and sells its products in approximately 42 countries. Other than in the United States and China, the Company does not conduct business in any country in which its net sales in that country exceed 10% of net sales. Net sales and long-lived assets are as follows:

	2012		2011		2010	
	Net Sales	Long-Lived Assets	Net Sales	Long-Lived Assets	Net Sales	Long-Lived Assets
	(In thousands)					
United States	\$ 489,566	\$ 93,080	\$ 529,142	\$ 94,213	\$ 416,159	\$ 113,388
China	431,157	789,702	554,747	936,415	497,298	922,923
Other	427,945		344,750		266,214	
<b>Total</b>	<b>\$ 1,348,668</b>	<b>\$ 882,782</b>	<b>\$ 1,428,639</b>	<b>\$ 1,030,628</b>	<b>\$ 1,179,671</b>	<b>\$ 1,036,311</b>

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The following is a reconciliation of the numerator and denominator used to calculate basic earnings (loss) per share and diluted earnings (loss) per share for the years ended December 31, 2012, 2011 and 2010:

	2012	2011	2010
	(In thousands, except per share amounts)		
Net (loss) income attributable to TTM Technologies, Inc. stockholders	\$ (174,595)	\$ 41,868	\$ 71,531
Weighted average shares outstanding	81,800	81,176	70,220
Dilutive effect of performance-based stock units, restricted stock units and stock options		768	599
Diluted shares	81,800	81,944	70,819
(Loss) earnings per share attributable to TTM Technologies, Inc. stockholders:			
Basic	\$ (2.13)	\$ 0.52	\$ 1.02
Diluted	\$ (2.13)	\$ 0.51	\$ 1.01

For the year ended December 31, 2012, potential shares of common stock, consisting of stock options to purchase approximately 1,151 shares of common stock at exercise prices ranging from \$4.69 to \$16.82 per share, 1,362 restricted stock units, and 267 performance-based restricted stock units were not included in the computation of diluted earnings per share because the Company incurred a net loss from operations and, as a result, the impact would be anti-dilutive.

For the years ended December 31, 2011 and 2010, performance-based stock units, restricted stock units and stock options to purchase 863 and 1,726 shares of common stock, respectively, were not considered in calculating diluted earnings per share because the options' exercise prices or the total expected proceeds under the treasury stock method for performance-based stock units, restricted stock units or stock options was greater than the average market price of common shares during the year and, therefore, the effect would be anti-dilutive.

Additionally, for the year ended December 31, 2012, the effect of 10,963 shares of common stock related to the Company's Convertible Notes, the effect of the convertible note hedge to purchase 10,963 shares of common stock and the warrants sold to purchase 10,963 shares of the Company's common stock were not included in the computation of dilutive earnings per share because the conversion price of the Convertible Notes and the strike price of the warrants to purchase the Company's common stock were greater than the average market price of common shares during the year, and therefore, the effect would be anti-dilutive.

**(22) Related Party Transactions**

In the normal course of business, the Company's foreign subsidiaries purchase laminate and prepreg from related parties. For the years ended December 31, 2012, 2011 and 2010, the Company's foreign subsidiaries purchased \$90,603, \$110,083 and \$92,705, respectively, of laminate and prepreg from these related parties.

Additionally, one of the related parties leases employee accommodation space from a foreign subsidiary of the Company. For the years ended December 31, 2012, 2011 and 2010, the net income for these activities was \$220, \$250 and \$222, respectively.

At December 31, 2012 and 2011, the Company's consolidated balance sheet included \$34,520 and \$36,851, respectively, in accounts payable due to, and \$48 and \$44, respectively, in accounts receivable due from a related party for the supply and lease arrangements mentioned above.





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**TTM TECHNOLOGIES, INC.**

**Notes to Consolidated Financial Statements (Continued)**

**(23) Dividend**

During the year ended December 31, 2012, one of the Company's majority owned foreign subsidiaries declared a dividend in the amount of approximately \$47,600, which includes \$9,501 paid to its noncontrolling interest shareholder during the year ended December 31, 2012.

**(24) Gain on Early Settlement of Related Party Financing Obligation**

The related party financing obligation represented the value of the Company's obligation under a put and call option agreement which granted a related party, which was also a 20% minority shareholder in a subsidiary of one of the Company's PCB subsidiaries, the right to sell its 20% equity interest to the Company. The Company also had the right to purchase that 20% equity interest held by this related party.

On June 8, 2011, the Company settled its obligation under the put and call option agreement for a payment of approximately \$20,528, resulting in a gain of \$1,659, which is included in Other, net in the consolidated statement of operations.

**(25) Subsequent Event**

Subsequent to December 31, 2012, the Company signed a letter of intent with its minority partner, Shengyi Technology Co. Ltd. (Sytech), to sell the Company's majority interest in Dongguan Shengyi Electronics Ltd., (SYE). Additionally, the Company agreed to acquire Sytech's minority equity interest in Dongguan Meadville Circuits Ltd., (DMC). Both plants manufacture conventional PCBs and are located in Dongguan, China. The transaction is expected to close by the end of the second quarter of 2013. A condition for closing the transaction is that the parties value all of SYE at 1 billion Chinese RMB (about \$161 million) and all of DMC at 900 million Chinese RMB (about \$145 million).