CPS TECHNOLOGIES CORP/DE/
Form 10-K
March 12, 2018

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 30, 2017
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 (State or Other Jurisdiction of Incorporation or Organization)	**04-2832509** (I.R.S. Employer 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]

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 $10 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 NASDAQ Capital Market..

Number of shares of Common Stock outstanding as of March 1, 2018: 13,203,436 shares.

Documents incorporated by reference.

Part I

Item 1. Business.

CPS Technologies Corporation (the 'Company' or 'CPS') provides advanced material solutions to the transportation, automotive, energy, computing/internet, telecommunications, aerospace, defense and oil and gas end markets.

Our primary material solution is metal matrix composites. We design, manufacture and sell custom metal matrix composite components which improve the performance and reliability of systems in these end markets.

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 enable telecommuting. These applications involve energy use or energy generation; the Company's products allow higher performance and improved energy efficiency.

Metal matrix composites (MMCs) are a class of materials consisting of a combination of metals and ceramics. Compared to conventional materials, MMCs provide superior thermal conductivity, improved thermal expansion matching, greater stiffness and lighter weight.

For 30 years CPS has been the leader in manufacturing MMC components. Products we provide include baseplates for motor controllers used in high-speed electric trains, subway cars, wind turbines, and hybrid and electric vehicles. We provide baseplates and housings used in radar, satellite and avionics applications. We provide lids and heatspreaders used with high performance integrated circuits for use in internet switches and routers. We provide baseplates and housings used in modules built with Wide Band Gap Semiconductors like SiC and GaN. CPS also assembles housings and packages for hybrid circuits. These housings and packages may include MMC components; they may also include components made of more traditional materials such as aluminum, copper-tungsten, etc.

CPS is a fully qualified manufacturer for many of the world's largest electronics OEMs.

CPS is actively working with customers in end markets other than electronics. An example is CPS's HybridTech Armor® for use in armoring military and commercial vehicles. In 2008 the Company entered into a cooperative agreement with the Army Research Laboratory to further develop large MMC HybridTech Armor® module panels. Although this program ended in 2015, the Company continues to receive funded orders from the U.S. Army, primarily for ballistic armor associated with the development for future combat vehicles and enhancements to present vehicles. CPS's HybridTech Armor® offers lighter weight, improved multi-hit capability, and easier attachment to the vehicle compared to alternatives.

CPS management believes our business model of providing advanced material solutions to a portfolio of high growth end markets 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.

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. The Company also has the capability of encapsulating Pyrolytic Graphite inserts to enhance the thermal conductivity of the AlSiC composite.

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 have developed and supplied components include robotic arms for semiconductor manufacturing equipment and components. The Company continues to identify opportunities for using advanced materials in such diverse areas as fracking in oil and gas, non-skid coatings, fire/heat barriers, consumer electronics and working with nuclear waste.

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.

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

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 2017, our three largest customers accounted for 28%, 14%, and 13% of revenues, respectively. In 2017, approximately 90% of our revenues were derived from commercial applications and 10% from defense-related applications.

Research and Development

In 2015, costs incurred related to funding under the Cooperative Agreement totaled $42 thousand of which essentially 100% was reimbursed by the U.S. Army and was recorded as revenue. This revenue of $42 thousand resulted in a gross margin of $8 thousand. In 2016 and 2017 no costs were incurred as the contract expired on March 31, 2015.

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 30, 2017, the Company had 12 United States patents. In addition the Company had several international patents covering the same subject matter as the U.S. patents. Licensees of these patents 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, we do have one major direct competitor producing metal matrix composites. That company, Denka, is based in Japan and sells to our major customers in Europe and Japan.

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, recently expired March 31, 2015, which was 95% funded by the US Department of Defense and 5% funded by CPS.

Employees

As of December 30, 2017, we had 143 permanent full-time employees. 133 were engaged in manufacturing and engineering and 10 in sales and administration, including finance, HR and general management.

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.

Our business could be negatively impacted by cyber-attacks.

As part of our business we face certain security threats including: (1) threats to our technology infrastructure; (2) attempts to gain access to our propriety, sensitive or classified information; (3) threats to physical security, including our facilities and personnel; and (4) threats from terrorism or similar acts. Cybersecurity threats in particular are persistent, evolve quickly and include, but are not limited to, computer viruses, attempts to access information, denial of service attacks and other electronic security breaches. Our information technology networks and related systems are critical to the operation of our business and essential to our ability to successfully perform day-to-day operations. We believe we have implemented appropriate measures and controls to appropriately identify and monitor these threats and mitigate potential risks. However, there can be no assurance that any such actions will be sufficient to prevent cybersecurity breaches, disruptions to mission critical systems, the unauthorized release of sensitive information or corruption of data, or harm to facilities or personnel.

The impact of these security threats and other disruptions is difficult to predict. They could also negatively impact our reputation among our customers and the public. Any one of these outcomes could have a negative impact on our financial condition, results of operations and liquidity.

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, any 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.

Exchange rates can impact our business adversely.

Our major competitor is based in Japan and, as a result, our relative costs vary by the Yen/Dollar exchange rate. As the dollar strengthens versus the Yen, our relative costs increase affecting our margins and prices to major customers.

Tax reform may significantly affect the Company and its Shareholders

On December 22, 2017, President Trump signed into law the "Tax Cuts and Jobs Act" (TCJA) that significantly reforms the Internal Revenue Code of 1986, as amended (the "Code"). The TCJA among other things, includes changes to U.S. federal tax rates, imposes significant additional limitations on the deductibility of interest and net operating loss carryforwards, allows for the expensing of capital expenditures, and puts into effect the migration from a 'worldwide' system of taxation to a territorial system. We do not expect tax reform to have a material impact to our projection of minimal cash taxes or to our net operating losses. Our net deferred tax assets have been revalued at the newly enacted U.S. corporate rate as of December 30, 2017. We continue to examine the impact this tax reform legislation may have on our business. The impact of this tax reform on holders of our common stock is uncertain and could be adverse. This 10-K does not discuss any such legislation or the manner in which it might affect purchases of our common stock. We urge our stockholders to consult with their legal and tax advisors with respect to such legislation and the potential tax consequences of investing in our common stock.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of December 30, 2017, all our manufacturing, engineering, sales and administrative operations were and continue to be located in leased facilities in Norton, Massachusetts and Attleboro, Massachusetts.

In February 2018, the Company signed a lease for the Norton facilities through February 2021. The leased facilities comprise approximately 38 thousand square feet. The lease is a triple net lease wherein the Company is responsible for payment of all real estate taxes, operating costs and utilities. The Company also has an option to buy the property and a first right of refusal during the term of the lease. Annual rental payments are $152 thousand.

In February 2011, the Company entered into a lease for an additional 13.8 thousand square feet in Attleboro, MA. The lease terms have been for one year and have been renewed annually. The current lease expires in February 2019 and the Company believes that this can be extended on similar terms for a year or more. Annual rental payments are $83 thousand.

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.

CPS Technologies Corp. manufactures baseplates for power module manufacturers who mount electronics on the baseplates to form a module which converts DC to AC and steps up and steps down voltage levels. Most baseplates manufactured by CPS require a nickel coating be applied to the baseplates via a chemical plating process, to facilitate soldering of the electronics to the baseplates (“Ni plating”). CPS uses several Ni plating vendors in the U.S. and Europe for this purpose. CPS warranties its baseplates meet the Ni plating specifications required by our customers, and we flow down this requirement to our Ni plating vendors

On January 24, 2018 the Company received a “Claim and Non-Conformance Notification” from one of our European customers relating to the Ni plating on our baseplates. Upon investigation it was determined that one employee of the Ni plating vendor used by CPS had deviated from the prescribed work instruction for Ni plating from mid-September 2017 until mid-January 2018, and the properties of the Ni plating on the baseplates plated by this operator are suspect. Because this issue is limited to the baseplates processed by only one employee, it is believed that fewer than 15% of the baseplates plated during this period were processed incorrectly. The Company’s Ni plating vendor has acknowledged this violation and is committed to correcting the problem.

A non-destructive method of evaluation can be used to determine if a baseplate was Ni plated incorrectly. In the case of affected baseplates, which have not been assembled into modules, it is a straight-forward process for the Ni plating vendor to rework these baseplates; this activity has begun and will be completed during the first calendar quarter of 2018. The larger issue is baseplates that have already been assembled into modules. During this four-month period approximately 15,000 baseplates from this Ni plating vendor were assembled into modules; only a portion of these baseplates are affected. The Ni plating vendor believes that the non-destructive evaluation technique used for the unassembled modules can also be used to screen the assembled modules and determine which modules have baseplates with the affected Ni plating.

In alerting the Company to “non-conformance” the customer stated that it “may incur several additional expenses, costs and consequential damages due to this non-conformity.” The notification went on to say that “the exact total value of such expenses, costs and consequential damages cannot be calculated until the quality issue will be completely solved.” Although the Company expects this issue to be resolved amicably, there is a possibility that this could result in

legal proceedings.

The Company is working closely with its customer and its Ni plating vendor to correct the situation and has informed its insurer of potential damages and the Ni plating vendor has done the same with its insurer. The Company believes that it is possible, that damages will be assessed but it is not possible at this time to quantify the potential financial impact, especially when insurance is considered. No amounts for damages have been recorded in the accompanying financial statements related to this uncertainty.

Other than this potential issue, the Company is not aware of any pending or threatened material litigation.

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 30, 2017, we had approximately 700 shareholders. The high and low closing bid prices of our common stock for each quarter during the years ended December 30, 2017 and December 31, 2016 are shown below.

	2017		2016	
	High	Low	High	Low
1st Quarter	$ 1.96	$ 1.35	$ 2.95	$ 1.49
2nd Quarter	$ 1.59	$ 1.11	$ 2.25	$ 1.45
3rd Quarter	$ 1.35	$ 1.09	$ 1.97	$ 1.28
4th Quarter	$ 1.77	$ 1.05	$ 1.87	$ 1.08

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.

In January 2015 our Common Stock moved from the Over-the-Counter (OTCQB) market to the NASDAQ Capital Markets and has continued to trade under the symbol CPSH.

Item 6. Selected Financial Data

Not applicable

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 transportation, automotive, energy, computing/internet, telecommunications, aerospace, defense and oil and gas end markets.

Our primary material solution is metal matrix composites. We design, manufacture and sell custom metal matrix composite components which improve the performance and reliability of systems in these end markets.

Products we provide include baseplates for motor controllers used in high-speed electric trains, subway cars, wind turbines, and hybrid and electric vehicles. We provide baseplates and housings used in radar, satellite and avionics applications. We provide lids and heatspreaders used with high performance integrated circuits for in internet switches and routers. We provide baseplates and housings used in modules built with Wide Band Gap Semiconductors like SiC and GaN. CPS also assembles housings and packages for hybrid circuits. These housings and packages may include MMC components; they may include components made of more traditional materials such as aluminum, copper-tungsten, etc.

CPS is a fully qualified manufacturer for many of the world’s largest electronics OEMs.

CPS is actively working with customers in end markets other than electronics. An example is CPS’s HybridTech Armor® for use in armoring military and commercial vehicles. In 2008 the Company entered into a cooperative agreement with the Army Research Laboratory to further develop large MMC HybridTech Armor® module panels. Although this program ended in 2015, the Company continues to receive funded orders from the U.S. Army, primarily for ballistic armor associated with the development for future combat vehicles and enhancements to present vehicles. CPS’s HybridTech Armor® offers lighter weight, improved multi-hit capability, and easier attachment to the vehicle compared to alternatives.

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 2017 its top three customers

accounted for 54% of revenue and the remaining 46% of revenue was derived from 72 other customers. In 2016 the top three customers accounted for 49% of revenue and the remaining 51% of revenue was derived from approximately 75 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

Revenue is recognized when the following criteria is met: (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 $2.1 million at December 30, 2017, $742 thousand was located at customers' locations pursuant to consigned inventory agreements. Of the total inventory of $1.97 million at December 31, 2016, $848 thousand was located at customers' locations pursuant to consigned inventory agreements.

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

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 inventory when there has been no activity on a particular part for a twelve month period and there are no pending customer orders.

However, an exception are in cases when a customer requests that the Company maintain inventory sufficient to respond quickly upon receiving a shipment request. Also, 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 manufactured to specification for which there are no customer purchase orders.

In determining inventory cost, the Company uses the first-in, first-out method and states inventory at the lower of cost or net realizable value. 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.

The Company typically buys 'lots' of components for its hermetic packaging products. Often all the components in a lot are not necessary to complete the order. Annually the company reviews this unused material and establishes an obsolescence reserve for the amount it does not expect to use over the next three years.

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 (three of the last four years had operating profits), 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.

At December 30, 2017 the Company's Deferred Tax Asset and other temporary differences will require taxable income of approximately $11 million and reversals of existing temporary differences to fully utilize, assuming an effective corporate tax rate of 21% based on the recently enacted Tax Cuts and Jobs Act. 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.

The Company's policy is to recognize interest and penalties related to income tax matters in income tax expense. As of December 30, 2017 and December 31, 2016, 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 30, 2017 or December 31, 2016 which required accrual or disclosure.

Income tax effects related to share-based compensation that are in excess, or less than, grant-date fair value, less any proceeds received on exercise of stock prices, are recognized.

Results of Operations

Results of Operations for the year 2017 (“2017”) compared with the year 2016 (“2016”):

Total revenue was $14.6 million in 2017, a 5% decrease compared with total revenue of $15.4 million in 2016. This decrease was due primarily to a reduction in the sales of armor products. There were no significant price changes during 2017 compared with 2016.

Gross margin in 2017 totaled $1.7 million or 11% of sales. This compares with $2.2 million, or 14% of sales, generated during 2016. This decline in margin was due primarily to lower revenues.

Selling, general and administrative (SG&A) expenses were $3.6 million during 2017, an increase of 8% compared with SG&A expenses of $3.3 million incurred during 2016. During 2017 the Company incurred approximately $0.2 million in one-time legal and other costs associated with the annual proxy process and $0.2 million associated with the separation of an executive officer, offset by other cost reductions.

The Company generated interest of $11 thousand in 2017. This compares with interest and other income in 2016 of $51 thousand, $40 thousand of which was due to the sale of used equipment in excess of book value.

Primarily as a result of lower volume and higher SG&A spending, as cited above, the Company incurred an operating loss of $2.0 million in 2017, compared with an operating loss of $1.2 million last year.

In 2017 the effective tax rate was 11% and as a result the operating loss of $2.0 million led to a net loss of $1.7 million. This unusually low effective rate was due in large part to the impact of the Tax Cuts and Jobs Act which reduced the corporate statutory rate from 35% to 21%. The effective tax rate in 2016 was 60% in which case the operating loss of $1.2 million resulted in a net loss of $0.5 million.

Significant Fourth Quarter Activity in 2017:

Revenues totaled $3.8 million versus $2.9 million in the last quarter of 2016, representing a 32% increase. This increase was entirely due higher shipments of baseplates. The impact of price changes was insignificant in the quarter compared with the same period in 2016.

Gross margin increased in the Fourth Quarter of 2017 compared with the Fourth Quarter of 2016 from $77 thousand to $563 thousand. This increase was directly associated with the increase in sales volume. There was no significant impact from price changes during the last quarter of 2017 compared with the last quarter of 2016.

SG&A expenses increased from $773 thousand to $959 thousand. This increase was due to the fact that the Company incurred $230 thousand of costs associated with the resignation of an executive officer. All other SG&A costs were down $44 thousand quarter on quarter.

Primarily as a result of higher sales volume, offset in part by the termination costs cited earlier, the Company's operating loss declined from $696 thousand in the Fourth Quarter to $396 thousand in the same quarter of 2016.

The net loss of the last quarter of 2017 was $793 thousand as the impact of the passage of the Tax Cuts and Jobs Act in December 2017, has the effect of creating a tax provision of $400 thousand for the quarter rather than a tax credit, despite a loss from operations. This net loss of $793 thousand compares with a net loss in the Fourth Quarter of 2016 of $454 thousand.

Liquidity and Capital Resources:

The Company's cash and cash equivalents at December 30, 2017 totaled $1.3 million compared with cash and cash equivalents at December 31, 2016 of $3.4 million. This decrease was due to operating losses and, to a lesser extent, an increase in working capital, offset in small part by depreciation in excess of capital expenditures.

Accounts receivable at December 30, 2017 totaled $2.9 million compared with $2.0 million at December 31, 2016. Days Sales Outstanding (DSOs), increased from 61 days at the end of 2016 to 70 days at the end of 2017. Both of these statistics are consistent with historical patterns and do not represent a change in terms of an increase in the aging of receivables.

Inventories totaled $2.1 million at December 30, 2017, compared with inventories of $2.0 million at December 31, 2016. The inventory turnover in 2016 was 5.6 times and 6.7 times for 2017. (both based on a 5 point inventory average).

All consigned inventory is shipped under existing purchase orders and per customers' requests. Of the inventory of $2.1 million at December 30, 2017, $742 thousand was located at customers' locations pursuant to consigned inventory agreements. Of the total inventory of $2.0 million at December 31, 2016, $848 thousand was located at customers' locations pursuant to consigned inventory agreements.

Contractual Obligations

In June 2017, the Company renewed its $1.5 million revolving line of credit line with Santander Bank. The agreement matures at the end of May 2018. The LOC is secured by the accounts receivable and other assets of the Company, has an interest rate of prime plus 100 basis points. Under the terms of the agreement, the Company is required to maintain its operating accounts with Santander Bank. The Company is also subject to certain financial covenants. These include specific earnings levels, targeted current ratios and targeted debt to tangible net worth ratios at the end of subsequent quarters. At December 30, 2017, the Company was in compliance with all existing covenants. Also, at December 30, 2017, the Company had no borrowings under this LOC and its borrowing base at the time would have permitted $1.5 million to have been borrowed.

The financial covenant requirement at the end of Q4, 2017 are shown below, together with the actual ratios achieved:

Covenant	Requirement	Actual
Current Ratio	Minimum of 2.0X	3.8X
Liabilities to Tangible Net Worth	Maximum of 0.5X	0.2X
Minimum Cash Balance	Minimum of $1,300	$1,340
Borrowings under the line of credit*	Maximum of $1,500	None
	*$1,500 could have been borrowed at year end 2017	

In February 2018, the Company signed a lease for the Norton facilities through February 2021. The leased facilities comprise approximately 38 thousand square feet. The lease is a triple net lease wherein the Company is responsible for payment of all real estate taxes, operating costs and utilities. The Company also has an option to buy the property and a first right of refusal during the term of the lease. Annual rental payments are $152 thousand.

In February 2011, the Company entered into a lease for an additional 13.8 thousand square feet in Attleboro, MA. The lease terms have been for one year and have been renewed annually. The current lease expires in February 2019 and the Company believes that this can be extended on similar terms for a year or more. Annual rental payments are $83 thousand.

Management believes that cash flows from operations, existing cash balances and a bank credit line 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.

As of December 30, 2017 the Company had $86 thousand of construction in progress and no outstanding commitments to purchase production equipment. The Company intends to finance production equipment in construction in progress and outstanding commitments under the lease agreement with existing cash balances and funds generated by operations.

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 30, 2017.

Changes in Internal Control over Financial Reporting

There were no material changes in the Company's internal control over financial reporting during fiscal 2017.

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 30, 2017. 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) (2013). Based on this assessment, management concluded that the Company's internal control over financial reporting was effective as of December 30, 2017.

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 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 2018 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 2017 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 2018 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 2017 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 2018 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 2017 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 2018 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 2017 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 2018 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 2017 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 9, 2018

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	Date
/s/ Grant C. Bennett Grant C. Bennett	President and Chief Executive Officer	March 9, 2018
/s/ Ralph M. Norwood Ralph M. Norwood	Chief Financial Officer	March 9, 2018
/s/ Francis J. Hughes, Jr. Francis J. Hughes	Director	March 9, 2018
/s/ Daniel C. Snow Daniel C. Snow	Director	March 9, 2018
/s/ Thomas M. Culligan Thomas M. Culligan	Director	March 9, 2018

CPS TECHNOLOGIES CORPORATION
EXHIBIT INDEX

Exhibit No.	Description
3.1*	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)
3.2*	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.
31.1	Certification Pursuant to Exchange Act Rule 13a-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

* Incorporated herein by reference.

(1) 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

To the Board of Directors and Stockholders of CPS Technologies Corporation

Opinion on the Financial Statements

We have audited the accompanying balance sheets of CPS Technologies Corporation (the "Company") as of December 30, 2017 and December 31, 2016, the related statements of operations, stockholders' equity and cash flows for each of the three years in the three-year period ended December 30, 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 30, 2017 and December 31, 2016, and the results of its operations and its cash flows for each of the three years in the three-year period ended December 30, 2017, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Wolf & Company, P.C.

We have served as the Company's auditor since 2005.

Boston, Massachusetts
March 9, 2018

CPS TECHNOLOGIES CORPORATION
BALANCE SHEETS

	December 30, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	$1,339,572	$3,407,760
Accounts receivable-trade, net	2,943,373	1,959,606
Inventories, net	2,109,513	1,970,961
Prepaid expenses and other current assets	101,086	88,443
Total current assets	6,493,544	7,426,770
Property and equipment:		
Production equipment	9,299,515	9,046,846
Furniture and office equipment	499,679	412,412
Leasehold improvements	891,817	886,582
Total cost	10,691,011	10,345,840
Accumulated depreciation and amortization	(9,287,006)	(8,720,219)
Construction in progress	86,493	158,006
Net property and equipment	1,490,498	1,783,627
Deferred taxes	3,038,666	2,827,349
Total assets	$11,022,708	$12,037,746

(continued)

See accompanying notes to financial statements.

CPS TECHNOLOGIES CORPORATION
BALANCE SHEETS

	December 30, 2017	December 31, 2016
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$946,385	$662,482
Accrued expenses	655,489	623,959
Deferred revenue	100,000	—
Total current liabilities	1,701,874	1,286,441
Commitments & Contingencies (note 4)		
Stockholders' Equity:		
Common stock, $0.01 par value, authorized 20,000,000 shares; issued 13,423,492 shares; outstanding 13,203,436; at December 30, 2017 and December 31, 2016, respectively	134,235	134,235
Additional paid-in capital	35,739,916	35,452,685
Accumulated deficit	(26,036,264)	(24,318,562)
Less cost of 220,056 common shares repurchased at December 30, 2017 and December 31, 2016	(517,053)	(517,053)
Total stockholders' equity	9,320,834	10,751,305
Total liabilities and stockholders' equity	$11,022,708	$12,037,746

See accompanying notes to financial statements.

CPS TECHNOLOGIES CORPORATION
STATEMENTS OF OPERATIONS
FOR THE YEARS ENDED DECEMBER 30, 2017, DECEMBER 31, 2016, AND DECEMBER 26, 2015

	2017	2016	2015
Revenues:			
Product sales	$14,577,183	$15,351,053	$21,719,427
Research and development under cooperative agreement	—	—	42,254

Total revenues	14,577,183	15,351,053	21,761,681
Cost of product sales	12,919,065	13,195,501	17,061,720
Cost of research and development under cooperative agreement	—	—	34,970
Gross margin	1,658,118	2,155,552	4,664,991
Selling, general, and Administrative expenses	3,609,328	3,336,631	4,045,834
Income (loss) from operations	(1,951,210)	(1,181,079)	619,157
Other income	11,476	51,318	5,694
Income (loss) before income tax	(1,939,734)	(1,129,761)	624,851
Income tax provision (benefit)	(222,032)	(676,144)	174,232
Net income (loss)	$(1,717,702)	$(453,617)	$450,619
Net income (loss) per basic common share	$(0.13)	$(0.03)	$0.03
Weighted average number of basic common shares outstanding	13,203,436	13,201,284	13,180,428
Net income (loss) per diluted common share	$(0.13)	$(0.03)	$0.03
Weighted average number of diluted common shares outstanding	13,203,436	13,201,284	13,639,074

See accompanying notes to financial statements.

CPS TECHNOLOGIES CORPORATION
STATEMENTS OF STOCKHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 30, 2017, DECEMBER 31, 2016,
AND DECEMBER 26, 2015

	Common stock					
	Number of shares issued	Par Value	Additional Paid-in capital	Accumulated deficit	Stock repurchased	Stock-holders' equity
Balance at December 27, 2014	13,293,092	$132,931	$34,763,698	$(24,315,564)	$(334,583)	$10,246,482
Share-based compensation expense	—	—	283,507	—	—	283,507
Issuance of common stock pursuant to exercise of stock options	119,200	1,192	171,478	—	—	172,670
Tax benefit from exercise of stock options	—	—	26,347	—	—	26,347
Repurchase of Common stock	—	—	—	—	(172,470)	(172,470)
Net income	—	—	—	450,619	—	450,619
Balance at December 26, 2015	13,412,292	$134,123	$35,245,030	$(23,864,945)	$(507,053)	$11,007,155
Share-based compensation expense	—	—	193,117	—	—	193,117
Issuance of common stock pursuant to exercise of stock options	11,200	112	11,723	—	—	11,835
Tax benefit from exercise of stock options	—	—	2,815	—	—	2,815
Repurchase of Common stock	—	—	—	—	(10,000)	(10,000)
Net (loss)	—	—	—	(453,617)	—	(453,617)
Balance at December 31, 2016	13,423,492	$134,235	$35,452,685	$(24,318,562)	$(517,053)	$10,751,305
Share-based						

compensation expense	—	—	287,231	—	—	287,231
Net (loss)	—	—	—	(1,717,702)	—	(1,717,702)
Balance at December 30, 2017	13,423,492	$134,235	$35,739,916	$(26,036,264)	$(517,053)	$9,320,834

See accompanying notes to financial statements.

CPS TECHNOLOGIES CORPORATION
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 30, 2017, DECEMBER 31, 2016,
AND DECEMBER 26, 2015

	2017	2016	2015
Cash flows from operating activities:			
Net income (loss)	$(1,717,702)	$(453,617)	$450,619
Adjustments to reconcile net income (loss) to cash provided (used) by operating activities:			
Share-based compensation	287,231	193,117	283,507
Depreciation and amortization	566,787	550,761	545,673
Deferred taxes	(211,317)	(673,785)	176,063
Excess tax benefit from stock options exercised	—	(2,815)	(26,347)
Gain on sale of property and equipment	—	(40,000)	—
Changes in operating assets and liabilities:			
Accounts receivable – trade, net	(983,767)	1,612,873	16,712
Inventories	(138,552)	661,483	(103,490)
Prepaid expenses and other current assets	(12,643)	16,318	62,022
Accounts payable	283,903	(960,082)	270,146
Accrued expenses	31,530	(307,957)	(117,700)
Deferred revenue	100,000	—	—
Net cash provided (used) by operating activities	(1,794,530)	596,296	1,557,205
Cash flows from investing activities:			
Purchases of property and equipment	(273,658)	(645,835)	(476,683)
Proceeds from sale of property and equipment	—	40,000	—
Net cash used by investing activities	(273,658)	(605,835)	(476,683)
Cash flows from financing activities:			
Excess tax benefit from stock options exercised	—	2,815	26,347
Proceeds from issuance of common stock	—	11,835	172,670
Repurchase of common stock	—	(10,000)	(172,470)
Net cash provided by financing activities	—	4,650	26,547
Net increase (decrease) in cash and cash equivalents	(2,068,188)	(4,889)	1,107,069
Cash and cash equivalents at beginning of year	3,407,760	3,412,649	2,305,580
Cash and cash equivalents at end of year	$1,339,572	$3,407,760	$3,412,649
Supplemental cash flow information:			
Income taxes paid, net of refund	$436	$436	$12,005
Interest paid	$—	$—	$—

See accompanying notes to financial statements.

CPS Technologies Corporation
Years Ended December 30, 2017, December 31, 2016, and December 26, 2015
Notes to Financial Statements

(1) Nature of Business

CPS Technologies Corporation (the 'Company' or 'CPS') provides advanced material solutions to the transportation, automotive, energy, computing/internet, telecommunications, aerospace, defense and oil and gas end markets.

Our primary material solution is metal matrix composites. We design, manufacture and sell custom metal matrix composite components which improve the performance and reliability of systems in these end markets.

(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, as determined under the first-in, first-out method (FIFO), or net realizable value. A reserve for obsolete inventories 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 30, 2017 and December 31, 2016, the Company believes that there

has been no impairment of its long-lived assets.

(2)(f) Revenue Recognition

The Company recognizes revenue when the following criteria are met: (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. Amounts collected before these criteria are met are recorded as deferred revenue.

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, 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, recently expired March 31, 2015, which was 95% funded by the US Department of Defense and 5% funded by CPS.

Revenues from this Cooperative Agreement were recognized proportionally as costs were incurred. We were 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.

(2)(g) Research and Development Costs

In 2015, costs incurred related to funding under the Cooperative Agreement totaled $42 thousand of which 100% was reimbursed by the U.S. Army and was recorded as revenue. This revenue of $42 thousand resulted in a gross margin of $8 thousand. In 2016 and 2017, no costs were incurred as the contract expired on March 31, 2015.

(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 (three of the last five years had operating profits), 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 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 30 2017 and December 31, 2016, 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 30, 2017 or December 31, 2016 which required accrual or disclosure.

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

Basic net income (loss) per common share is calculated by dividing net income (loss) 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) Reclassification

Certain amounts in prior year’s financial statements have been reclassified to conform to the current year’s presentation.

(2)(k) Recent Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers. This update provides a comprehensive new revenue recognition model that requires revenue to be recognized in a manner to depict the transfer of goods or services to a customer at an amount that reflects the consideration expected to be received in exchange for those goods or services. In August 2015, the FASB modified ASU 2014-09 to be effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period and allows for either full retrospective or modified retrospective application. This standard will be effective for the Company for fiscal year 2018. The Company has selected to utilize the modified retrospective approach. Management does not expect that the implementation of this accounting standard will have a material impact on the Company’s financial statements.

In February 2016 the FASB issued ASU No. 2016-02, Leases, which requires a lessee

to recognize lease liabilities for the lessee’s obligation to make lease payments arising from a lease, measured on a discounted basis, and right-of-use assets, representing the lessee’s right to use, or control the use of, specified assets for the lease term. Additionally, the new guidance has simplified accounting for sale and leaseback transactions. Lessor accounting is largely unchanged. The ASU is effective for fiscal years beginning after December 15, 2018. It is expected that assets and liabilities will increase based upon the present value of remaining lease payments for leases in place at the adoption date and such amounts may be material to the financial statements depending on terms of any lease renewals and other operating leases entered into.

(2)(l) 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 years 2017 and 2015 consisted of 52 weeks while 2016 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.

In the first quarter of fiscal 2017, the Company prospectively adopted the provisions of ASU 2016-09, and, as such, the cash flow from tax benefits that are a result of tax deductions in excess of the compensation cost recognized for those options (excess tax benefits) is classified with other income tax cash flows as an operating activity for the year ended December 30, 2017. Tax deductions from certain stock option exercises are treated as being realized when they reduce tax expense and taxes payable in accordance with relevant tax law.

(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 and the sale of structural components to the oil and gas industry uses the same equipment and personnel as does the Company's electronics business described above and does not represent a separate business segment.

(3) Inventories

As of December 30, 2017 and December 31, 2016 inventories consisted of the following:

	2017	2016
Raw materials	$478,567	$398,994
Work in process	1,003,285	1,089,496
Finished goods	1,014,023	1,032,971
Gross Inventory	2,495,875	2,521,461
Reserve for obsolescence	(386,362)	(550,500)
Total	$2,109,513	$1,970,961

(4) Commitments & Contingencies

Operating Lease Obligations

In February 2018, the Company signed a lease for the Norton facilities through February 2021. The leased facilities comprise approximately 38 thousand square feet. The lease is a triple net lease wherein the Company is responsible for payment of all real estate taxes, operating costs and utilities. The Company also has an option to buy the property and a first right of refusal during the term of the lease. Annual rental payments are $152 thousand.

In February 2011, the Company entered into a lease for an additional 13.8 thousand square feet in Attleboro, MA. The lease terms have been for one year and have been renewed annually. The current lease expires in February 2019 and the Company believes that this can be extended on similar terms for a year or more. Annual rental payments are $83 thousand.

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

Fiscal year:	
2018	$235,200
2019	166,200
2020	152,400
2021	25,400
	$579,200

Loss contingency

The Company manufactures baseplates for power module manufacturers. Most baseplates manufactured by CPS require a nickel coating be applied to the baseplate (“Ni plating”). CPS warranties its baseplates meet the Ni plating specifications required by our customers, and we flow this requirement to our Ni plating vendors.

On January 24, 2018 the Company received a “Claim and Non-Conformance Notification” from one of its European customers relating to the Ni plating on our baseplates. Upon investigation, it was determined that one employee of the Ni plating vendor used by CPS had deviated from the prescribed work instruction for Ni plating from mid-September 2017 until mid-January 2018. The Company's Ni plating vendor has acknowledged this violation and is committed to correcting the problem.

In the case of affected baseplates, which have not been assembled into modules, it is a straight-forward process for the Ni plating vendor to rework these baseplates. The larger issue is baseplates that have already been assembled into modules. During this four-month period approximately 15,000 baseplates from this Ni plating vendor were assembled into modules; only a small portion of these baseplates are affected.

In alerting the Company to “non-conformance” the customer stated that it “may incur several additional expenses, costs and consequential damages due to this non-conformity.” The notification went on to say that “the exact total value of such expenses, costs and consequential damages cannot be calculated until the quality issue will be completely solved.” Although the Company expects this issue to be resolved amicably, there is a possibility that this could result in legal proceedings.

The Company is working closely with its customer and its Ni plating vendor to correct the situation and has informed its insurer of potential claims and the Ni plating vendor has done the same with its insurer. The Company believes that it is possible that damages will be assessed but it is not possible at this time to quantify the potential financial impact,

especially when insurance is considered. No amounts for damages have been recorded in the accompanying financial statements related to this situation.

(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. Some outstanding options are nonstatutory stock options; some are incentive stock options. All options granted are 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 immediately on date of grant.

Under the 2009 Plan a total of 2,856,100 shares of common stock are available for issuance, of which 1,189,195 shares remain available for grant as of December 30, 2017.

As of December 30, 2017, the 2009 Plan is the only stock option plan from which awards can be made as all other option plans have expired. As of December 30, 2017 there are 8,000 options outstanding under the 1999 Plan.

A summary of stock option activity for all the above plans as of December 30, 2017 and changes during the year then ended is presented below:

	Shares	Weighted Average Exercise Price	Weighted Remaining Contractual Life (years)	Aggregate Intrinsic Value
Outstanding at beginning of year	1,557,905	$1.79		
Granted	167,500	$1.58		
Exercised	—	—		
Forfeited	(50,500)	$1.78		
Expired	(8,000)	$2.17		
Outstanding at end of year	1,666,905	$1.77	5.2	$266,667
Options exercisable at year-end	1,230,905	$1.73	4.3	$207,455

No options were exercised during fiscal 2017. The total intrinsic value of options exercised during fiscal years 2016 and 2015 was $19,592 and $141,520, respectively.

Cash received from option exercises under all share-based payment arrangements was $11,836, and $172,670, for the years ended December 31, 2016 and December 26, 2015, 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 2017 and 2016:

2017	2016

Risk-free interest rate	2.08-2.23%	1.39-1.53%
Expected life in years	6.1	6.3
Expected volatility	54%	53%
Expected dividend yield	0	0
Weighted average fair value of grants	$.84	$.85

All options are granted with an exercise price equal to the fair market value of the underlying common stock on the date of grant.

The Company recognized $287,231, $193,117 and $283,507 as compensation expense related to total stock options outstanding in 2017, 2016 and 2015, respectively. As of December 30, 2017, there was $282,389 of total unrecognized compensation cost related to nonvested share-based compensation arrangements granted under the plan; that cost is expected to be recognized over a weighted average period of 3.2 years.

(6) Accrued Expenses

Accrued expenses at December 30, 2017 and December 31, 2016 consist of the following:

	2017	2016
Accrued legal and accounting	$78,925	$87,690
Accrued payroll and related	455,518	456,063
Accrued other	121,046	80,206
	$655,489	$623,959

(7) Revolving Line of Credit

In June 2017, the Company renewed its $1.5 million revolving line of credit line with Santander Bank. The agreement matures at the end of May 2018. The LOC is secured by the accounts receivable and other assets of the Company and has an interest rate of prime plus 100 basis points. Under the terms of the agreement, the Company is required to maintain its operating accounts with Santander Bank. The Company is also subject to certain financial covenants. These include specific earnings levels, targeted current ratios and targeted debt to tangible net worth ratios at the end of subsequent quarters. At December 30, 2017, the Company was in compliance with all existing covenants. Also, at December 30, 2017, the Company had no borrowings under this LOC and its borrowing base at the time would have permitted $1.5 million to have been borrowed.

(8) Income Taxes

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

	2017	2016	2015
Current			
Federal	$(6,529)	$—	$(2,286)
State	(4,186)	456	456
Current income tax provision (benefit):	(10,715)	456	(1,830)
Deferred:			
United States:			
Federal	(246,458)	(526,922)	168,371
State	35,141	(149,678)	7,691

Deferred income tax provision (benefit), net	(211,317)	(676,600)	176,062
Total	$(222,032)	$(676,144)	$174,232

Deferred tax assets as of December 30, 2017 and December 31, 2016 are as follows:

	December 30, 2017	December 31, 2016
Deferred Tax Assets:		
Net operating loss carryforwards	$634,000	$363,000
Stock compensation	478,000	628,000
Credit carryforwards	1,494,000	1,265,000
Inventory	235,000	369,000
Accrued liabilities	20,000	27,000
Depreciation	175,000	171,000
Other	3,000	4,000
Gross deferred tax assets	3,039,000	2,827,000
Valuation allowance	—	—
Net deferred tax assets	$3,039,000	$2,827,000

At December 30, 2017 and December 31, 2016 the Company had net operating loss carryforwards of approximately $2,367,000 and $923,000, respectively, available to offset future income for U.S. Federal income tax purposes.

On December 22, 2017, the President of the United States signed into law the Tax Cuts and Jobs Act (“the Act”). The Act makes significant changes to the U.S. tax code including the following:

- Reduction of the corporate federal income tax rate from 35% to 21%;
- Repeal of the domestic manufacturing deduction;
- Repeal of the corporate alternative minimum tax;
- Acceleration of business asset expensing.

Due to the Act, U.S. deferred tax assets and liabilities were re-measured from 35% to 21% resulting in an additional expense of $680,000 in the fourth quarter of 2017.

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. 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.

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

2017	2016	2015

Balance at beginning of year	$2,827,349	$2,150,749	$2,300,465
Deferred tax (expense) benefit	211,317	676,600	(149,716)
Balance at end of year	$3,038,666	$2,827,349	$ 2, 150,749

Income tax 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:

	2017	2016	2015
Tax at statutory rate	$(660,000)	$(384,000)	$212,000
State tax, net of federal benefit	450	450	450
Net operating loss and credit carryforwards	(282,450)	(249,450)	(34,450)
Effect of tax cuts and jobs act	628,000	—	—
Other	92,000	(43,000)	(4,000)
Total	$(222,000)	$(676,000)	$174,000

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 2014 through 2017.

(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 2017 and 2016 the Company did not offer a 401k match. The Company recognized $120,000 of expense in 2015 for the Company match.

(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, cash equivalents 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 2017, 2016 and 2015 were as follows:

	Percent of Total Revenues		
Significant Customer	2017	2016	2015
A	28%	19%	27%
B	14%	19%	23%
C	9%	10%	10%
D	13%	<10%	<10%

As of December 30, 2017, the Company had trade accounts receivable due from these four customers that accounted for 68% of total trade accounts receivable as of that date. No other customer balances constitute 10% or more of accounts receivable at December 30, 2017. 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 2017, 2016, and 2015:

	Percent of Total Revenues		
Country	2017	2016	2015
United States of America	30%	29%	21%
Germany	42%	38%	50%
Other	28%	33%	29%

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 70%, 71% and 79% of total revenue in 2017, 2016 and 2015, 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 (loss) per share calculations.

	For the years ended		
	Dec. 30, 2017	Dec. 31, 2016	Dec. 26, 2015
Basic Computation:			
Numerator:			
Net income (loss)	$(1,717,702)	$(453,617)	$450,619
Denominator:			
Weighted average common shares outstanding	13,203,436	13,201,284	13,180,428
Basic net income (loss) per share	$(0.13)	$(0.03)	$0.03
Diluted Computation:			

Numerator:			
Net income (loss)	$(1,717,702)	$(453,617)	$450,619
Denominator:			
Weighted average common shares outstanding	13,203,436	13,201,284	13,180,428
Stock options	—	—	458,646
Total shares	13,203,436	13,201,284	13,639,074
Diluted net income (loss) per share	$(0.13)	$(0.03)	$0.03

The total number of anti-dilutive shares at December 30, 2017 and December 31, 2016 was 1,450,105 and 1,221,105, respectively.

(12) Allowance for Doubtful Accounts

Activity in the allowance for doubtful account was as follows for fiscal years 2017, 2016, and 2015:

	2017	2016	2015
Beginning balance	$10,000	$10,000	$10,000
Provision for bad debt	—	—	—
Charge-offs	—	—	—
Ending balance	$10,000	$10,000	$10,000