CPS TECHNOLOGIES CORP/DE/

Form 10-K March 17, 2014

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

#### **FORM 10-K**

(Mark One)

[X] Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 28, 2013

or

[] Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, for the transition period from to

Commission file number: 0-16088

# **CPS TECHNOLOGIES CORPORATION**

(Exact Name of Registrant as Specified in its Charter)

Delaware 04-2832509
(State or Other Jurisdiction (I.R.S. Employer of Incorporation or Organization) Identification No.)

111 South Worcester Street
Norton, MA
(Address of principal executive offices)

02766-2102
(Zip Code)

Registrant's telephone no., including area code: 508-222-0614

Securities registered pursuant to Section 12(b) of the Act: None Securities registered pursuant to Section 12(g) of the Act:

# Common Stock, par value, \$0.01 per share

(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

[] Yes [X] No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

[] Yes [X] 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 than the registrant was required to file such reports), and (2) has been subject to the filing requirements for the past 90 days.

[X] Yes [] No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

[X] Yes [] No

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "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 [X]

(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 [X] No

The aggregate market value of the voting Common Stock held by non-affiliates of the Registrant was \$12.2 million based on the average of the reported closing bid and asked prices for the Common Stock as of the last business day of the registrant's most recently completed second fiscal quarter as reported on the OTC Bulletin Board.

Number of shares of Common Stock outstanding as of February 24, 2014: 13,066,641 shares.

Documents incorporated by reference.

#### Part I

#### Item 1. Business.

CPS Technologies Corporation (the 'Company' or 'CPS') provides advanced material solutions to the electronics, power generation, automotive and other industries. In 2008 the Company also entered into a cooperative agreement with the U.S. Army to further develop its composite technology to produce armor.

The Company's products are generally used in high-power, high-reliability applications. These applications always involve energy use or energy generation and the Company's products allow higher performance and improved energy efficiency. The Company is an important participant in the growing movement towards alternative energy and "green" lifestyles. For example, the Company's products are used in high-speed trains, mass transit, hybrid and electric cars, wind-turbines for electricity generation as well as routers and switches for the internet which in turn enable telecommuting.

The Company's primary advanced material solution is metal matrix composites (MMCs), a new class of materials which is a combination of metal and ceramic. CPS has a leading, proprietary position in metal matrix composites. Metal matrix composites have several superior properties compared to conventional materials including improved thermal conductivity, thermal expansion matching, stiffness and light weight which enable higher performance and higher reliability in our customers' products.

Like plastics several decades ago, we believe metal-matrix composites will penetrate many end markets over many years. CPS management believes our business model of providing advanced material solutions to a portfolio of high growth end markets which are, at any point in time, in various stages of the technology adoption lifecycle, provides CPS with the opportunity for sustained growth and a diversified customer base. We believe we have validated this model as we are now supplying customers at all stages of the technology adoption lifecycle.

CPS is the leader in supplying metal matrix composites to certain high growth electronics end markets which are well along in the adoption lifecycle and therefore generating significant demand. These end markets include motor controllers used in high-speed electric trains, subway cars and wind turbines, hybrid and electric vehicles, aerospace and defense, and high performance integrated circuits used in internet switches and routers. CPS supplies baseplates, heat spreaders and lids to customers in these end markets. CPS is a fully qualified manufacturer for many of the world's largest electronics OEMs.

CPS also assembles housings and packages for hybrid circuits. These housings and packages may include components made of metal-matrix composites; they may include components made of more traditional materials such as aluminum, copper-tungsten, etc.

The Company is also actively working with customers in end markets at the beginning stages of the adoption lifecycle. An example of such a market is the market for armor. In 2008 the Company entered into a cooperative agreement with the Army Research Laboratory to further develop large hybrid metal matrix composite modules which integrally combine metal matrix composites and ceramics by enveloping ceramic tiles with MMCs. This system offers a lighter weight, durable, multi-hit capable and cost competitive alternative to conventional steel, aluminum and ceramic based armor systems. CPS hybrid hard face armor modules are comprised of multiple materials completely enveloped within and mechanically and chemically bonded to lightweight and stiff aluminum metal matrix composites.

The Company believes that its hybrid hard face armor tiles will find application in many military vehicles as well as armored commercial vehicles.

Our products are manufactured by proprietary processes we have developed including the QuicksetTM Injection Molding Process ('Quickset Process') and the QuickCastTM Pressure Infiltration Process ('QuickCast Process').

CPS was incorporated in Massachusetts in 1984 as Ceramics Process Systems Corporation and reincorporated in Delaware in April 1987 through a merger into a wholly-owned Delaware subsidiary organized for purposes of the reincorporation. In July 1987, CPS completed our initial public offering of 1.5 million shares of our Common Stock. In March 2007, the Company changed its name from Ceramics Process Systems Corporation to CPS Technologies Corporation.

#### Overview of Markets and Products

#### **Electronics Markets Overview**

End-user demand continues to motivate the electronics industry to produce products which:

- operate at higher speeds;
- are smaller in size; and

- operate with higher reliability.

While these three requirements result in products of ever-increasing performance, these requirements also create a fundamental challenge for the designer to manage the heat generated by the system operating at higher speeds and/or higher power. Smaller assemblies further concentrate the heat and increase the difficulty of removing it.

This challenge is found at each level in an electronic assembly: at the integrated circuit level speeds are increasing and line widths are decreasing; at the circuit board level higher density devices are placed closer together on circuit boards; and at the system level higher density circuit boards are being assembled closer together.

The designer must resolve the thermal management issues or the system will fail. For every 10 degree Celsius rise in temperature above a threshold level, the reliability of a circuit is decreased by approximately half. In addition, heat usually causes changes in parameters which degrade the performance of both active and passive electronic components.

To resolve thermal management issues the designer is primarily concerned with two properties of the materials which comprise the system: 1) thermal conductivity, which is the rate at which heat moves through materials, and 2) thermal expansion rate (Coefficient of Thermal Expansion or CTE) which is the rate at which materials expand or contract as temperature changes. The designer must ensure that the temperature of an electronic assembly stays within a range in which the differences in the expansion rates of the materials in the assembly do not cause a failure from breaking, delaminating, etc.

CPS combines at the microstructural level a ceramic with a metal to produce a metal matrix composite which has the thermal conductivity needed to remove heat, and a thermal expansion rate which is sufficiently close to other components in the assembly to ensure the assembly is reliable. The ceramic is silicon carbide (SiC), the metal is aluminum (Al), and the composite is aluminum silicon carbide (AlSiC), a metal-matrix composite. CPS can adjust the thermal expansion rate of AlSiC components to match the specific application by modifying the amount of SiC compared to the amount of Al in the component.

CPS produces products made of AlSiC in the shapes and configurations required for each application, for example, in the form of lids, substrates, housings, etc. Every product is made to a customer's blueprint. The CPS process technology allows most products to be made to net shape, requiring no or little final machining.

Although the Company's focus today is on AlSiC components, it believes its proprietary Quickset- Quickcast process technology can be used to produce other metal-matrix composites which may meet future market needs.

Today, the problem of thermal management is most acute in high-performance, high-density applications such as high-performance microprocessors, application-specific integrated circuits for internet routers and switches, motor controllers for trains, subway cars and wind turbines, and components for satellite communications. However, as the trends towards faster speeds, reduced size and increased reliability continue, and as high-density circuitry is used in a larger number of applications, we believe our products will be used in an increasing number of applications across many end markets.

# Structural Markets Overview

Structural applications perform primarily a mechanical rather than electrical function. In any mechanical assembly with moving parts the stiffness and weight of moving parts can have a significant impact on the performance and energy efficiency of the assembly. In particular, in equipment with reciprocating components increasing the stiffness and reducing the weight of reciprocating components improves the performance and energy efficiency of the equipment.

Today many mechanical components are made of steel because steel has the stiffness required for the particular application. AlSiC has approximately the same stiffness as steel, but is only one-third the weight of steel. AlSiC is, however, higher cost than steel. However, we believe there are many mechanical applications where the customer will pay the higher cost for AlSiC because of significant improvements in performance resulting from the superior stiffness-to-weight ratio of AlSiC.

Examples of structural applications for which we are developing and supplying components include armor, robotic arms for semiconductor manufacturing equipment and components used in oil and gas industries.

#### **Specific Markets and Products**

#### Motor Controller Applications (Insulated Gate Bipolar Transistor ("IGBT") Applications)

The use of power modules to control electric motors of all sizes is growing. This growth is the result of several factors including emerging high-power applications which demand power controllers such as trains, subways and certain industrial equipment, and cost declines in power modules which increasingly make variable speed drives cost effective. Power semiconductors are a very significant portion of the cost of variable speed drives, and the cost of the module housing and thermal management system are also significant; declines in the costs of all these components is driving increased use of variable speed drives.

We provide baseplates and heat spreaders on which power semiconductors are mounted to produce modules for motor control. The power semiconductors are typically IGBTs and these applications are often referred to as IGBT applications. Our AlSiC baseplates have sufficient thermal conductivity to allow for removal of heat through the baseplate, and have a thermal expansion rate sufficiently similar to the other components in the assembly to ensure reliability over time as the assembly thermally cycles. We believe this market will continue to grow as the use of power modules penetrates additional motor applications, and as electric motors themselves penetrate new applications such as the hybrid electric vehicle.

Today our primary products for IGBT applications are used in electric trains, subway cars, wind-generating turbines and hybrid and electric vehicles.

Major automobile companies around the world are introducing hybrid electric vehicles (HEVs) and electric vehicle (EVs) at an increasing rate. This focus on more energy efficient vehicles is being driven by increases in energy costs and concerns about climate change. There are many varieties of HEVs and EVs, but all HEVs and EVs contain an electric motor and contain one or more motor controller modules. The Company provides baseplates on which motor controller modules are assembled; these baseplates are lighter weight and provide greater reliability than baseplates made from more conventional materials.

The Company is working with multiple tier one and tier two suppliers to the automobile industry on several new designs for future introduction. The Company believes the HEV and EV markets will be the source of significant and long-term growth for the Company.

# <u>Lids and Heat Spreaders for High-Performance Microprocessors, Application-Specific Integrated Circuits and Other Integrated Circuits ("Flip-chip Applications")</u>

Increases in speed, circuit density, and the number of connections in microprocessor chips (CPUs) and application-specific integrated circuits (ASICs) are accelerating a transition in the way in which these circuits are packaged. Packages provide mechanical protection to the integrated circuit (IC), enable the IC to be connected to other circuits via pins, solder bumps or other connectors, and allow attachment of a heat sink or fan to ensure the IC does not overheat. In the past most high-performance ICs were electrically connected to the package by fine wires in a process known as wire bonding. Today, most high-performance semiconductors are connected to the package by

placing metal bumps on the connection points of the die, turning the die upside down in the package, and directly connecting the bumps on the die with corresponding bumps on the package base by reflowing the bumps. This is referred to as a "flip-chip package". Flip chip packages allow for connection of a larger number of leads in a smaller space, and can provide other electrical performance advantages compared to wire bonded packages.

In many flip chip configurations a lid or heat spreader is placed over the die to protect the die from mechanical damage and to facilitate the removal of heat from the die. Often a heat sink or fan is then attached to the lid. For a high-density die the package designer must ensure that the lid has sufficient thermal conductivity to remove heat from the die and that all components of the package assembly - the die itself, the package base, and the package lid - are made from materials with sufficiently similar thermal expansion rates to ensure the assembly will not break apart over time as it thermally cycles.

Our composite material, AlSiC, has been developed to meet these two needs: it is engineered to have sufficient thermal conductivity to allow the heat generated by the die to be removed through the lid, and it is engineered to expand upon heating at a rate similar to other materials used in the package assembly in order to ensure reliability of the package over time as it thermally cycles. We produce lids made of AlSiC for high performance microprocessors and application-specific integrated circuits used in servers, internet switches and other applications.

Most participants in the semiconductor industry believe the densities of ICs will continue to increase following the well-known "Moore's Law". As IC densities increase, generally so does the IC size, and the amount of heat generated by the IC. We believe the need for thermal management will continue to grow rapidly.

#### **Customers**

We sell primarily to major microelectronics systems houses in the United States, Europe and Asia. Our customers typically purchase prototype and evaluation quantities of our products over a one to three year period before purchasing production volumes.

In 2013, our three largest customers accounted for 42%, 23% and 8% of revenues, respectively. In 2013, approximately 96% of our revenues were derived from commercial applications and 4% from defense-related applications.

# Research and Development

In 2013, costs incurred related to funding under the Cooperative Agreement totaled \$311 thousand of which 100% was reimbursed by the U.S. Army and was recorded as revenue. This revenue of \$311 thousand resulted in a gross margin of \$52 thousand.

#### Availability of Raw Materials

We use a variety of raw materials from numerous domestic and foreign suppliers. These materials are primarily aluminum ingots, ceramic powders and chemicals. The raw materials we use are available from domestic and foreign sources and none is believed to be scarce or restricted for national security reasons. We use no conflict metals.

#### Patents and Trade Secrets

As of December 28, 2013, we had 12 United States patents and 2 United States patent pending. We also have several international patents covering the same subject matter as the U.S. patents. Our licensees have rights to use certain patents as defined in their respective license agreements.

We intend to continue to apply for domestic and foreign patent protection in appropriate cases. In other cases, we believe we are better served by reliance on trade secret protection. In all cases, we seek protection for our technological developments to preserve our competitive position.

# **Backlog and Contracts**

Over 90% of the Company's product sales are custom in that they are based on customers' drawings and the large majority of these sales are "designed in" and are sold over multiple years. Major customers typically give the Company a non-binding forecast of demand for a one-year period and then negotiate a pricing agreement with the Company valid for that one-year period. Each week customers then issue releases or authorizations to ship under the pricing agreements. At any point in time the contractually binding backlog represented by the releases in hand does not necessarily reflect underlying demand. Given this situation, the Company does not believe backlog data is helpful to investors.

#### Competition

We have developed and expect to continue to develop products for a number of different end markets and we will encounter competition from different producers of metal-matrix composites and other competing materials.

We believe that the principal competitive factors in our end markets today include technical competence, product performance, quality, reliability, price, corporate reputation, and strength of sales and marketing resources. We believe our proprietary processes, reputation, and the price at which we can offer products for sale will enable us to compete successfully in the many electronics end markets. However, some of the American and foreign companies now producing or developing metal-matrix composites have far greater financial and sales and marketing resources than we do which may enable them to develop and market products which would compete against those developed by us.

#### Government Regulation

We produce non-nuclear, non-medical hazardous waste in our development and manufacturing operations. The disposal of such waste is governed by state and federal regulations. Various customers, vendors, and collaborative development agreement partners of CPS may reside abroad, thereby possibly requiring export and import of raw materials, intermediate products, and finished products, as well as potential technology transfer abroad under collaborative development agreements. These types of activities are regulated by bureaus within the Departments of Commerce, State and Treasury.

In 2008, the Company entered into a cooperative agreement with the US Army Research Laboratory to perform research and development concerning hybrid metal matrix composite encapsulated ceramic armor technology. The Cooperative Agreement was a four-year agreement which is 95% funded by the US Department of Defense and 5% funded by CPS.

Revenues from this Cooperative Agreement are recognized proportionally as costs are incurred. We are reimbursed for reasonable and allocable costs up to the reimbursement limits set by the Cooperative Agreement. All payments to the Company for work performed on this Cooperative Agreement are subject to audit and adjustment by the Defense Contract Audit Agency. Adjustments, if any, are recognized in the period made.

#### **Employees**

As of December 28, 2013, we had 135 permanent full-time employees, 11 temporary full-time employees and 5 part-time employees, of whom 137 were engaged in manufacturing and engineering and 14 in sales and administration, including finance, purchasing, IT, and customer service.

None of our employees are covered by a collective bargaining agreement. We consider our relations with our employees to be excellent.

#### Item 1A. Risk Factors.

# We are heavily dependent on the electronics industry and changes in the industry could harm our business and operating results.

The electronics industry is subject to economic cycles, demand in some segments is currently volatile, and is likely in the future to experience recessionary periods. A protracted general recession in the electronics industry could have a material adverse effect on our business, financial condition and results of operations.

#### Our operating results may fluctuate substantially, which may cause our stock price to fall.

Our quarterly and annual results of operations have varied in the past, and our operating results may vary significantly in the future due to a number of factors including, but not limited to: timing of orders from major customers; mix of products and services; pricing and other competitive pressures; delays in prototype shipments, economic conditions in the electronics industry, raw material costs, and our ability to time expenditures in anticipation of future revenues.

# Some executive officers and key personnel are critical to our business and these key personnel may not remain with the Company in the future.

Our success depends upon the continued service of some executive officers and other key personnel. Our employees are not bound by employment agreements, and there can be no assurance that the Company will retain its officers and key employees.

#### We may need additional capital in the future, which may not be available.

If our capital resources are insufficient to meet future capital requirements, we will have to raise additional funds. The sale of equity or convertible debt securities in the future may be dilutive to our shareholders. If we are unable to obtain adequate funds on reasonable terms, we may be required to curtail operations significantly or to obtain funds by entering into financing agreements on unattractive terms.

#### The trading price of our common stock may be volatile.

The trading prices of our common stock has been and could in the future be subject to significant fluctuations in response to variations in quarterly operating results, developments in the electronics industry, changes in general economic conditions and economic conditions in the electronics industry, and other factors. In addition, the stock market in recent years has experienced significant price and volume fluctuations which have affected the market prices of technology companies and which have been unrelated to or disproportionately impacted by the operating performance of those companies. These broad market fluctuations may cause the market price of our common stock to decline.

#### The Company relies on a small number of customers for a large percentage of its revenues.

Historically the Company has had a small number of customers representing a large percentage of its total sales. Although the Company endeavors to expand its customer base, we expect that sales to a limited number of customers will continue to account for a high percentage of our revenues in any given period for the foreseeable future. The reliance makes us particularly susceptible to factors affecting those customers. If such customers' business declines and as a result our sales to such customers decline without corresponding sales orders from other customers, our financial condition and results of operations would be adversely affected.

# The growth of our business depends upon the development and successful commercial acceptance of our new products.

Our failure to develop, manufacture, and sell new products in quantities sufficient to offset a decline in revenue from existing products or to successfully manage product and related inventory transactions could harm our business. We depend upon timely and efficient completion of design and development, implementation of manufacturing processes, and effective sales, marketing and customer service. Because of the complexity of our products, significant delays may occur in introducing new products, or between a product's initial introduction and volume production.

#### Technological changes may make our products obsolete or result in decreased prices or increased expenses.

Although our products are "designed-in" and often have lives lasting several years, and technological changes could eliminate our competitive advantages. This could lead to significant price erosion for products. Our success will depend in part on our ability to develop and offer more advanced products in the future, to anticipate both future demand and the technology to supply that demand, to enhance our current products and services, to provide those products and services at competitive prices on a timely and cost-effective basis to achieve market acceptance of those products and services.

# Our military business could suffer as a result of the pressures to reduce defense spending.

Over the past two years revenues from our contract with the U.S. Army Research Laboratory represented less than 5% of the Company's total revenue. This contract will expire in 2014 and pressures to reduce national spending on defense could make it difficult to continue to generate revenues from the military sector in the near future.

#### **Item 1B. Unresolved Staff Comments**

None.

#### Item 2. Properties.

As of December 28, 2013, all our manufacturing, engineering, sales and administrative operations are located in leased facilities in Norton, Massachusetts and Attleboro, MA. The Company entered into a 10-year lease for the Norton facilities effective on March 1, 2006. The leased facilities comprise approximately 38 thousand square feet.

In February 2011, the Company entered into a lease for an additional 13.8 thousand square feet in Attleboro, MA. The lease term is for one year and has an option to extend the lease for five additional one-year periods. The Company renewed the lease in 2013 for one additional year and also obtained two years of additional options which could extend the Company use through February 2019.

# Item 3. Legal Proceedings.

We are not a party to any litigation which could have a material adverse effect on us or on our business and we are not aware of any pending or threatened material litigation against us.

#### **Item 4. Mine Safety Disclosures**

Not applicable

# Part II

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

On December 28, 2013, we had approximately 680 shareholders. The high and low closing bid prices of our common stock for each quarter during the years ended December 28, 2013 and December 29, 2012 are shown below.

	2013		2012	
	High	Low	High	Low
1st Quarter	\$1.63	\$0.81	\$2.30	\$1.10
2nd Quarter	\$1.95	\$0.77	\$2.75	\$1.99
3rd Quarter	\$2.00	\$1.45	\$2.40	\$1.29
4th Quarter	\$2.50	\$1.49	\$1.80	\$1.00

We have never paid cash dividends on our Common Stock. We currently plan to reinvest our earnings, if any, for use in the business and do not intend to pay cash dividends in the foreseeable future. Future dividend policy will depend, among other factors, upon our earnings and financial condition.

Our Common Stock is traded on the Over-the-Counter (OTCQB) under the symbol CPSH.

#### Item 6. Selected Financial Data (000's, except per share amounts)

The following selected financial data of CPS should be read in conjunction with the financial statements and related notes filed as part of this Annual Report on Form 10-K. Amounts are in thousands except per share amounts.

# SELECTED FINANCIAL DATA

For the Fiscal Year:	2013	2012	2011	2010	2009
Summary of Operations					
Product Revenue	\$21,095	\$13,454	\$17,643	\$19,913	\$11,301
Cooperative Agreement Revenue	311	597	2,164	1,484	1,679
Operating Expenses	19,946	16,851	20,143	20,344	12,831
Operating Income (Loss)	1,459	(2,799)	(336)	1,054	149
Other Income (Expense), Net	(30)	(29)	(33)	(32)	(39)
Net Income (Loss) Before Taxes	1,429	(2,828)	(369)	1,021	110
Provision (Benefit) for Income Taxes	463	(1,306)	(323)	311	(452)
Net Income (Loss)	966	(1,522)	(46)	710	562
Net Income (Loss) Per Basic Common Share	\$0.07	\$(0.12)	\$0.00	\$0.06	\$0.04
Weighted Average Basic Number of Common Shares Outstanding	12,985	12,870	12,766	12,643	12,625
Net Income (Loss) Per Diluted Common Share	\$0.07	\$(0.12)	\$0.00	\$0.06	\$0.04
Weighted Average Diluted Number of Common Shares	13,265	12,870	12,766	12,882	12,931
Outstanding	13,203	12,670	12,700	12,002	12,931
Year-End Position					
Working Capital	\$5,205	\$3,395	\$5,501	\$5,731	\$5,020
Total Assets	\$11,140	\$10,349	\$11,334	\$10,611	\$9,230
Long-term Obligations	<b>\$</b> —	\$76	\$200	\$176	\$263
Stockholders' Equity	\$8,865	\$7,532	\$8,802	\$8,486	\$7,553

# SELECTED QUARTERLY FINANCIAL DATA

	First	Second	Third	Fourth
	Fiscal	Fiscal	Fiscal	Fiscal
	Quarter	Quarter	Quarter	Quarter
2013				
Total Revenues	\$5,031	\$5,301	\$5,974	\$5,100
Gross Margin	\$914	\$1,363	\$1,718	\$1,362
Net Income (loss)	\$2	\$236	\$452	\$276
Net Income (loss) Per Basic Share	\$0.00	\$0.02	\$0.03	\$0.02
Net Income (loss) Per Diluted Common Share	\$0.00	\$0.02	\$0.03	\$0.02
2012				
Total Revenues	\$3,555	\$3,628	\$2,744	\$4,125
Gross Margin	\$(34)	\$193	\$(236)	\$333
Net Income	\$(534)	\$(373)	\$(531)	\$(84)
Net Income (loss) Per Basic Share	\$(0.04)	\$(0.03)	\$(0.04)	\$(0.01)
Net Income (loss) Per Diluted Common Share	\$(0.04)	\$(0.03)	\$(0.04)	\$(0.01)

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

This document contains forward-looking statements, based on numerous assumptions, subject to risks and uncertainties. Although we believe that the forward-looking statements are reasonable, we do not and cannot give any assurance that our beliefs and expectations will prove to be correct. Many factors could significantly affect our operations and cause our actual results to be substantially different from our expectations. Those factors include, but are not limited to: (i) general economic and business conditions; (ii) customer acceptance of our products; (iii) materials and manufacturing costs; (iv) the financial condition of customers, competitors and suppliers; (v) technological developments; (vi) increased competition; (vii) changes in capital market conditions; (viii) governmental and business conditions in countries where our products are manufactured and sold; (ix) changes in trade regulations; (x) the effect of acquisition activity; (xi) changes in our plans, strategies, objectives, expectations or intentions; and (xii) other risks and uncertainties indicated from time to time in our filings with the Securities and Exchange Commission. Actual results might differ materially from results suggested by any forward-looking statements in this report. We do not have an obligation to publicly update any forward-looking statements, whether as a result of the receipt of new information, the occurrence of future events or otherwise.

#### **Overview**

The Company provides advanced material solutions to the electronics, robotics, automotive, defense and other industries.

CPS' primary advanced material solution is metal matrix composites, a new class of materials which are a combination of metal and ceramic. CPS has a leading, proprietary position in metal matrix composites. Metal matrix composites have several superior properties compared to conventional materials including improved thermal conductivity, thermal expansion matching, stiffness and light weight, which enable higher performance and higher reliability in our customers' products.

The end markets which account for a majority of our sales today are all electronics markets: primarily the motor controller market, application-specific integrated circuits market and the high-performance microprocessor. The Company's products are typically heat spreaders or baseplates, hermetic packaging, lids, substrates and thermal planes, and are used in applications where thermal management and/or weight are important considerations.

In addition to electronics end markets, we are developing, manufacturing and marketing metal-matrix composite components for some structural end-markets including armor.

The objective of the Cooperative Agreement with the U.S. Army was to further develop large hybrid metal matrix composite modules which integrally combine metal matrix composites and ceramics by enveloping ceramic tiles with MMCs. This system offers a lighter weight, durable, multi-hit capable and cost competitive alternative to conventional steel, aluminum and ceramic based armor systems. CPS hybrid hard face armor modules are comprised of multiple materials completely enveloped within and mechanically and chemically bonded to lightweight and stiff aluminum metal matrix composites. The Company believes that its hybrid hard face armor tiles will find application in many military vehicles as well as armored commercial vehicles.

CPS's products are custom rather than catalog items. They are made to customers' designs and are used as components in systems built and sold by our customers. At any point in time our product mix will consist of some products with on-going production demand, and some products which are in the prototyping or evaluation stages at our customers. The Company seeks to have a portfolio of products which include products in every stage of the technology adoption lifecycle at our customers. CPS' growth is dependent upon the level of demand for those products already in production, as well as its success in achieving new "design wins" for future products.

As a manufacturer of highly technical and custom products, the Company incurs fixed costs needed to support the business, but which do not vary significantly with changes in sales volume. These costs include the fixed costs of applications engineering, tooling design and fabrication, process engineering, etc. Accordingly, particularly given our current size, changes in sales volume generally result in even greater changes in financial performance on a percentage basis as fixed costs are spread over a larger or smaller base. Sales volume is therefore a key financial metric used by management.

The Company believes the underlying demand for metal matrix composites is growing as the electronics and other industries seek higher performance, higher reliability, and reduced costs. CPS believes that the Company is well positioned to offer our solutions to current and new customers as these demands grow. In 2013 its top three customers accounted for 73% of revenue and the remaining 27% of revenue was derived from 65 other customers. In 2012 the top three customers accounted for 63% of revenue and the remaining 37% of revenue was derived from approximately 69 customers.

#### **Application of Critical Accounting Policies**

Financial statements are prepared in conformity with accounting principles generally accepted in the United States of America. As such, the Company is required to make certain estimates, judgments and assumptions that it believes are reasonable based upon the information available. These estimates and assumptions affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the periods presented. CPS's significant accounting policies are presented within Note 2 to the financial statements; the significant accounting policies which management believes are most critical to aid in fully understanding and evaluating its reported financial results include the following:

#### Revenue Recognition (\$ in 000)

Revenue is recognized in accordance with the provisions of the Securities and Exchange Commission Staff Accounting Bulletin ("SAB") No. 104 which establishes guidance in applying generally accepted accounting principles to revenue recognition in financial statements. SAB No. 104 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services rendered; (3) the price to the buyer is fixed or determinable; and (4) collectability is reasonably assured.

Shipping terms are customarily EXW (Ex-works) Shipping Point which terms are consistent with "FOB Shipping Point". Revenues for products sold in the normal course of business are recognized upon shipment when delivery terms are EXW shipping point and all other revenue recognition criteria have been met.

The Company also has consigned inventory agreements with a few customers. For product shipped under consigned inventory agreements, the Company recognizes revenue when the customer either notifies CPS that they have picked the product from the consigned inventory or, in some cases, when sixty days have elapsed from the date the shipment arrives at the customer's location. Of the inventory of \$2.2 million at December 28, 2013, \$980 thousand was located at customers' locations pursuant to consigned inventory agreements. Of the total inventory of \$2.5 million at December 29, 2012, \$1.1 million was located at customers' locations pursuant to consigned inventory agreements.

Advance payments, if any, in excess of revenue recognized are recorded as deferred revenue.

In 2008, CPS entered into a cooperative agreement with the US Army Research Laboratory to perform research and development concerning hybrid metal matrix composite encapsulated ceramic armor technology. The Cooperative Agreement was a four-year agreement which was subsequently extended through July 14, 2014. This agreement was 95% funded by the US Department of Defense and 5% funded by CPS.

Revenues on this Cooperative Agreement are recognized proportionally as costs are incurred. The Company is reimbursed for reasonable and allocable costs up to the reimbursement limits set by the Cooperative Agreement. All payments to the Company for work performed on this Cooperative Agreement are subject to audit and adjustment by the Defense Contract Audit Agency. Adjustments, if any, are recognized in the period made.

The Cooperative Agreement extends for four years and provides for funding of up to \$8.34 million, over the four years, but actual funding is provided incrementally on a year-to-year basis, depending on, among other factors, if yearly objectives are met and if Congress authorizes the funds (\$6.6 million has been authorized through December 28, 2013). If the total \$8.34 million in funding is provided by the Government, the Company's cost share will amount to \$439 thousand over the term of the Agreement. Amendment/Modification #P00009 extended the term of performance of the original Agreement, Cooperative Agreement W911NF-08-2-0017, from July 14, 2013 to July 14, 2014. As of December 28, 2013, the Company had invoiced \$6.6 million since inception of the Agreement which represents the full amount approved to date of \$6.6 million.

# Accounts Receivable

The Company performs ongoing monitoring of the status of its receivables based on the payment history and the credit worthiness of our customers, as determined by a review of their current credit information. Management continuously monitors collections and payments from customers and maintains a provision for estimated credit losses based upon historical experience and any specific customer collection issues that have been identified. While such credit losses have historically been low and within expectations, there is no guarantee that we will continue to experience the same credit loss rates as in the past. Although the Company's major customers are large and have a favorable payment history, a significant change in the liquidity or financial position of one of them could have a material adverse impact on the collectability of accounts receivable and future operating results. Sales returns are offset against the related amounts invoiced in accounts receivable.

#### Inventory

The Company has a build-to-order business model and manufactures product to ship against specific purchase orders; occasionally CPS manufactures product in advance of anticipated purchase orders to level load production or prepare for a ramp-up in demand. In addition, 100% of the Company's products are custom, meaning they are produced to a customer's design and generally cannot be used for any other purpose. Purchase orders generally have cancellation provisions which vary from customer to customer, but which can result occasionally in CPS producing product which the customer is not obligated to purchase. However, once a product has gone into production, most customer orders are recurring and order cancellations are rare. The Company's general obsolescence policy is to write off obsolete inventory when there has been no activity on a particular part for a twelve month period and there are no pending customer orders.

In some cases, customers place blanket purchase orders and request the Company to maintain inventory sufficient to respond quickly upon receiving a shipment request. The Company manufactures to specifications and the products typically have a life which extends over several years and does not deteriorate over time. Therefore, the risk of obsolescence due to the passage of time, per se, is minimal. However, in order to more efficiently schedule production or to meet agreements with customers to have inventory in the pipeline, the Company occasionally manufactures products in advance of purchase orders. In these instances, the Company bears the risk that it will be left with product manufactures to specification for which there are no customer purchase orders. The Company scrutinizes its inventory and, in the absence of pending orders or strong evidence of future sales, establishes an obsolescence reserve when there has been no activity on a particular part for twelve month period.

In determining inventory cost, the Company uses the first-in, first-out method and states inventory at the lower of cost or market. Virtually all of the Company's inventory is customer specific; as a result, if a customer's order is cancelled, it is unlikely that CPS would be able to sell that inventory to another customer. Likewise, if the Company chooses to manufacture product in advance of anticipated purchase orders and those orders did not materialize, it is unlikely that it would be able to sell that inventory to another customer. The value of CPS's work in process and finished goods is based on the assumption that specific customers will take delivery of specific items of inventory. The Company has not experienced losses to date as a result of customer cancellations and has not established a reserve for such cancellations.

# Property and Equipment

Property and equipment are stated at cost. Depreciation of equipment is calculated on a straight-line basis over the estimated useful life, generally five years for production equipment and three to five years for furniture and office equipment. Amortization of equipment under capital leases is calculated on a straight-line basis over the life of the lease. Maintenance and repairs are charged to expense as incurred. Upon retirement or sale, the cost and related accumulated depreciation or amortization are removed from their respective accounts. Any gains or losses on the disposition of property and equipment are included in the results of operations in the period in which they occur.

#### Income Taxes

Deferred tax assets and liabilities are based on the net tax effects of tax credits, operating loss carryforwards and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The Company considers many factors in assessing whether or not a valuation allowance for its Deferred Tax asset is warranted. On the positive side, the Company considered such factors as its: history of taxable earnings (seven consecutive years from 2003-10), global customer base consisting of large companies with significant resources, current products and their expected life, technological advantages, potential for price increases, trend of improved manufacturing efficiencies and the magnitude of the Deferred Tax Asset compared with the Company's expectation of future earnings over the remaining life of the asset. On the negative side, the Company considered such factors as: the global economic environment, the Company's ability to absorb a period of operating losses and negative cash flow and the potential for the technological breakthroughs and substitution of the Company's products by lower cost solutions.

In the second quarter of 2012, the Company decided to reclassify 100% of its Deferred Tax Asset as non-current as sales slowed and it became clear that earning a profit for the year and realizing some deferred tax benefit over the next twelve months would be unlikely. At the end of 2012 a detailed analysis was made considering the future outlook for operations and projected changes in balance sheet accounts. Based upon this analysis, it was decided to classify \$355 thousand of the Deferred Tax Asset as current and the balance as non-current.

At December 28, 2013 the Company's Deferred Tax Asset included net operating loss carryforwards and other temporary differences which will require taxable income of approximately \$6.3 million to fully utilize, assuming an effective corporate tax rate of 39%. The Company has concluded that it is more likely than not that its Deferred Tax

Asset will be fully realized. Current projections of future taxable income, including the reversal of temporary differences, reflect the Company's belief that it has attractive growth opportunities and a favorable cost structure. These projections support the conclusion that the Company will generate taxable income sufficient to utilize the losses before they expire. An important consideration in this analysis is the fact that none of the NOL carryforwards expire before 2032.

The Company's policy is to recognize interest and penalties related to income tax matters in income tax expense. As of December 28, 2013 and December 29, 2012, the Company had no accruals for interest or penalties related to income tax matters. The Company did not have any uncertain tax positions at December 28, 2013 or December 29, 2012 which required accrual or disclosure.

Income tax effects related to share-based compensation that are in excess, or less than, of grant-date fair value, less any proceeds received on exercise of stock prices, are recognized as either an increase or decrease to additional paid-in capital upon exercise. These tax effects are either offset against currently payable taxes or the benefit of net operating loss utilization.

# **Results of Operations**

Year ended December 28, 2013 ("2013") compared to the year ended December 29, 2012 ("2012").

Total revenues were \$21.4 million in 2013, a 52% increase compared with total revenues of \$14.1

million generated in 2012. This increase was due in large part to the sales of baseplates for traction and hybrid electric vehicle applications and, to a lesser degree, the sales of hermetic packages.

Gross margin in 2013 totaled \$ 5.4 million or 25% of sales. In 2012 the Company's gross margin totaled \$0.3 million or 2% of sales. This improvement was due primarily to the increase in sales volume which had the effect of spreading fixed costs over a much larger sales volume. In addition, \$0.3 million was due to higher prices on existing products.

Selling, general and administrative (SG&A) expenses totaled \$ 3.9 million in 2013, up 28% when compared with SG&A expenses of \$3.1 million in 2012. This increase was due in large part to four factors: an increase in sales commissions associated with the higher sales volume, an increase in compensation expense for incentive bonuses, a 401K match which was suspended during the quarter in 2012, and higher legal expenses associated with an overseas patent action.

Primarily as a result of the higher revenues, the Company earned an operating profit of \$1.5 million in 2013. This compares with an operating loss of \$2.8 million in 2012. Interest expense totaled \$30 thousand in 2013 compared with \$29 thousand in 2012. The net income for 2013 totaled \$1.0 million versus a net loss of \$1.5 million in 2012.

Significant Fourth Quarter of 2013 Activity

Revenues totaled \$5.1 million in the Fourth Quarter of 2013 versus \$4.1 million in the comparable quarter in 2012. The increase was due in large part to the sales of baseplates for traction applications and, to a lesser extent, sales of baseplates for hybrid and electric vehicles and \$0.3 million of price increases on existing products.

Gross Margin increased in the Fourth Quarter of 2013 versus the Fourth Quarter of 2012 to \$1,362 thousand (27% of sales) from \$333 thousand (8% of sales). The primary reason for the improvement in 2013 was due to higher sales volume and, to a lesser degree, price increases on existing products.

Selling, General and Administrative expenses totaled \$ 931 thousand in the Fourth Quarter of 2013, up 22% versus the Fourth Quarter of 2012, due to three major factors: an increase in incentive compensation, the 401K match, which was suspended during the quarter in 2012, and higher sales commissions associated with higher sales volume.

The Operating Profit of \$ 431 thousand in the Fourth Quarter 2013 compares with a operating loss of \$427 thousand in the Fourth Quarter of 2012. Net Income in the Fourth Quarter of 2013 totaled \$276 thousand, up from a net loss of \$84 thousand in the corresponding quarter of 2012.

Year ended December 29, 2012 ("2012") compared to the year ended December 31, 2011 ("2011").

Total revenues were \$14.1 million in 2012 compared to total revenues of \$19.8 million in 2011, a 29% decrease. This reduction of \$5.7 million was made up of three main categories: baseplates used in the traction and high power markets, lids and heatspreaders, and revenue earned from The Cooperative Agreement with the U.S. Army Research Laboratory. The traction and high power markets were adversely affected by the weak economies in Europe and the slow-down of traction spending in China. The reduction in the lid and heatspreaders occurred as many products approached their end of life. The lower revenues earned on the contract with the U.S. Army Laboratory reflected a general tightening of the defense spending as well as the fact that The Cooperative Agreement is nearing the end of its contract.

Gross Margin in 2012 totaled \$256 thousand, representing 2% margin on sales. This compares with \$3.0 million gross margin generated in 2011 (15% of sales). The most significant factor causing the decline was the drop in sales volume which resulted in manufacturing fixed costs being spread over significantly fewer dollars. Other factors contributing to this reduction in margin percentage included \$292 thousand obsolescence charges for lids that reached the end of life earlier than forecast by customers, additional costs associated with an outside finishing operation recorded in the First Quarter, and the lower prices for certain baseplate products.

Selling, General and Administrative (SG&A) expenses totaled \$3.1 million in 2012 compared to \$3.3 million in 2011. The decrease was due primarily to the suspension of the Company's 401k matching program in the First Quarter of 2012 and lower expenses for sales commissions, the latter of which was directly related to the lower sales volume.

The Operating Loss for 2012 totaled \$2.8 million versus an Operating Loss in 2011 of \$336 thousand. The increase was primarily due to lower sales volume. Other factors contributing to this increase include obsolescence charges and costs associated with the finishing operation cited earlier, offset in small part by a reduction in SG&A spending.

Other Expense (net) was down slightly versus 2011. The Loss before Taxes in 2012 totaled \$2.8 million versus a Loss before Taxes in 2011 of \$400 thousand. This increase was due to the same factors cited above for the change in Operating Income. The tax benefit in 2012 was \$1.3 million compared to \$323 thousand in 2011.

Significant Fourth Quarter of 2012 Activity

Revenues totaled \$4.1 million in the Fourth Quarter of 2012 versus \$4.2 million in the comparable quarter in 2011. The totals are similar as the Company was able to generate an increase in the sales of baseplates and hermetic packages during the Fourth Quarter of 2012 to approximately offset the decline experienced in its sale of lids, revenues generated from the contract with the U.S. Army Research Laboratory and revenues from automotive products.

Gross Margin increased in the Fourth Quarter of 2012 versus the Fourth Quarter 2011 to \$333 thousand (8% of sales) from \$248 thousand (6% of sales). This improvement was primarily due to operational improvements in manufacturing operations.

Selling, General and Administrative expenses totaled \$760 thousand in the Fourth Quarter of 2012 compared with \$712 thousand in the Fourth Quarter of 2011. A major reason for this difference was an increase in legal expenses associated with an overseas patent issue.

The Operating Loss of \$427 thousand in the Fourth Quarter of 2012 and the Net Loss of \$84 thousand in the same quarter represent a modest change when compared with the Fourth Quarter of 2011 when Operating Loss and Net Loss totaled \$464 thousand and \$103 thousand, respectively.

The Company's Fourth Quarter of 2012 Operating Loss of \$427 thousand was the smallest of any quarter during the year. This was due to higher revenues compared with previous quarters.

# Liquidity and Capital Resources

The Company's cash and cash equivalents at December 28, 2013 totaled \$ 1.6 million with no borrowings on the Company's \$2 million committed line of credit. This compares with cash and cash equivalents of \$0.3 million and bank borrowings of \$0.5 million on its credit line at December 29, 2012. This improvement in the Company's net cash position of \$1.8 million (i.e. cash less borrowing on the credit line), was due primarily to earnings from operations. At the end of 2013, the Company's investment in receivables, inventories and prepaid expenses, less accounts payables and accruals, totaled \$3.1 million versus \$ 3.4 million in these accounts at the end of 2012. This decrease of approximately 7% was due to a reduction in inventories at the end of the Fourth Quarter of 2013 versus the end of the Fourth Quarter in 2012.

Accounts receivable at December 28, 2013 totaled \$ 2.9 million, flat when compared with receivables at December 29, 2012. Days Sales Outstanding (DSOs) decreased to 51 days compared with DSO's of 63 at the end of Q4 2012. This reduction reflects the fact that a greater percentage of revenues in 2013 occurred early in the quarter when compared with 2012; as a result a greater portion of sales were collected before quarter end. The accounts receivable balances at December 28, 2013, and December 29, 2012 were both net of an allowance for doubtful accounts of \$10 thousand.

Inventories totaled \$ 2.2 million at December 28, 2013, approximately a 10% reduction from the

\$2.5 million at the end of 2012. This total is in line with inventory levels maintained throughout 2013. The inventory balance at December 28, 2013, was net of an obsolescence reserve \$390 thousand. The turnover in 2013 was 7.4 times based on the average of inventories over the past 5 quarter ends. This compares with 4.4 times for the same period in 2012. This increase is due primarily to 2012 turnovers being adversely impacted by the slow-down in sales during that year.

All consigned inventory is shipped under existing purchase orders and per customers' requests. Of the inventory of \$2.2 million at December 28, 2013, \$980 thousand was located at customers' locations pursuant to consigned inventory agreements. Of the total inventory of \$2.5 million at December 29, 2012, \$1.1 million was located at customers' locations pursuant to consigned inventory agreements.

The Company financed its working capital during 2013 with a combination of beginning cash balances and cash flow generated from operations. The Company expects it will continue to be able to fund its working capital requirements during 2014 from a combination of operating cash flow, existing cash balances and borrowings under its line of credit, if necessary.

The Company continues to sell to a limited number of customers and the loss of any one of these customers could cause the Company to require additional external financing. Failure to generate sufficient revenues, raise additional capital or reduce certain discretionary spending could have a material adverse effect on the Company's ability to achieve its business objectives.

In early May 2013, the Company renewed its \$2 million revolving line of credit ("LOC") and \$500 thousand of an equipment finance facility ("Lease Line") with Santander Bank. Both agreements mature in May 2014. The LOC is secured by the accounts receivable and other assets of the Company, has an interest rate of prime plus one percent (1%) and a one-year term. The LOC and the Lease Line are cross defaulted and cross collateralized. The Company is also subject to certain financial covenants within the terms of the line of credit that require the Company to maintain a targeted coverage ratio as well as targeted debt to equity and current ratios. At December 28, 2013, the Company was in compliance with existing covenants.

At December 28, 2013, the Company had \$ 76 thousand net carrying value of capital equipment financed by advances and capital lease obligations under the Lease Line and \$423 thousand available remaining. Equipment financed by the Santander equipment lease qualifies for treatment as a capital lease once converted from the Lease Line to a lease. At December 28, 2013 the Company had no borrowings under this LOC while its borrowing base at the time would have permitted borrowings of \$1.4 million.

The covenants with Santander Bank are identical for the line of credit and equipment financing facility. The covenant requirements are shown below together with the actual ratios achieved for 2013:

Covenant	Requirement	Actual
Quarterly Net Income	Minimum of \$1.00	\$ 275 K
Current Ratio Liabilities to Net Worth	minimum of 1.5X maximum of 1.0X	3.3X 0.3X
Capital Expenditures for 2013	maximum of \$900K	\$ 564K
Borrowings under the lease line Borrowings under the line of credit	maximum of \$500K maximum of \$1.442K	\$ 76K \$ 0
	(based on receivables at 12/28/2013)	

Management believes that cash flows from operations, existing cash balances and the leasing and credit line in place with Santander Bank will be sufficient to fund our cash requirements for the foreseeable future. However, there is no assurance that we will be able to generate sufficient revenues or reduce certain discretionary spending in the event that

planned operational goals are not met such that we will be able to meet our obligations as they become due.

#### **Contractual Obligations**

Our contractual obligations at year-end 2013 consist of the following:

# Payments Due by Period (in \$000)

	Total	Less than one year	1-3 years	4-5 years	More than 5 years
Capital lease obligations, including interest	\$78	\$78	None	None	None
Bank borrowings	None	None	None	None	None
Operating lease obligations	\$426	\$231	\$195	None	None

# **Off-Balance Sheet Arrangements**

We have no off-balance sheet arrangements.

#### Recent Accounting Pronouncements

A summary of recent accounting standards is included in Note 2 to the financial statements.

# **Inflation**

Inflation had no material effect on the results of operations or financial condition during the last few years. There can be no assurance however, that inflation will not affect our operations or business in the future.

#### Item 7A. Quantitative and Qualitative Disclosure about Market Risk

We are not significantly exposed to the impact of interest rate changes and foreign currency fluctuations. We have not used derivative financial instruments.

#### **Item 8. Financial Statements and Supplementary Data**

See Index to the Company's Financial Statements and the accompanying notes which are filed as part of this Annual Report on Form 10-K.

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

None.

# Item 9A. Controls and Procedures

#### Evaluation of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in Securities and Exchange Commission reports is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to the Company's management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Under the direction of our Chief Executive Officer and Chief Financial Officer, management has carried out an evaluation of the effectiveness of the Company's disclosure controls and procedures as such item is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based on that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that these disclosure controls and procedures were effective as of December 28, 2013.

# Changes in Internal Control over Financial Reporting

There were no material changes in the Company's internal control over financial reporting during fiscal 2013.

#### Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company, as such term is defined in Rule 13a-15(f) of the Exchange Act. 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 accounting principles generally accepted in the United States and 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 Company's assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States, and that receipts and expenditures of the Company are being made only in accordance with authorizations of the Company's management and directors; 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.

Under the direction of our Chief Executive Officer and Chief Financial Officer, management has assessed the effectiveness of the Company's internal control over financial reporting as of December 28, 2013. In making this assessment, management used the criteria set forth in the "Internal Control Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management concluded that the Company's internal control over financial reporting was effective as of December 28, 2013.

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to recent final rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this annual report.

#### **Item 9B. Other Information**

The Company had no information required to be disclosed in a report on Form 8-K during the fourth quarter of the year covered by this Form 10-K that has not been so reported.

#### Part III

#### Item 10. Directors, Executive Officer and Corporate Governance

The information required by this Item 10 is incorporated herein by reference to our Definitive Proxy Statement, under the captions "Members of the Board of Directors, Nominees and Executive Officers," "Certain Relationships and Related Person Transactions; Legal Proceedings," "Section 16(a) Beneficial Ownership Reporting Compliance," "Code of Conduct" and "Corporate Governance" and with respect to our 2014 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission not later than 120 days after the end of the Company's 2013 fiscal year.

The Company has adopted the CPS Code of Conduct, which applies to all directors, officers (including the principal executive officer, principal financial officer and treasurer) and employees. A copy of this code can be found on the Company's website at www.alsic.com/investor-relations.

#### **Item 11. Executive Compensation**

The information required by this Item 11 is incorporated herein by reference to our Definitive Proxy Statement, under the captions "Compensation" and "Compensation Discussion and Analysis" with respect to our 2014 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission not later than 120 days after the end of the Company's 2013 fiscal year.

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

The information required by this Item 12 is incorporated herein by reference to our Definitive Proxy Statement, under the caption "Equity Compensation Plan Information" and "Security Ownership of Certain Beneficial Owners and Management" with respect to our 2014 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission not later than 120 days after the end of the Company's 2013 fiscal year.

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

The information required by this Item 13 is incorporated herein by reference to our Definitive Proxy Statement, under the captions "Certain Relationships and Related Person Transactions; Legal Proceedings" and "Corporate Governance" with respect to our 2014 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission not later than 120 days after the end of the Company's 2013 fiscal year.

#### Item 14. Principal Accountant Fees and Services

The information required by this Item 14 is incorporated herein by reference to our Definitive Proxy Statement, under the caption "Accounting Matters" with respect to our 2014 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission not later than 120 days after the end of the Company's 2013 fiscal year.

#### Part IV

#### Item 15. Exhibits, Financial Statement Schedules.

(a) Documents filed as part of this Form 10-K.

#### 1. Financial Statements

The financial statements filed as part of this Form 10-K are listed on the Index to Financial Statements of this Form 10-K.

#### 2. Exhibits

The exhibits to this Form 10-K are listed on the Exhibit Index of this Form 10-K.

#### **SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

# CPS TECHNOLOGIES CORPORATION

/s/ Grant C. Bennett

By: President and Chief Executive Officer

March 14, 2014

Pursuant to the Requirements of the Securities Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	<u>Date</u>
/s/ Grant C. Bennett Grant C. Bennett	President and Chief Executive Officer	March 14, 2014
/s/ Ralph M. Norwood Ralph M. Norwood	Chief Financial Officer	March 14, 2014
/s/ Francis J. Hughes, Jr. Francis J. Hughes	Director	March 14, 2014
/s/ Daniel C. Snow Daniel C. Snow	Director	March 14, 2014

# CPS TECHNOLOGIES CORPORATION EXHIBIT INDEX

# Exhibit

Description

No.

- Restated Certificate of Incorporation of the Company, as amended, is incorporated herein by reference to Exhibit 3 to the Company's Registration Statement on Form 8-A (File No. 0-16088)
- By-laws of the Company, as amended, are incorporated herein by reference to Exhibit 3.2 to the Company's Registration Statement on Form S-1 (File No. 33-14616)(the '1987 S-1Registration Statement')
- 4.1\* Specimen certificate for shares of Common Stock of the Company is incorporated herein by reference to Exhibit 4 to the 1987 S-1 Registration Statement
- 4.2\* Description of Capital Stock contained in the Restated Certificate of Incorporation of the Company, as amended, filed as Exhibit 3.1
- 10.5\*(1) Retirement Savings Plan, effective September 1, 1987 is incorporated by reference to Exhibit 10.35 to the Company's 1989 S-1 Registration Statement
- 10.21\* 1999 Stock Incentive Plan adopted by the Company's Board of Directors on January 22, 1999
- 10.22\* 2009 Stock Incentive Plan ("2009 Plan") on December 10, 2009.
- 23.1 Consent of Wolf & Company, P.C.
- Certification Pursuant to Exchange Act Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

<sup>\*</sup> Incorporated herein by reference.

<sup>(1)</sup> Management Contract or compensatory plan or arrangement filed as an exhibit to this Form pursuant to Items 14(a) and 14(c) of Form 10-K.

# INDEX TO FINANCIAL STATEMENTS OF CPS TECHNOLOGIES CORPORATION

Report of Independent Registered Public Accounting Firm

Balance Sheets as of December 28, 2013 and December 29, 2012

Statements of Operations for the years ended December 28, 2013, December 29, 2012 and December 31, 2011

Statements of Stockholders' Equity for the years ended December 28, 2013, December 29, 2012 and December 31, 2011

Statements of Cash Flows for the years ended December 28, 2013, December 29, 2012 and December 31, 2011

Notes to Financial Statements

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders CPS Technologies Corporation Norton, Massachusetts

We have audited the accompanying balance sheets of CPS Technologies Corporation (the "Company") as of December 28, 2013 and December 29, 2012 and the related statements of operations, stockholders' equity and cash flows for each of the years in the three-year period ended December 28, 2013. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our 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 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 audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of CPS Technologies Corporation as of December 28, 2013 and December 29, 2012, and the results of its operations and its cash flows for each of the years in the three-year period ended December 28, 2013, in conformity with accounting principles generally accepted in the United States of America.

/s/ Wolf & Company, P.C. Boston, Massachusetts March 14, 2014

# CPS TECHNOLOGIES CORPORATION BALANCE SHEETS

ASSETS	Dec 201	cember 28,	Dec 201	eember 29, 2
Current assets: Cash and cash equivalents Accounts receivable-trade, net Inventories, net Prepaid expenses and other current assets Deferred taxes	\$	1,571,054 2,900,457 2,183,699 175,726 649,420	\$	306,854 2,876,149 2,457,315 140,723 354,825
Total current assets		7,480,356		6,135,866
Property and equipment: Production equipment Furniture and office equipment Leasehold improvements		7,728,408 383,990 759,819		7,430,783 354,490 735,099
Total cost Accumulated depreciation and amortization Construction in progress		8,872,217 (7,470,815) 431,385		8,520,372 (6,877,285) 138,133
Net property and equipment		1,832,787		1,781,220
Deferred taxes, non-current portion		1,826,482		2,432,148
Total assets	\$	11,139,625	\$	10,349,234
( ) T				

(continued)

See accompanying notes to financial statements.

# CPS TECHNOLOGIES CORPORATION BALANCE SHEETS

LIABILITIES AND STOCKHOLDERS'	December 28, 2013		De 201	cember 29, 12	
EQUITY					
Current liabilities:	Ф		Φ	500,000	
Line of credit borrowings	\$		\$	500,000	
Accounts payable		1,091,909		1,179,313	
Accrued expenses		1,106,813		938,043	
Obligations under capital leases,		76 272		102 266	
current portion		76,372		123,366	
Total current liabilities		2,275,094		2,740,722	
Obligations under capital					
leases, non-current		_		76,372	
Total liabilities		2,275,094		2,817,094	
Commitments (note 4)					
Stockholders' Equity:					
Common stock, \$0.01 par value,					
authorized 15,000,000 shares;					
issued 13,178,042 and 12,928,042;					
outstanding 13,066,641 and 12,871,759 shares;					
at December 28, 2013 and December 29, 2012,					
respectively		131,781		129,281	
Additional paid-in capital		34,278,757		33,821,961	
Accumulated deficit		(25,318,332)	)	(26,284,787)	
Less cost of 111,401 and 56,283 common shares repurchased					
at December 28, 2013 and December 29, 2012, respectively		(227,675)		(134,315)	
Total stockholders' equity		8,864,531		7,532,140	
Total liabilities and stockholders' equity	\$	11,139,625	\$	10,349,234	

See accompanying notes to financial statements.

CPS TECHNOLOGIES CORPORATION STATEMENTS OF OPERATIONS FOR THE YEARS ENDED DECEMBER 28, 2013, DECEMBER 29, 2012, AND DECEMBER 31, 2011

2013 2012 2011

Revenues:

Product sales \$ 21,094,801 \$ 13,454,250 \$ 17,643,151

Research and development under

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•		_					
cooperative agreement		311,198		597,460		2,164,001	
Total revenues Cost of product sales Cost of research and development		21,405,999 15,789,840		14,051,710 13,293,905		19,807,152 14,878,123	
under cooperative agreement		259,082		501,868		1,973,114	
Gross Margin Selling, general, and		5,357,077		255,937		2,955,915	
administrative		3,897,588		3,055,077		3,291,745	
Income (loss) from operations Other expense, net		1,459,489 (30,327)		(2,799,140) (28,588)		(335,830) (32,671)	
Income (loss) before income tax Income tax provision (benefit)		1,429,162 462,707		(2,827,728) (1,305,700)		(368,501) (322,766)	
Net income (loss)	\$	966,455	(\$	1,522,028)	(\$	45,735)	
Net income (loss) per basic common share Weighted average number of basic common shares		\$ 0.07		(\$ 0.12)		(\$ 0.00)	
outstanding		12,985,107		12,869,618		12,765,774	
Net income (loss) per diluted common share Weighted average number of diluted common shares		\$ 0.07		(\$ 0.12)		(\$ 0.00)	
outstanding		13,265,486		12,869,618		12,765,774	
See accompanying notes to financia	al s	statements.					

# CPS TECHNOLOGIES CORPORATION STATEMENTS OF STOCKHOLDERS' EQUITY FOR THE YEARS ENDED DECEMBER 28, 2013, DECEMBER 29, 2012, AND DECEMBER 31, 2011

	Common stoc	k	Additional	ditional			
	Number of shares issued	Par Value	Paid-in capital	Accumulated deficit	Stock repurchased	Stock- holders' equity	
Balance at December 25, 2010	12,698,842	\$126,989	\$33,136,420	\$(24,717,024)	\$(60,835)	\$8,485,550	
Share-based compensation expense	_	_	210,125	_	_	210,125	
Tax benefit from exercise of stock options	_	_	126,049	_	_	126,049	
Repurchase of Common stock	_	_	_	_	(73,480)	(73,480)	
Issuance of common stock pursuant to exercise of stock options	223,100	2,231	97,302	_	_	99,533	
Net Loss	_	_	_	(45,735)	_	(45,735)	
Balance at December 31, 2011	12,921,942	129,220	33,569,896	(24,762,759)	(134,315)	8,802,042	
Share-based compensation expense	_	_	242,793	_	_	242,793	
Issuance of common stock pursuant to exercise of stock							
options	6,100	61	9,272	_	_	9,333	
Net Loss	_	_	_	(1,522,028)	_	(1,522,028)	
Balance at December 29, 2012	12,928,042	129,281	33,821,961	(26,284,787)	(134,315 )	7,532,140	
Share-based compensation expense	_	_	248,535	_	_	248,535	

Issuance of common

stock pursuant to exercise of stock options	250,000	2,500	90,860	_	_	93,360
Tax benefit from exercise of stock options	_	_	117,401	_	_	117,401
Repurchase of Common stock	_	_	_	_	(93,360	) (93,360 )
Net income	_	_	_	966,455	_	966,455
Balance at December 28, 2013	13,178,042	\$131,781	\$34,278,757	\$(25,318,332	)\$(227,675	)\$8,864,531

See accompanying notes to financial statements.

# CPS TECHNOLOGIES CORPORATION STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 28, 2013, DECEMBER 29, 2012, AND DECEMBER 31, 2011

	2013	2012	2011
Cash flows from operating activities:			
Net income (loss)	\$ 966,455	(1.522.028)	\$ (45,735)
Adjustments to reconcile net income (loss)	φ 700, <del>1</del> 33	(1,322,020)	Ψ (¬3,733)
to cash provided (used) by operating			
activities:			
Share-based compensation	248,535	242,793	210,125
Depreciation and amortization	615,348	723,092	751,411
Write off of construction in progress		12,720	—
Deferred taxes	311,071	(1,306,156)	(380,538)
Excess tax benefit from stock options	011,071	(1,000,100)	(200,220)
exercised	(117,401)	) —	(126,049)
Provision for bad debt	_	, 	18,011
Changes in operating assets and liabilities:			,
Accounts receivable - trade	(24,308)	236,811	791,991
Inventories	273,616	681,302	(1,614,859)
Prepaid expenses and other current assets	(35,003)	11,721	(75,865)
Accounts payable	(87,404)	(284,684)	651,433
Accrued expenses	286,171	278,012	(98,179)
Net cash provided (used) by operating	2,437,080	0 (926,417)	81,746
activities			
Cash flows from investing activities:			
Purchases of property and equipment	(666,915)	(209,987)	(635,255)
Net cash used by			
investing activities	(666,915)	(209,987)	(635,255)
Cash flows from financing activities:			
Payment of capital lease obligations	(123,366)	(208,504)	(259,386)
Excess tax benefit from stock options exercised	117,401		126,049
(Repayment of) proceeds from line of credit	(500,000)		_
Proceeds from issuance of common stock	93,360	9,333	99,533
Repurchase of common stock	(93,360)	<del></del>	(73,480)
Net cash provided (used) by financing activities	(505,965)	300,829	(107,284)
Net increase (decrease) in cash and cash equivalents	1,264,200	(835,575)	(660,793)
Cash and cash equivalents at beginning of year	306,854	1,142,429	1,803,222
Cash and Cash equivalents at orginning of year	500,054	1,172,729	1,003,222
Cash and cash equivalents at end of year	\$ 1,571,054	4 \$ 306,854	\$ 1,142,429

Supplemental cash flow information:

Acquisition of production equipment under capital leases	\$ —	\$ —	\$ 238,900
Income taxes paid, net of refund	\$ —	\$ —	\$ 11,900
Interest paid	\$ 30,327	\$ 28,588	\$ 32,672

See accompanying notes to financial statements.

CPS Technologies Corporation Years Ended December 28, 2013, December 29, 2012, and December 31, 2011 Notes to Financial Statements

#### (1) Nature of Business

CPS Technologies Corporation (the "Company") provides advanced material solutions to the electronics, robotics, automotive and other industries. The Company's primary advanced material solution is metal matrix composites which are a combination of metal and ceramic.

CPS also assembles housings and packages for hybrid circuits. These housings and packages may include components made of metal-matrix composites or they may include components made of more traditional materials such as aluminum, copper-tungsten, etc.

The Company sells into several end markets including the wireless communications infrastructure market, high-performance microprocessor market, motor controller market, and other microelectronic and structural markets. In 2008 the Company also entered into a cooperative agreement with the U.S. Army to further develop its composite technology to produce armor.

# (2) Summary of Significant Accounting Policies

#### (2)(a) Cash and Cash Equivalents

The Company considers all highly liquid investments with a maturity of three months or less at the date of purchase to be cash equivalents.

#### (2)(b) Accounts Receivable

The Company reports its accounts receivable at the invoiced amount less an allowance for doubtful accounts. The Company's management provides appropriate provisions for uncollectible accounts based upon factors surrounding the credit risk and activity of specific customers, historical trends, economic conditions and other information. Adjustments to the allowance are charged to operations in the period in which information becomes available that may affect the allowance. Sales returns are offset against the related amounts invoiced in accounts receivable.

#### (2)(c) Inventories

Inventories are stated at the lower of cost or market, as determined under the first-in, first-out method (FIFO), or market. A reserve for obsolete inventories, if any, is based on factors regarding the sales and usage of such inventories, including inventories manufactured for specific customers. The Company's general obsolescence policy is to write off obsolete inventory when there has been no activity on a particular part for a twelve month period and there are no pending customer orders.

# (2)(d) Property and Equipment

Property and equipment are stated at cost. Depreciation of equipment is calculated on a straight-line basis over the estimated useful life, generally five years for production equipment and three to five years for furniture and office equipment. Amortization of equipment under capital leases is calculated on a straight-line basis over the shorter of the life of the lease or the estimated useful life of the equipment. Maintenance and repairs are charged to expense as incurred. Upon retirement or sale, the cost and related accumulated depreciation or amortization are removed from their respective accounts. Any gains or losses on the disposition of property and equipment are included in the results

of operations in the period in which they occur.

#### (2)(e) Impairment of Long-Lived Assets

The Company reviews long-lived assets for impairment whenever circumstances and situations change such that there is an indication that the carrying amounts may not be recovered. Recoverability is assessed based on estimated undiscounted future cash flows. As of December 28, 2013 and December 29, 2012, the Company believes that there has been no impairment of its long-lived assets.

#### (2)(f) Revenue Recognition

The Company recognizes revenue in accordance with the provision of the Securities and Exchange Commission Staff Accounting Bulletin ("SAB") No. 104 which establishes guidance in applying generally accepted accounting principles to revenue recognition in financial statements. SAB No. 104 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services rendered; (3) the price to the buyer is fixed or determinable; and (4) collectability is reasonably assured.

Shipping terms are customarily EXW (Ex-works), shipping point which terms are consistent with "FOB Shipping Point". Revenues for products sold in the normal course of business are recognized upon shipment when delivery terms are EXW shipping point and all other revenue recognition criteria have been met.

The Company has entered into consigned inventory agreements with a few customers. For products shipped under consigned inventory agreements, the Company recognizes revenue when either the customer notifies CPS that they have picked the product from the consigned inventory or, in some cases, when sixty days have elapsed from the date the shipment arrives at the customer's location.

In 2008, CPS entered into a cooperative agreement with the US Army Research Laboratory to perform research and development concerning hybrid metal matrix composite encapsulated ceramic armor technology. The Cooperative Agreement was a four-year agreement which was subsequently extended through July 14, 2014. This agreement was 95% funded by the US Department of Defense and 5% funded by CPS.

Revenues on this Cooperative Agreement are recognized proportionally as costs are incurred. The Company is reimbursed for reasonable and allocable costs up to the reimbursement limits set by the Cooperative Agreement. All payments to the Company for work performed on this Cooperative Agreement are subject to audit and adjustment by the Defense Contract Audit Agency. Adjustments, if any, are recognized in the period made.

The Cooperative Agreement extends for four years and provides for funding of up to \$8.34 million, over the four years, but actual funding is provided incrementally on a year-to-year basis, depending on, among other factors, if yearly objectives are met and if Congress authorizes the funds (\$6.6 million has been authorized through December 28, 2013). If the total \$8.34 million in funding is provided by the Government, the Company's cost share will amount to \$439 thousand over the term of the Agreement. Amendment/Modification #P00009 extended the term of performance of the original Agreement, Cooperative Agreement W911NF-08-2-0017, from July 14, 2013 to July 14, 2014. As of December 28, 2013, the Company had invoiced \$6.6 million since inception of the Agreement which represents the full amount approved to date of \$6.6 million.

#### (2)(g) Research and Development Costs

In 2013, costs incurred related to funding under the Cooperative Agreement totaled \$311 thousand of which 100% was reimbursed by the U.S. Army and was recorded as revenue. This revenue of \$311 thousand resulted in a gross margin of \$52 thousand.

In 2012, costs incurred related to funding under the Cooperative Agreement were \$605 thousand of which \$597 thousand is reimbursed by the U.S. Army and \$8 thousand is the Company's cost share. The revenue recognized by the Company of \$597 thousand less the Company's research and development cost of \$502 thousand resulted in a gross margin of \$95 thousand.

In 2011, costs incurred related to total funding under the Cooperative Agreement were \$2.259 million of which \$2.164 million was reimbursed by the U.S. Army and \$95 thousand was the Company's cost share. The revenue recognized by the Company of \$2.164 million less the Company's research and development costs of \$1.973 million resulted in a gross margin of \$191 thousand.

#### (2)(h) Income Taxes

Deferred tax assets and liabilities are based on the net tax effects of tax credits, operating loss carryforwards and temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The Company considers many factors in assessing whether or not a valuation allowance for its Deferred Tax asset is warranted. On the positive side, the Company considered such factors as its: history of taxable earnings (seven consecutive years from 2003-10), global customer base consisting of large companies with significant resources, current products and their expected life, technological advantages, potential for price increases, trend of improved manufacturing efficiencies and the magnitude of the Deferred Tax Asset compared with the Company's expectation of future earnings over the remaining life of the asset. On the negative side, the Company considered such factors as: the current global recession, the Company's ability to absorb additional periods of operating losses and negative cash flow and the potential for the technological breakthroughs and substitution of the Company's products by lower cost solutions.

The Company's policy is to recognize interest and penalties related to income tax matters in income tax expense. As of December 28, 2013 and December 29, 2012, the Company has no accruals for interest or penalties related to income tax matters. The Company does not have any uncertain tax positions at December 28, 2013 or December 29, 2012 which required accrual or disclosure.

Income tax effects related to share-based compensation that are in excess, or less than, of grant-date fair value, less any proceeds received on exercise of stock prices, are recognized as either an increase or decrease to additional paid-in capital upon exercise. These tax effects are either offset against currently payable taxes or the tax benefit of net operating loss utilization.

#### (2)(i) Net Income (Loss) Per Common Share

Basic net income (loss) per common share is calculated by dividing net income by the weighted average number of common shares outstanding during the period. Diluted net income (loss) per common share is calculated by dividing net income (loss) by the sum of the weighted average number of common shares plus additional common shares that would have been outstanding if potential dilutive common shares had been issued for granted stock option and stock purchase rights. Common stock equivalents are excluded from the diluted calculations when a net loss is incurred as they would be anti-dilutive.

#### (2)(j) Comprehensive Income

The Company has no items of comprehensive income, and therefore net income is equal to comprehensive income.

#### (2)(k) Recent Accounting Pronouncements

In July 2013, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2013-11 Income Taxes (Topic 740) - Presentation of an Unrecognized Tax Benefit When a Net Operating Loss

Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists that provides guidance on whether an uncertain tax position should be presented as a reduction to a deferred tax asset or as a reduction to a deferred tax asset or as a separate liability. This guidance seeks to address diversity in practice. This ASU is effective for fiscal years, and interim periods within those years, beginning after December 15, 2013. The Company does not expect the adoption of this ASU amendment to have any affect on the financial condition, results of operations or cash flows.

# (2)(1) Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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 amounts of revenues and expenses recorded during the reporting period. Such estimates are adjusted by management periodically as a result of existing or anticipated economic changes which effect, or may effect, the Company's financial statements. Actual results could differ from these estimates.

#### (2)(m) Fiscal Year-End

The Company's fiscal year end is the last Saturday in December which could result in a 52 or 53 week year. Fiscal year 2013 and 2012 consisted of 52 weeks, 2011 consisted of 53 weeks.

# (2)(n) Share-Based Payments

The Company measures the cost of employee services received in exchange for an award of equity instruments based on the grant date fair value of the award. That cost is recognized over the period during which an employee is required to provide services in exchange for the award, the requisite service period (usually the vesting period). The Company provides an estimate of forfeitures at initial grant date, and this estimated forfeiture rate is adjusted periodically based on actual forfeiture experience. The Company uses the Black-Scholes option pricing model to determine the fair value of stock options granted.

#### (2)(o) Segment Reporting

The Company views its operations and manages its business as one segment. The Company produces and sells advanced material solutions, primarily metal matrix composites, to assemblers of high density electronics and other specialty components and subassemblies. The Company also assembles housings and packages for hybrid circuits, selling to the same customers mentioned above. These customers represent a single market or segment with similar stringent and well-defined requirements. The Company's customers, in turn, sell the components and subassemblies which incorporate the products into many different end markets, however, these end markets are two to three levels removed from the Company. The Company makes operating decisions and assesses financial performance only for the Company as a whole and does not make operating decisions or assess financial performance by the end markets which ultimately use the products.

The Cooperative Agreement the Company entered into with the Army Research Laboratory in 2008 uses the same equipment and personnel as does the Company's electronics business described above, and at this stage does not represent a separate business segment.

#### (2)(p) Reclassifications

Certain amounts 2011 and 2012 have been reclassified to conform with the 2013 financial statement presentation.

#### (3) Inventories

As of December 28, 2013 and December 29, 2012 inventories consisted of the following:

	2013	2012
Raw materials	\$359,535	\$312,213
Work in process	1,135,413	1,145,843
Finished goods	1,079,251	1,306,259
Gross Inventory	2,574,199	2,764,315
Reserve for obsolescence	(390,500)	(307,000)
Total	\$2,183,699	\$2,457,315

#### (4) Leases and Commitments

# Capital Lease Obligations

An equipment financing facility with Santander Bank (see note 7), agreed to in May 2013, allowed the Company to finance up to \$500 thousand of eligible equipment. As of year-end 2013 the Company had \$424 thousand available remaining on the Santander lease line. Equipment financed by the Santander equipment lease qualifies for treatment as a capital lease.

At December 28, 2013, the Company had acquired production equipment with a cost of \$2.55 million and accumulated amortization of \$2.33 million under capital leases. At December 29, 2012, the Company had production equipment with a cost of \$2.55 million and accumulated amortization of \$2.15 million under capital leases. All capital leases are three year leases with a one dollar buyout.

Future payments required under capital lease obligations are as follows at December 28, 2013:

Fiscal Year 2014	\$78,067
Total future minimum lease payments Less amount representing interest	78,067
at rates ranging between 4.4% and 5.9%	1,695
Present value of net future lease payments Less current portion	76,372 76,372
Long-term obligation under capital leases	\$

Interest expense was approximately \$30 thousand, \$29 thousand, and \$33 thousand for 2013, 2012, and 2011, respectively.

#### **Operating Lease Obligations**

The Company entered into a 10-year lease for the Norton facilities effective on March 1, 2006. Rental expense for operating leases is recognized on a straight-line basis over the term of the lease and was \$129 thousand in each of the years 2013, 2012 and 2011.

In February 2011, the Company entered into a lease for an additional 13,800 square feet in Attleboro, MA. The lease term was for one year and included five, one-year options for extensions at a rate of \$6,900 per month. In October 2013, the Company renewed the lease for one additional year. In December 2013 the Company agreed with the landlord for two additional, one-year options. As a result, if the Company exercises all of the options, it will be able to use the space through February 2019.

Future minimum rental payments over the terms of the lease agreements are approximately as follows:

Fiscal year:

2014 231,000 2015 156,900 2016 37,500 \$425,400

#### 5) Share-Based Compensation Plans

The Company adopted the 2009 Stock Incentive Plan ("2009 Plan") on December 10, 2009. Under the terms of the 2009 Plan all of the Company's employees, officers, directors, consultants and advisors are eligible to be granted options, restricted stock awards, or other stock-based awards. All outstanding options are nonstatutory stock options exercisable at the fair market value of the stock on the date of grant, and expire ten years from the date of grant. The options granted to employees generally vest in equal annual installments over a five-year period. The options granted to directors generally vest one year from date of grant.

Under the 2009 Plan a total of 1,500,000 shares of common stock are available for issuance, of which 356,895 shares remain available for grant as of December 28, 2013.

As of December 28, 2013, the 2009 Plan is the only stock option plan from which awards can be made as all other option plans have expired. The 1999 Stock Option Plan ("1999 Plan") expired on January 22, 2009 and no additional options can be granted from the plan. As of December 28, 2013 there are 238,250 options outstanding under the 1999 Plan.

A summary of stock option activity for all the above plans as of December 28, 2013 and changes during the year then ended is presented below:

		Weighted	Weighted	
		Average	Remaining	Aggregate
		Exercise	Contractual	Intrinsic
	Shares	Price	Life (years)	Value
Outstanding at				
beginning of year	1,418,155	\$1.25		
Granted	231,000	\$1.00		
Exercised	(250,000)	\$0.37		
Forfeited	(21,000)	\$1.53		
Expired	(32,000)	\$0.31		
Outstanding at				
end of year	1,346,155	\$1.39	7.16	\$1,401,461

Options exercisable

at year-end 799,113 \$1.38 6.60 \$803,570

The total intrinsic value of options exercised during fiscal years 2013, 2012 and 2011 was \$310,170, \$28,835 and \$321,842, respectively. As of December 28, 2013, there was \$480,409 of total unrecognized compensation cost related to nonvested share-based compensation arrangements granted under the plans; that cost is expected to be recognized over a weighted average period of 1.8 years.

Cash received from option exercises under all share-based payment arrangements was \$93,360, \$9,333 and \$99,533, for the years ended December 28, 2013, December 29, 2012 and December 31, 2011, respectively.

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model. The following table presents the annualized weighted average values of the significant assumptions used to estimate the fair values of the options granted during 2013 and 2011:

	2013	2011
Risk-free interest rate	1.62%	2.45%
Expected life in years	9	9
Expected volatility	53%	82%
Expected dividend yield	0	0
Weighted average fair value of grants	\$0.60	\$1.60

All options are granted with an exercise price equal to the fair market value of the underlying common stock on the date of grant. There were no options granted in 2012.

The Company recognized \$248,535, \$242,793 and \$210,125 as compensation expense related to total stock options outstanding in 2013, 2012 and 2011, respectively. The expense in 2012 included \$20,500 associated with extending the option exercise period for five individuals terminated during the year. Their options were extended to the lesser of four years or the original expiration date of the option.

A tax benefit of \$117,401, \$0 and \$126,049 was recognized as additional paid in capital in the years ended December 28, 2013, December 29, 2012 and December 31, 2011, respectively, resulting from the excess tax benefit of share-based awards over the cumulative compensation expense recognized for financial reporting.

# (6) Accrued Expenses

Accrued expenses at December 28, 2013 and December 29, 2012 consist of the following:

	2013	2012
Accrued legal and		
accounting	\$92,000	\$92,000
Accrued payroll and related	823,196	388,029
Accrued other	158,116	457,558
Accrued income tax payable	33,501	456
	\$1,106,813	\$938,043

The accrued payroll and related at December 28, 2013 includes \$200 thousand for 401k company match and \$305 thousand for incentive bonuses. These totaled \$0 and \$130 thousand respectively, on December 29, 2012.

#### (7) Revolving Line of Credit and Lease Line

In early May 2013, the Company renewed its \$2 million revolving line of credit ("LOC") and \$500 thousand of an equipment finance facility ("Lease Line") with Santander Bank. Both agreements mature in May 2014. The LOC is secured by the accounts receivable and other assets of the Company, has an interest rate of prime (3.25% at December 28, 2013) plus one percent (1%) and a one-year term. The LOC and the Lease Line are cross defaulted and cross collateralized. The Company is also subject to certain financial covenants within the terms of the line of credit that require the Company to maintain a targeted coverage ratio as well as targeted debt to equity and current ratios. At December 28, 2013, the Company was in compliance with existing covenants.

At December 28, 2013, the Company had \$76 thousand of capital equipment financed by capital lease obligations under the Lease Line (see note 4) and \$424 thousand available remaining. Equipment financed by the Santander equipment lease qualifies for treatment as a capital lease once converted from the Lease Line to a lease.

At December 28, 2013 the Company had no borrowings under this LOC while its borrowing base at the time would have permitted borrowings of \$1.4 million.

# (8) Income Taxes

Components of income tax expense (benefit) for each year are as follows:

	2013	2012	2	2011
Current				
Federal	\$ 33,7	777 \$ —	- :	\$ 95,217
State	456	45	56	(37,445)
Current income tax provision:	34,2	233 45	56	57,772
Deferred:				
United States:				
Federal	379	,574 (1	,165,700)	(274,962)
State	48,9	900 (1	40,456)	(105,576)
Deferred income tax provision (benefit), net	428	,474 (1	,306,156)	(380,538)
Total	\$ 462	,707 \$ (1	,305,700)	\$ (322,766)

Deferred tax assets as of December 28, 2013 and December 29, 2012 are as follows:

December 28, December 29, 2013 2012

Deferred Tax Assets:

Net operating loss

carryforwards \$ 734,000 \$ 1,227,000

Stock compensation	343,000	250,000
Credit carryforwards	859,000	665,000
Inventory	319,000	328,000
Accrued liabilities	39,000	23,000
Depreciation	177,000	289,000
Other	5,000	5,000
Gross deferred tax assets Valuation allowance	2,476,000 —	2,787,000 —
Net deferred tax assets	\$ 2,476,000 \$	2,787,000

At December 28, 2013 and December 29, 2012, the Company had net operating loss carryforwards of approximately \$1,710,000 and \$3,303,000 respectively available to offset future income for U.S. Federal income tax purposes. These operating loss carryforwards expire in varying amounts through 2032.

During 2013, the Company utilized approximately \$1,300,000 of net operating loss carryforwards.

A valuation allowance is required to be established or maintained when it is "more likely than not" that all or a portion of deferred tax assets will not be realized. The Company believes that it will generate sufficient future taxable income to realize the tax benefits related to the remaining deferred tax assets.

A summary of the change in the deferred tax asset is as follows:

	2013	2012	2011
Balance at beginning of year	\$2,786,973	\$1,480,817	\$1,100,279
Deferred tax (expense) benefit	(311,071)	1,306,156	380,538
Balance at end of year	\$2,475,902	\$2,786,973	\$1,480,817

Income tax (benefit) expense is different from the amounts computed by applying the U.S. federal statutory income tax rate of 34 percent to pretax income as a result of the following:

	2013	2012	2011
Tax at statutory rate	\$486,000	\$(961,000)	\$(125,000)
State tax, net			
of federal benefit	33,000	(140,000)	(94,000)
Net operating			
loss and credit carryforwards	(60,000)	(218,000)	(95,000)
Other	4,000	13,000	(9,000)
Total	\$463,000	\$(1,306,000)	\$(323,000)

The Company's income tax filings are subject to review and examination by federal and state taxing authorities. The Company is currently open to audit under the applicable statutes of limitations for the years 2010 through 2013.

At December 28, 2013 the Company's Deferred Tax Asset included net operating loss carryforwards and other temporary differences which will require taxable income of approximately \$6.3 million to fully utilize, assuming an effective corporate tax rate of 39%. The Company has concluded that it is more likely than not that its Deferred Tax

Asset will be fully realized.

#### (9) Retirement Savings Plan

The Company sponsors a Retirement Savings Plan (the 'Plan') under the provisions of Section 401 of the Internal Revenue Code. Employees, as defined in the Plan, are eligible to participate in the Plan after 30 days of employment. Under the terms of the Plan, the Company may match employee contributions under such method as described in the Plan and as determined each year by the Board of Directors. During 2013 and 2012 the Company did not offer a 401k match. During the year 2011 the Company matched dollar for dollar up to a maximum of 4% of employee contributions. The Company recognized \$200,000, \$0 and \$267,760 expense, in 2013, 2012 and 2011, respectively.

# (10) Concentrations of Credit Risk, Significant Customers and Geographic Information

Financial instruments which subject the Company to concentrations of credit risk consist principally of cash and trade accounts receivable. The Company maintains such cash deposits in a high credit quality financial institution.

The Company extends credit to customers who consist principally of microelectronics systems companies in the United States, Europe and Asia. The Company generally does not require collateral or other security as a condition of sale rather relying on credit approval, balance limitation and monitoring procedures to control credit risk of trade accounts receivable. Management conducts on-going credit evaluations of its customers, and historically the Company has not experienced any significant credit-related losses with respect to its trade accounts receivable.

Revenues from significant customers as a percentage of total revenues in 2013, 2012 and 2011 were as follows:

	Percent of Total			
	Revenues			
Significant Customer	2013	2012	2011	
A	42%	38%	42%	
В	23%	17%	15%	
C	8 %	8 %	14%	

As of December 28, 2013, the Company had trade accounts receivable due from these three customers that accounted for 82% of total trade accounts receivable as of that date. Management believes that any credit risks have been properly provided for in the accompanying financial statements.

The Company's revenue was derived from the following countries in 2013, 2012, and 2011:

	Percent of Total		
	Reven	ues	
Country	2013	2012	2011
United States of America	16%	21%	41%
Germany	65%	58%	52%
Other	19%	21%	7 %

Many of the Company's customers based in the United States conduct design, purchasing and payable functions in the United States, but manufacture overseas. Revenue generated from shipments made to customers' locations outside the United States accounted for 84%, 79% and 59% of total revenue in 2013, 2012 and 2011, respectively.

All of the Company's long-lived assets and operations are located in the United States.

# (11) Net Income (Loss) Per Share

The following reconciles the basic and diluted net income per share calculations.

	For the years ended		
	Dec. 28, 2013	Dec. 29, 2012	Dec. 31, 2011
Basic Computation:			
Numerator:			
Net income (loss)	\$ 966,455	(\$1,522,028)	(\$ 45,735)
Denominator:			
Weighted average			
common shares			
outstanding	12,985,107	12,869,618	12,765,774
Basic net income (loss) per share	\$ 0.07	(\$ 0.12)	(\$ 0.00)
Diluted Computation:			
Numerator:			
Net income (loss)	\$ 966,455	(\$1,522,028)	(\$ 45,735)
Denominator:			
Weighted average			
common shares			
outstanding	12,985,107	12,869,618	12,765,774
Stock options	280,379		
Total shares	13,265,486	12,869,618	12,765,744
	Φ Ο Ο7	(\$ 0.12)	(# 0 00)
Diluted net income (loss) per share	\$ 0.07	(\$ 0.12)	(\$ 0.00)

# (12) Allowance for Doubtful Accounts

Activity in the allowance for doubtful account was as follows for fiscal years 2013, 2012, and 2011:

	2013	2012	2011
Beginning balance	\$10,000	\$10,000	\$5,000
Provision for bad debt	_	_	18,011
Charge-offs			(13,011)
Ending balance	\$10,000	\$10,000	\$10,000