MoSys, Inc.
Form 424B5
July 03, 2017

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Filed Pursuant to Rule 424(b)(5)
Registration Statement No. 333-197991

Prospectus Supplement
(To Prospectus dated September 9, 2014)

1,325,000 Shares

MOSYS, INC.

Common Stock

We are offering shares of our common stock, par value $0.001 per share, pursuant to this prospectus supplement and the accompanying prospectus. In a concurrent private placement, we are selling to the purchasers of shares of our Common Stock in this offering warrants to purchase an aggregate of 662,500 shares of our Common Stock (the "Warrants"). The Warrants and the shares of our Common Stock issuable upon the exercise of the Warrants are not being registered under the Securities Act of 1933, as amended (the "Securities Act"), at this time, are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder.

Our common stock is listed on The NASDAQ Capital Market under the symbol "MOSY." The last reported sale price of our common stock on June 29, 2017 was $2.32 per share.

As of the date of this prospectus supplement, the aggregate market value of our outstanding common stock held by non-affiliates was approximately $15 million, based on 6,676,770 shares of outstanding common stock, of which approximately 6,494,187 shares were held by non-affiliates, and a price of $2.32 per share, which was the last reported sale price of our common stock on The NASDAQ Capital Market on June 29, 2017. As of the date of this prospectus, we have sold no securities pursuant to General Instruction I.B.6. of Form S-3 during the prior 12 calendar month period that ends on, and includes, the date of this prospectus.

Investing in our common stock involves risk. See "Risk Factors" beginning on page S-8 of this prospectus supplement.

	Per Share	Total
Public offering price	$ 1.70	$ 2,252,500
Placement agent fees(1)	$ 0.102	$ 135,150
Proceeds, before expenses, to us	$ 1.598	$ 2,117,350

(1) In addition, we have agreed to reimburse Roth Capital Partners, LLC for certain offering-related expenses. See "Plan of Distribution."

We have retained Roth Capital Partners, LLC to act as our sole placement agent in connection with this offering. The placement agent has agreed to use its reasonable best efforts to place the securities offered by this prospectus supplement. We have agreed to pay the placement agent the fee set forth in the table above.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

Roth Capital Partners

The date of this prospectus is June 30, 2017

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PROSPECTUS SUPPLEMENT

PROSPECTUS

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the terms of the offering of common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part is the accompanying prospectus, which provides more general information. To the extent there is a conflict between the information contained in this prospectus supplement, on one hand, and the information contained in the accompanying prospectus or any document incorporated by reference therein, on the other hand, you should rely on the information in this prospectus supplement.

It is important for you to read and consider all information contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference in the prospectus in making your investment decision. You should also read and consider the information in the documents to which we have referred in "Where You Can Find More Information" and "Incorporation by Reference," below.

You should not assume that the information contained in this prospectus supplement or the accompanying prospectus is accurate as of any date other than their respective dates, or that the information contained in any document incorporated by reference in this prospectus is accurate as of any date other than the date on which that document was filed with the Securities and Exchange Commission, or SEC.

We and the placement agent are not making an offer to sell the common stock in jurisdictions where the offer or sale is not permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offer and sale of our common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about and observe any restrictions relating to the offering of the common stock and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute an offer of, or an invitation to purchase, any shares of common stock in any jurisdiction in which such offer or invitation would be unlawful.

You should rely only on the information contained in the prospectus supplement, the accompanying prospectus and the documents we incorporate by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with information that is different. We are offering our common stock only in jurisdictions where such offers are permitted. The information contained in this prospectus supplement and the accompanying prospectus is accurate only as of their respective dates, regardless of the time of delivery of this prospectus supplement, or of any sale of our common stock.

In this prospectus supplement, "MoSys," "we," "us," and "our" refer to MoSys, Inc. and our subsidiaries on a consolidated basis.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information related to our business. Since it is a summary, this section may not contain all the information that you should consider before investing in our common stock. You should carefully read the entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference in each one, including the "Risk Factors" section.

Our Business

Overview

MoSys, Inc., together with its subsidiaries ("MoSys," the "Company," "we," "our" or "us"), is a fabless semiconductor company focused on the development and sale of integrated circuits, or ICs, for the high-speed networking, communications, storage and data center markets. Our solutions deliver time-to-market, performance, power, area and economic benefits for system original equipment manufacturers, or OEMs. We have developed two families of ICs under the Bandwidth Engine® and LineSpeed product names. Bandwidth Engine ICs combine our proprietary 1T-SRAM® high-density embedded memory, integrated macro functions and high-speed serial interface, or SerDes, I/O, with our intelligent access technology and a highly efficient interface protocol. The LineSpeed IC product line, which was announced in March 2013, is comprised of non-memory, high-speed SerDes I/O devices with clock data recovery, gearbox and retimer functionality, which convert lanes of data received on line cards or by optical modules into different configurations and/or ensure signal integrity. Historically, our primary business was the design, development, marketing, sale and support of differentiated intellectual property, or IP, including embedded memory and high-speed parallel and SerDes I/O used in advanced systems-on-chips, or SoCs. Currently, we are focused on developing differentiated IP-rich IC products and are dedicating all our research and development, marketing and sales budget to these IC products.

Our future success and ability to achieve and maintain profitability are dependent on the marketing and sales of our IC products into networking, communications and other markets requiring high-bandwidth memory access.

We incurred a net loss of $4.4 million for the quarter ended March 31, 2017 and had an accumulated deficit of $218.4 million as of March 31, 2017. In addition, we incurred net losses of approximately $32.0 million and $31.5 million for the years ended December 31, 2016 and 2015, respectively. These and prior year losses have resulted in significant negative cash flows for almost a decade and have required us to raise substantial amounts of additional capital during this period. To date, we have primarily financed our operations through multiple offerings of common stock to investors and affiliates, as well as asset sale transactions. In March 2016, we entered into a 10% Senior Secured Convertible Note Purchase Agreement with the purchasers of $8.0 million principal amount of 10% Senior Secured Convertible Notes due August 15, 2018 (the "Notes"), at par, in a private placement transaction. The Notes bear interest at the annual rate of 10%. Accrued interest is payable semi-annually in cash or in-kind through the issuance of identical new Notes, or with a combination of the two, at our option. Since issuance of the Notes, we have made the interest payments in-kind through the issuance of additional notes totaling approximately $0.8 million. Further, the Notes restrict our ability to incur any indebtedness for borrowed money, unless such indebtedness by its terms is expressly subordinated to the Notes in right of payment and to the security interest of the Note holder(s) in respect to the priority and enforcement of any security interest in our property securing such new debt; provided that the Note holder(s) security interest and cash payment rights under the Notes shall be subordinate to a maximum of $5 million of indebtedness for a secured accounts receivable line of credit facility under certain conditions.

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We expect to continue to incur operating losses for the foreseeable future as we secure customers for and continue to invest in the commercialization of our IC products. We will need to increase revenues substantially beyond levels that we have attained in the past in order to generate sustainable operating profit and sufficient cash flows to continue doing business without raising additional capital from time to time. As a result of our expected operating losses and cash burn for the foreseeable future, recurring losses from operations, and the need to repay the Notes and accrued interest in 2018, if we are unable to raise sufficient capital through additional debt or equity arrangements, there will be uncertainty regarding our ability to maintain liquidity sufficient to operate our business effectively, which raises substantial doubt as to our ability to continue as a going concern within one year from the date of issuance of this Prospectus Supplement. There can be no assurance that such additional capital, whether in the form of debt or equity financing, will be sufficient or available and, if available, that such capital will be offered on terms and conditions acceptable to us. In April 2017, we committed to effect a reduction in our workforce and associated operating expenses, net loss and cash burn as part of our efforts to sustain our business. We will primarily focus our resources on producing and selling our existing products, and will substantially curtail new product development. If we are unsuccessful in these efforts, we will need to implement additional cost reduction strategies, which could further affect our near- and long-term business plan. These efforts may include, but are not limited to, further reducing headcount and curtailing business activities.

Our Strategy

Our primary business objective is to be an IP-rich fabless semiconductor company offering ICs that deliver unparalleled bandwidth performance for next generation networking systems.

Our Products

Bandwidth Engine

The Bandwidth Engine is a memory-dominated IC that has been designed to be a high-performance companion IC to packet processors. While the Bandwidth Engine primarily functions as a memory device with a high-performance and high-efficiency interface, it also can accelerate certain processing operations by serving as a co-processor element. Our Bandwidth Engine ICs combine: (1) our proprietary high-density, high-speed, low latency embedded memory, (2) our high-speed serial interface technology, or SerDes, (3) an open-standard interface protocol and (4) intelligent access technology. We believe an IC combining our 1T-SRAM memory and serial I/O with logic and other intelligence functions provides a system-level solution and significantly improves overall system performance at lower cost, size and power consumption. Our Bandwidth Engine ICs can provide up to and over 4.5 billion memory accesses per second, which is more than twice the performance of current memory-based solutions. They also can enable system designers to significantly narrow the gap between processor and memory IC performance. Customers that design Bandwidth Engine ICs onto the line cards in their networking systems will re-architect their systems at the line-card level and use our product to replace traditional memory solutions. When compared with existing commercially available solutions, our Bandwidth Engine ICs may:

provide up to four times the performance;

reduce power by approximately 50%;

reduce cost by greater than 50%; and

result in a dramatic reduction in IC pin counts on the line card.

Our first generation Bandwidth Engine IC products contain 576 megabytes, or MB, of memory and use a serial I/O with up to 16 lanes operating at up to 10.3 Gbps per lane. Variations of this IC can have up to two interface ports, with up to eight serial receiver and eight serial transmitter lanes per

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port for a total of 16 lanes of 10.3 Gbps SerDes interface. These ICs include an ALU, which can perform read-modify-write operations. We have been shipping our initial Bandwidth Engine products since 2012.

Our second generation Bandwidth Engine IC products contain 576 MB of memory and use serial I/O with up to 16 lanes operating at up to 15 Gbps per lane. In addition to a speed improvement of up to 50%, the architecture will enable several family member parts with added specialized features. To date, we have announced three unique devices in this product family:

- MSR620 with burst features optimized for oversubscription buffer applications;
- MSR720 with a write cache and memory coherency capability that allows for deterministic look-ups optimized for state and queue type applications; and
- MSR820 with increased intelligence for lookup, metering and statistics applications by adding dual counters, atomic and extensive metering functions.

We have been shipping our Bandwidth Engine 2 IC products since 2013.

Our third generation Bandwidth Engine IC products contain 1152 MB of memory and use serial I/O with up to 16 lanes operating at up to 30 Gbps per lane. Bandwidth Engine 3 targets support for packet-processing applications with up to five billion memory single word accesses per second, as well as burst mode to enable full duplex buffering up to 400Gbps for ingress, egress and oversubscription applications. To date, we have announced three unique devices in this product family:

- MSR630 enables high rate lookup or high-performance buffer capabilities; and
- MSR830 offers additional offload capabilities for functions such as statistics and metering to increase performance and add features for next-generation networking and communications equipment; and
- MSRZ30 builds upon the capabilities and performance of the MSR830, with data rates, interface protocol and data structures that are optimized for the EZchip NPS-400 network processing unit, or NPU, and can increase memory bandwidth by up to 50%.

We commenced sampling of these products in the first quarter of 2016.

The devices provide benefits of size, power, pin count and cost savings to our customers. We do not anticipate significant revenues from these products until 2019 or later.

Programmable Search Engine

We brought our Programmable Search Engine, or PSE, IC products to market in early 2016 to further leverage our proven serial interface technology and high-density integrated memory with the processor engine architecture to enable high-speed customizable search, security, and data analysis functions for networking, security, and data center applications. Our PSE architecture features 32 search-optimized processor engines, data flow schedulers, and over a terabit of internal access bandwidth. The device leverages our GCI technology and high-density integrated memory (1152 Mb of 1T-SRAM® embedded memory). The PSE device's 32 processor elements have direct access to integrated table memory through an internal interconnect and scheduler architecture. To date, we have not sold the PSE in significant quantities.

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LineSpeed

To date, we have announced four unique devices in this product family:

MSH320, a 100Gbps Gearbox with RS-FEC: For adapting 10x10 to 4x25 from 100Gbps optical standards to a host ASIC, MAC/Framer, NPU or FPGA with 10x10G interfaces. The MSH320 includes an integrated Reed-Solomon forward error correction, or RS-FEC, option to enable systems to also support new electrical and optical standards. The device also includes a 10x10Gbps retimer to allow seamless support of 10 and 40Gbps interfaces;

MSH225, a 10 Lane Full-Duplex Retimer: For high-density retiming applications where the line rates may be up to 28Gbps per lane and connect to host ASIC, framer, NPU or FPGA ICs equipped with 25Gbps interfaces. Each one of the 20 total independent lanes can be configured to support 10, 25, 40 or 100Gbps standards. The MSH225 integrates optional 100Gbps RS-FEC capability and includes a unique redundant link mode feature to support redundancy, scaling or monitoring features;

MSH322, a 100Gbps Multi-Link Gearbox for Line Cards for support of high-density, independent 10GE and 40GE interfaces multiplexed into a 100GE (4x25Gbps) host interface, while supporting the latest optical industry standards. The device enables line cards with high-density switches based on 25Gbps interfaces to support two times the density of 10 and 40Gbps ports; and

MSH321, a derivative Multi-Link Gearbox built into a highly compact package and optimized layout to support the MLG function in module and compact daughter card applications.

To date, less than 10% of our design wins claimed are for our LineSpeed products, and we expect these customers to take a minimum of 12 to 18 months to commence production. We do not have adequate capital to support production of the MHS321 and MSH322 devices, as we would need to incur significant mask fabrication and related expenditures.

IP Licensing and Distribution

Historically, we have offered our memory and I/O technologies on a worldwide basis to semiconductor companies, electronic product manufacturers, foundries, intellectual property companies and design companies through product development, technology licensing and joint marketing relationships. We licensed our IP technology to semiconductor companies who incorporated our technology into ICs that they sold to their customers. As a result of the change in our corporate strategy, since early 2012, our IP licensing activities have been limited, and we expect this to continue. However, during 2016, 24% of our total revenues were generated from licensing and royalties related to our existing licensing arrangements, as we continued to perform and deliver under outstanding license agreements and collect royalties from 1T- SRAM licensees. To date, we have completed our performance obligations under our existing licensing agreements, and we expect licensing and royalty revenues to be minimal in future years.

Available Information

We were founded in 1991 and reincorporated in Delaware in September 2000. Our website address is www.mosys.com. The information in our website is not incorporated by reference into this report. Through a link on the Investor section of our website, we make available our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after they are filed with, or furnished to, the Securities and Exchange Commission, or SEC. You can also read and obtain copies of any materials we file with the

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SEC, at the SEC's Public Reference Room at 450 Fifth Street, NW, Washington, DC 20549. You can obtain additional information about the operation of the Public Reference Room by calling the SEC at 1.800.SEC.0330. In addition, the SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including us. The information contained on the SEC's website is expressly not incorporated by reference into this prospectus supplement, other than documents that we file with the SEC that are incorporated by reference in this prospectus supplement.

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THE OFFERING

Common stock offered by MoSys, Inc.	1,325,000 shares
Common stock to be outstanding after this offering	8,001,770 shares
Use of proceeds	We estimate that the net proceeds from the sale of the shares of our common stock in this offering will be approximately $2 million, after deducting placement agent commissions and expense reimbursement and our estimated expenses related to this offering. We intend to use all the net proceeds we receive from our sale of shares in this offering for general corporate purposes. See "Use of Proceeds" below.
NASDAQ Global Market symbol	MOSY
Risk Factors	See "Risk Factors" beginning on page S-8 for a discussion of the factors you should consider before deciding to invest in shares of our common stock.
Transfer agent and registrar	Wells Fargo Bank, N.A.

The number of shares of our common stock to be outstanding after this offering is based upon 6,676,770 shares outstanding as of May 31, 2017. This number does not include:

- 972,859 shares of common stock issuable upon conversion 10% Subordinate Senior Secured Convertible Notes due August 15, 2018 (the "Notes");
- 206,364 shares of common stock issuable upon exercise of outstanding exercisable stock options with a weighted average exercise price of approximately $21.1364 per share;
- 144,479 shares of common stock issuable upon exercise of outstanding stock options that are not exercisable;
- 56,885 shares of common stock issuable upon vesting of restricted stock units;
- 373,256 shares of common stock available for future issuance under our equity incentive plans;
- 146,712 shares of common stock available for sale under our employee stock purchase plan; and
- 662,500 shares of common stock issuable upon exercise of the Warrants being sold in a concurrent private placement transaction.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements in this prospectus supplement or the accompanying prospectus constitute forward-looking statements. These statements involve known and unknown risks, uncertainties, and other factors that may cause our or our industry's actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by such forward-looking statements. These factors include, among others, those factors incorporated by reference under "Risk Factors" below.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," or "continue" or similar terms.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Our actual results could differ materially from those expressed or implied by these forward-looking statements as a result of various factors, including the risk factors under the heading "Risk Factors" below and a variety of other factors, including, without limitation, statements about our future business operations and results, the market for our technology, our strategy and competition.

Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of these statements. We undertake no obligation to update or revise any of the forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. In light of these risks, uncertainties and assumptions, the forward-looking events discussed or incorporated by reference in this prospectus supplement or the accompanying prospectus may not occur.

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RISK FACTORS

An investment in our common stock is risky. Prior to making a decision about investing in our common stock, you should carefully consider the risks discussed below, together with all of the other information contained in this prospectus supplement and the accompanying prospectus, or otherwise incorporated by reference in this prospectus supplement and the accompanying prospectus. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of the risks or uncertainties described below or in our filings with the SEC or any such additional risks and uncertainties actually occur, our business, results of operations, cash flows and financial condition could be materially and adversely affected. In that case, the trading price of our common stock could decline, and you might lose all or part of your investment.

We have a history of losses and we will need to raise additional capital in the future and our inability to do so may adversely impact our ability to continue as a going concern.

Our consolidated financial statements have been prepared on a going concern basis that assumes we will be able to realize our assets and discharge our liabilities in the normal course of business for the foreseeable future. In the first quarter of 2017 ended March 31, 2017, we recorded an operating loss of $4.2 million and an accumulated deficit of $218 million. We recorded an operating loss of approximately $31 million for the year ended December 31, 2016 and we ended the period with an accumulated deficit of approximately $214 million. In addition, we recorded operating losses of approximately $31 million and $33 million for the years ended December 31, 2015 and 2014, respectively. These losses have resulted in significant negative cash flows from operations for more than a decade and have required us to raise substantial amounts of additional capital during this period. We expect to continue to incur operating losses for the foreseeable future as we secure customers for and continue to invest in the commercialization of our IC products. Due to the strong commitment of our resources to research and development and expansion of our product offerings to customers, we will need to increase revenues substantially beyond levels that we have attained in the past in order to generate sustainable operating profit and sufficient cash flows to continue doing business without raising additional capital from time to time. Given our history of fluctuating revenues and operating losses, the expected reduction in royalty and licensing revenues and challenges we face in securing customers for our IC products, we cannot be certain that we will be able to achieve profitability on either a quarterly or annual basis in the future. The possibility that we will not be able to meet our obligations as and when they become due over the next twelve months raises substantial doubt about our ability to continue as a going concern.

Accordingly, we have been pursuing, and will continue to pursue, the implementation of certain cost reduction strategies. Additionally, we are seeking additional financing and evaluating financing alternatives in order to meet our cash requirements for the next 12 months. We may not be able to obtain additional financing, as needed, on acceptable terms, or at all, which may require us to further reduce our operating costs and other expenditures, including additional reductions of personnel and capital expenditures. Alternatively, or in addition to such potential measures, we may elect to implement other cost reduction actions as we may determine are necessary and in our best interests, including the possible sale or cessation of certain of our business segments. Any such actions undertaken might limit our opportunities to realize plans for revenue growth, and we might not be able to reduce our costs in amounts sufficient to achieve break-even or profitable operations. If we issue additional equity or convertible debt securities to raise funds, the ownership percentage of our existing stockholders would be reduced and they may experience significant dilution. New investors may demand rights, preferences or privileges senior to those of existing holders of our common stock. If we are not successful in these actions, we may be forced to cease operations.

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Our auditor has expressed substantial doubt about our ability to continue as a going concern and, absent additional financing, we may be unable to remain a going concern.

In light of our recurring losses, accumulated deficit and negative cash flow, as described in the notes to our consolidated financial statements, the report of our independent registered public accounting firm on our financial statements for the year ended December 31, 2016 contains an explanatory paragraph raising substantial doubt about our ability to continue as a going concern. Our consolidated financial statements do not include any adjustments that may be necessary in the event we are unable to continue as a going concern. If we do not raise enough additional capital sufficient to allow for the removal of this going concern uncertainty, we will need to significantly modify our operational plans for us to continue as a going concern.

Our failure to raise additional capital or generate the significant capital necessary to expand our operations and invest in the new products could reduce our ability to compete and could harm our business.

We intend to continue spending substantial amounts to grow our business. In March 2016, we issued $8 million aggregate principal amount of 10% Subordinate Senior Secured Convertible Notes due August 15, 2018 (the Notes). The Note principal is convertible into our common stock, as well as the interest on the Notes, as we have the option of paying the interest in-kind by converting such interest into additional note principal. In addition, the Notes also include limited anti-dilution protection, such that the conversion price will be reset to a lower conversion price in some situations. As a result, our stockholders may experience significant dilution of these Notes and any additional paid-in-kind principal are converted into our common stock and the conversion price is reset. We will still need to obtain additional financing to pursue our business strategy, develop new products, respond to competition and market opportunities and acquire complementary businesses or technologies. There can be no assurance that such additional capital, whether in the form of debt or equity financing, will be sufficient or available and, if available, that such capital will be offered on terms and conditions acceptable to us. We are exploring various alternatives, and expect to implement cost reductions to successfully sustain the business. If we are unsuccessful in these efforts, we will need to implement significant cost reduction strategies that could affect our near- and long-term business plan. These efforts may include, but are not limited to reducing headcount and curtailing business activities, especially around new product development.

If we were to raise additional capital through sales of our equity securities, our stockholders would suffer dilution of their equity ownership. If we engage in a subsequent debt financing, we may be required to accept terms that restrict our ability to incur additional indebtedness, prohibit us from paying dividends, repurchasing our stock or making investments, and force us to maintain specified liquidity or other ratios, any of which could harm our business, operating results and financial condition. If we need additional capital and cannot raise it on acceptable terms, we may not be able to, among other things:

Develop or enhance our products;

Continue to expand our product development and sales and marketing organizations;

Acquire complementary technologies, products or businesses;

Expand operations, in the United States or internationally;

Hire, train and retain employees; or

Respond to competitive pressures or unanticipated working capital requirements.

Our failure to do any of these things could seriously harm our ability to execute our business strategy and may force us to curtail our research and development plans or existing operations.

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We currently lack the funds to repay the convertible notes due in August 2018.

In March 2016, we entered into a 10% Senior Secured Convertible Note Purchase Agreement with the purchasers of the Notes. Accrued interest is payable semi-annually in cash or in kind through the issuance of identical new Notes, or with a combination of the two, at our option. Through February 2017, we have made the interest payments in-kind through the issuance of additional notes totaling approximately $765,000. The notes are secured by substantially all of our assets. If we fail to pay the Notes, including accrued interest, in full when due, the holders of the Notes, acting through their agent, will be entitled to pursue all of their remedies as secured creditors, including taking possession of the collateral securing the Notes and effecting a private sale of some or all of our assets securing the Notes. After the holders of the Notes take such actions, we may not have enough assets to make payments owed to other creditors, to continue operating our business, or distribute any funds to stockholders.

Our success depends upon the networking and communications systems markets' acceptance of our ICs.

The future prospects of our business depend on the adoption and acceptance by our target markets, networking communications and data center equipment providers, of our Bandwidth Engine and LineSpeed ICs. In 2011, we began focusing our engineering, marketing and sales efforts on our IC products and de-emphasizing our technology licensing activities, which historically have been our primary revenue source. Our prospective customers may be unwilling to adopt and design-in our ICs due to the uncertainties and risks surrounding designing a new IC into their systems and relying on a supplier that has almost no history of manufacturing such ICs. In addition, our Bandwidth Engine IC products require our customers and their other IC suppliers to implement our new and proprietary chip-to-chip communication protocol, GCI, which they may be unwilling to do. We have determined and negotiated prices with a few customers for our ICs and have gained only limited experience with the cost of making and selling these products. Thus, currently, we do not know whether we will be able to profitably make and sell these products. We are investing significant resources to develop our next generation IC products, but may not introduce these new products successfully or obtain significant revenue from them.

An important part of our strategy to gain market acceptance is to penetrate new markets by targeting market leaders to accept our IC solutions. This strategy is designed to encourage other participants in those markets to follow these leaders in adopting our solutions. If a high-profile industry participant adopts our ICs for one or more of its products but fails to achieve success with those products, or is unable to successfully implement our ICs, other industry participants' perception of our solutions could be harmed. Any such event could reduce the amount of future sales of our IC products.

Our future revenue depends on our winning designs with our customers, and those customers designing our solutions into their product offerings and successfully selling and marketing such products. If we do not continue to win designs in the short term, our product revenue in the following years will not grow.

We sell our ICs to original equipment manufacturer (OEM) customers that include our ICs in their products. Our technology is generally incorporated into products at the design stage, which we refer to as a design win, and which we define as the point at which a customer has made a commitment to build a board against a fixed schematic for his system, and this board will utilize our ICs. As a result, our future revenue depends on our OEM customers designing our ICs into their products, and on those products being produced in volume and successfully commercialized. If we fail to convince our current or prospective customers to include our ICs in their products and fail to achieve a consistent number of design wins, our results of operations and business will be harmed. In addition, if a current or prospective customer designs a competitor's offering into its product, it becomes significantly more difficult for us to sell our IC solutions to that customer because changing suppliers involves significant cost, time, effort and risk for the OEM. Even if a customer designs one of

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our ICs into its product, we cannot be assured that the OEM's product will be commercially successful over time or at all or that we will receive or continue to receive any revenue from that customer. Furthermore, the customer product for which we obtain a design win may be canceled before the product enters production or is introduced into the market. Because of our extended sales cycle, our revenue in future years is highly dependent on design wins we are awarded today. Our lack of capital and uncertainty about our future technology roadmap also may limit our success in achieving additional design wins, as discussed under, *"Our auditor has expressed substantial doubt about our ability to continue as a going concern, and, absent additional financing, we may be unable to remain a going concern,"* and *"We may experience difficulties in transitioning to new wafer fabrication process technologies or in achieving higher levels of design integration, which may result in reduced manufacturing yields, delays in product deliveries and increased costs."*

The design win process is generally a lengthy, expensive and competitive process, with no guarantee of revenue, and if we fail to generate sufficient revenue to offset our expenses, our business and operating results would suffer.

Achieving a design win is typically a lengthy, expensive and competitive process because our customers generally take a considerable amount of time to evaluate our ICs. In the markets we serve, the time from initial customer engagement to design win to production volume shipments can range from two to three years, though it may take longer for new customers or markets we intend to address. In order to win designs, we are required to both incur design and development costs and dedicate substantial engineering resources in pursuit of a single customer opportunity. Even though we incur these costs, we may not prevail in the competitive selection process and, even if we do achieve a design win, we may never generate sufficient, or any, revenue to offset our development expenditures. Our customers have the option to decide whether or not to put our solutions into production after initially designing our products in the specification. The customer can make changes to its product after a design win has been awarded to us, which can have the effect of canceling a previous design win. The delays inherent in our protracted sales cycle increase the risk that a customer will decide to cancel, curtail, reduce or delay its product plans, causing us to lose anticipated revenue. In addition, any change, delay or cancellation of a customer's plans could harm our financial results, as we may have incurred significant expense while generating no revenue.

If our foundries do not achieve satisfactory yields or quality, our cost of goods sold will increase, our operating margins will decline, and our reputation and customer relationships could be harmed.

We depend not only on sufficient foundry manufacturing capacity and wafer prices, but also on good production yields (the number of good die per wafer) and timely wafer delivery to meet customer demand and maintain profit margins. The fabrication of our products is a complex and technically demanding process. Minor deviations in the manufacturing process can cause substantial decreases in yields, and in some cases, cause production to be suspended. Our foundry, Taiwan Semiconductor Manufacturing Company (TSMC), from time to time, experiences manufacturing defects and reduced manufacturing yields. Changes in manufacturing processes or the inadvertent use of defective or contaminated materials by our foundries could result in lower than anticipated manufacturing yields, which would harm our revenue or increase our costs. For example, recently, our foundry produced ICs and met its process specification range but did not meet our customer's specifications causing us to write off a portion of our production lot. Many of these problems are difficult to detect at an early stage of the manufacturing process and may be time consuming and expensive to correct. Poor yields from our foundry, or defects, integration issues or other performance problems in our ICs, could cause us significant customer relations and business reputation problems, harm our operating results and give rise to financial or other damages to our customers. Our customers might consequently seek damages from us for their losses. A product liability claim brought against us, even if unsuccessful, would likely be time consuming and costly to defend.

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We may experience difficulties in transitioning to new wafer fabrication process technologies or in achieving higher levels of design integration, which may result in reduced manufacturing yields, delays in product deliveries and increased costs.

We aim to use the most advanced manufacturing process technology appropriate for our solutions that is available from TSMC. As a result, we periodically evaluate the benefits of migrating our solutions to other technologies in order to improve performance and reduce costs. These ongoing efforts require us from time to time to modify the manufacturing processes for our products and to redesign some products, which in turn may result in delays in product deliveries. We are dependent on TSMC to support the production of wafers for future versions of our ICs, as TSMC is our sole foundry. Such production may require changes to TSMC's existing process technology. If TSMC elects to not alter their process technology to support future versions of our ICs, we would need to identify a new foundry.

In addition, specifically with regard to our Bandwidth Engine products, our 1T-SRAM technology is not available at process nodes below 40 nanometers. To date, we have not developed any memory products below the 40 nanometer process node. To continue the product roadmap for our Bandwidth Engine and PSE products, we will need to identify a new foundry and/or no longer use our 1T-SRAM technology. We do not consider this to adversely affect our current product offerings, but we expect to face difficulties, delays and increased expense as we transition our products to new processes, and potentially to new foundries for future products. For example, we believe our next generation of products will need to be designed using a FinFET process, which will require us to incur significantly high development costs for mask tooling and computer-aided design software. We currently lack the funds to pay for such development costs. Moreover, an inability to continue our product roadmap can adversely affect, and has in the past affected our efforts to win new customers, secure additional design wins and significantly grow our future revenues.

Because the manufacturing of integrated circuits is extremely complex, the process of qualifying a new foundry is a lengthy process and there can be no assurance that we will be able to find and qualify replacement suppliers without materially adversely affecting our business, financial condition, results of operations and prospects for future growth. We cannot assure you that we will be able to maintain our relationship with our foundries or develop relationships with new foundries. If we or TSMC experience significant delays in transitioning to smaller geometries or fail to efficiently implement transitions, we could experience reduced manufacturing yields, delays in product deliveries and increased costs, any of which could harm our relationships with our customers and our operating results.

We may not achieve the anticipated benefits of becoming a fabless semiconductor company by developing and bringing to market the Bandwidth Engine and LineSpeed IC product lines.

In 2010, we expanded our business model to become a fabless semiconductor company through the development of a product line of memory ICs called the Bandwidth Engine. In March 2013, we announced a product line of SerDes ICs called LineSpeed. Our goal is to increase our total available market by creating high-performance ICs for networking communications and data center systems, using our proprietary technology and design expertise. This development effort required that we add headcount and design resources, such as expensive software tools, which has increased our losses from and cash used in operations. We may not be successful in our development efforts to bring our ICs to market successfully nor be successful in selling ICs due to various risks and uncertainties, including, but not limited to:

Our lack of working capital;

customer acceptance;

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adoption of the GCI protocol, without which our Bandwidth Engine products cannot function;

difficulties and delays in our product development, manufacturing, testing and marketing activities;

timeliness of new product introductions;

the anticipated costs and technological risks of developing and bringing ICs to market;

the willingness of our manufacturing partners to assist successfully with fabrication;

our ability to qualify our products for mass production and achieve wafer yield levels and the final test results necessary to be price competitive;

the availability of quantities of ICs supplied by our manufacturing partners at a competitive cost;

our ability to generate the desired gross margin percentages and return on our product development investment;

competition from established IC suppliers;

the adequacy of our intellectual property protection for our proprietary IC designs and technologies;

customer concerns over our financial condition and viability to be a long-term profitable supplier;

the vigor and growth of markets served by our current and prospective customers; and

our lack of recent experience as a fabless semiconductor company making and selling proprietary ICs.

If we experience significant delays in bringing our IC products to market or if customer adoption of our products is delayed, this could have a material adverse effect on our anticipated revenues in upcoming years due to the potential loss of design wins and future revenues. For example, we have experienced significant delays in bringing our third generation LineSpeed products to market, which has prevented us from achieving design wins and resulted in us introducing products after our competitors. We may continue to experience significant delays in the future.

Our main objective is the development and sale of our products to networking communications and data center systems providers and their subsystem and component vendors, and, if demand for these products does not grow, we may not achieve revenue growth and our strategic objectives.

We market and sell our ICs to networking communications and data center equipment providers and their subsystem and component vendors. We believe our future business and financial success depends on market acceptance and increasing sales of these products. In order to meet our growth and strategic objectives, networking infrastructure OEMs must incorporate our products into their systems, and the demand for their systems must grow as well. We cannot provide assurance that sales of our products to these OEMs will increase substantially in the future or that the demand for our customers' systems will increase. Our future revenues from these products may not increase in accordance with our growth and strategic objectives if instead our OEM customers modify their product designs, select products sold by our competitors or develop their own proprietary ICs. Moreover, demand for their products that incorporate our ICs may not grow or result in significant sales of such

products due to factors affecting the customers and their business, such as industry downturns, declines in capital

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spending in the enterprise and carrier markets and unfavorable macroeconomic conditions. Thus, the future success of our business depends in large part on factors outside our control, and sales of our products may not meet our revenue growth and strategic objectives.

Our failure to continue to develop new products and enhance our products on a timely basis could diminish our ability to attract and retain customers.

The existing and potential markets for our products are characterized by ever-increasing performance requirements, evolving industry standards, rapid technological change and product obsolescence. These characteristics lead to frequent new product introductions and enhancements, shorter product life cycles and changes in industry demands. In order to attain and maintain a significant position in the market, we will need to continue to enhance and evolve our products and the underlying proprietary technologies in anticipation of these market trends.

Our future performance depends on a number of factors, including our ability to:

identify target markets and relevant emerging technological trends;

develop and maintain competitive technology by improving performance and adding innovative features that differentiate our products from alternative technologies;

enable the incorporation of our products into the customers' products on a timely basis and at competitive prices;

develop our products to be manufactured at smaller process geometries; and

respond effectively to new technological developments or new product introductions by others.

Our failure to develop future products that achieve market acceptance could harm our competitive position and impede our future growth.

Our ICs have a lengthy sales cycle, which makes it difficult to predict success in this market and the timing of future revenue.

Our ICs have a lengthy sales cycle, ranging from six to 24 months from the date of our initial proposal to a prospective customer until the date on which the customer confirms that it has designed our product into its system. As lengthy, or an even lengthier period, could ensue before we would know the volume of products that such customer will, or is likely to, order. A number of factors can contribute to the length of the sales cycle, including technical evaluations of our products by the customers, the design process required to integrate our products into the customers' products and the timing of the customers' new product announcements. In anticipation of product orders, we may incur substantial costs before the sales cycle is complete and before we receive any customer payments. As a result, in the event that a sale is not completed or is cancelled or delayed, we may have incurred substantial expenses, making it more difficult for us to become profitable or otherwise negatively impacting our financial results. Furthermore, because of this lengthy sales cycle, the recording of revenues from our selling efforts may be substantially delayed, our ability to forecast our future revenue may be more limited and our revenue may fluctuate significantly from quarter to quarter. We cannot provide any assurances that our efforts to build a strong and profitable business based on the sale of ICs will succeed. If these efforts are not successful, in light of the substantial resources that we have invested, our future operating results and cash flows could be materially and adversely affected.

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The semiconductor industry is cyclical in nature and subject to periodic downturns, which can negatively affect our revenue.

The semiconductor industry is cyclical and has experienced pronounced downturns for sustained periods of up to several years. To respond to any downturn, many semiconductor manufacturers and their customers will slow their research and development activities, cancel or delay new product developments, reduce their workforces and inventories and take a cautious approach to acquiring new equipment and technologies. As a result, our business has been in the past and could be adversely affected in the future by an industry downturn, which could negatively impact our future revenue and profitability. Also, the cyclical nature of the semiconductor industry may cause our operating results to fluctuate significantly from year-to-year, which may tend to increase the volatility of the price of our common stock.

We expect our licensing and royalty revenues to decrease compared with our historical results, and there is no guarantee revenues from our IC products will replace these lost revenues in the near future.

In 2011, we began to place greater emphasis on our IC business and re-deploy engineering, marketing and sales resources from IP to IC activities. We are no longer actively pursuing new license arrangements, and, as a result, our license and royalty revenues in 2016 declined when compared with prior years. We do not expect to generate sufficient revenues from our IC business to allow us to achieve profitability in 2017. In addition, the production volumes of the current royalty-bearing products shipped by our licensees are expected to decrease; therefore we expect our royalty revenue to decrease in 2017 and future periods. Historically, royalties have generated a 100% gross margin, and any decrease in royalties adversely affects our gross margin, operating results and cash flows.

Our revenue has been highly concentrated among a small number of licensees and customers, and our results of operations could be harmed if we lose a key revenue source and fail to replace it.

Our overall revenue has been highly concentrated, with a few customers accounting for a significant percentage of our total revenue. For the three months ended March 31, 2017, our three largest customers represented 46%, 11%, and 11% of total revenue, respectively. For the year ended December 31, 2016, our three largest customers represented 47%, 21% and 13% of total revenue, respectively. For the year ended December 31, 2015, our three largest customers represented 34%, 31% and 12% of total revenue, respectively. For the year ended December 31, 2014, our three largest customers represented 34%, 31% and 11% of total revenue, respectively. We expect that a relatively small number of customers will continue to account for a substantial portion of our revenue for the foreseeable future.

As a result of this revenue concentration, our results of operations could be adversely affected by the decision of a single key licensee or customer to cease using our technology or products or by a decline in the number of products that incorporate our technology that are sold by a single licensee or customer or by a small group of licensees or customers.

Our revenue concentration may also pose credit risks, which could negatively affect our cash flow and financial condition.

We might also face credit risks associated with the concentration of our revenue among a small number of licensees and customers. As of March 31, 2017, one customer represented 76% of total trade receivables. As of December 31, 2016, four customers represented 88% of total trade receivables. Our failure to collect receivables from any customer that represents a large percentage of receivables on a timely basis, or at all, could adversely affect our cash flow or results of operations and might cause our stock price to fall.

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Our products must meet exact specifications, and defects and failures may occur, which may cause customers to return or stop buying our products.

Our customers generally establish demanding specifications for quality, performance and reliability that our products must meet. However, our products are highly complex and may contain defects and failures when they are first introduced or as new versions are released. If defects and failures occur in our products during the design phase or after, we could experience lost revenues, increased costs, including warranty and customer support expenses and penalties for non-performance stipulated in customer purchase agreements, delays in or cancellations or rescheduling of orders or shipments, product returns or discounts, diversion of management resources or damage to our reputation and brand equity, and in some cases consequential damages, any of which would harm our operating results. In addition, delays in our ability to fill product orders as a result of quality control issues may negatively impact our relationship with our customers. We cannot assure you that we will have sufficient resources to satisfy any asserted claims. Furthermore, any such defects, failures or delays may be particularly damaging to us as we attempt to establish our reputation as a reliable provider of IC products.

Because we sell our products on a purchase order basis and rely on estimated forecasts of our customers' needs, inaccurate forecasts could adversely affect our business.

We expect to sell our IC products pursuant to individual purchase orders, rather than long-term purchase commitments. Therefore, we will rely on estimated demand forecasts, based upon input from our customers, to determine how much product to manufacture. Because our sales will be based primarily on purchase orders, our customers may cancel, delay or otherwise modify their purchase commitments with little or no notice to us. For these reasons, we will generally have limited visibility regarding our customers' product needs. In addition, the product design cycle for networking OEMs is lengthy, and it may be difficult for us to accurately anticipate when they will commence commercial shipments of products that include our ICs.

Furthermore, if we experience substantial warranty claims, our customers may cancel existing orders or cease to place future orders. Any cancellation, delay or other modification in our customers' orders could significantly reduce our revenue, cause our operating results to fluctuate from period to period and make it more difficult for us to predict our revenue. In the event of a cancellation or reduction of an order, we may not have enough time to reduce operating expenses to mitigate the effect of the lost revenue on our business.

If we overestimate customer demand for our products, we may purchase products from our manufacturers that we cannot sell. Conversely, if we underestimate customer demand or if sufficient manufacturing and testing capacity were unavailable, we would forego revenue opportunities and could lose market share in the markets served by our products and could incur penalty payments under our customer purchase agreements. In addition, our inability to meet customer requirements for our products could lead to delays in product shipments, force customers to identify alternative sources and otherwise adversely affect our ongoing relationships with our customers.

We depend on contract manufacturers for a significant portion of our revenue from the sale of our IC products.

Many of our current and prospective OEM customers use third party contract manufacturers to manufacture their systems, and these contract manufacturers purchase our products directly from us on behalf of the OEMs. Although we expect to work with our OEM customers in the design and development phases of their systems, these OEMs often give contract manufacturers some authority in product purchasing decisions. If we cannot compete effectively for the business of these contract manufacturers, or, if any of the contract manufacturers that work with our OEM customers experience

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financial or other difficulties in their businesses, our revenue and our business could be adversely affected. For example, if a contract manufacturer becomes subject to bankruptcy proceedings, we may not be able to obtain our products held by the contract manufacturer or recover payments owed to us by the contract manufacturer for products already delivered to the contract manufacturer. If we are unable to persuade contract manufacturers to purchase our products, or if the contract manufacturers are unable to deliver systems with our products to OEMs on a timely basis, our business would be adversely affected.

We rely on independent foundries and contractors for the manufacture, assembly, testing and packaging of our integrated circuits, and the failure of any of these third parties to deliver products or otherwise perform as requested could damage our relationships with our customers and harm our sales and financial results.

As a fabless semiconductor company, we rely on third parties for substantially all of our manufacturing operations. We depend on these parties to supply us with material in a timely manner that meets our standards for yield, cost and quality. We do not have long-term supply contracts with any of our suppliers or manufacturing service providers, and therefore they are not obligated to manufacture products for us for any specific period, in any specific quantity or at any specified price, except as may be provided in a particular purchase order. Any problems with our manufacturing supply chain could adversely impact our ability to ship our products to our customers on time and in the quantity required, which in turn could damage our customer relationships and impede market acceptance of our IC solutions.

Our third party wafer foundries, testing and assembly vendors and sales offices are located in regions at high risk for earthquakes and other natural disasters. Any disruption to the operations of these foundries, vendors and offices resulting from earthquakes or other natural disasters could cause significant delays in the development, production, shipment and sales of our IC products.

TSMC, which manufactures our products, is located in Asia, as are other foundries we may use in the future. EAG, which handles the testing of our products, is headquartered in California. Our primary engineering design center is located in Santa Clara, California, and we have sales offices in Japan and China. The risk of an earthquake in the Pacific Rim region is significant due to the proximity of major earthquake fault lines. In September 1999, a major earthquake in Taiwan affected the facilities of several major foundries and other vendors. As a result of this earthquake, these vendors suffered power outages and disruptions that impaired their production capacity. In September 2003 and February 2016, additional disruptive earthquakes occurred in Taiwan. The occurrence of additional earthquakes or other natural disasters could result in the disruption of the wafer foundry or assembly and test capacity of the third parties that supply these services to us and may impede our research and development efforts, as well as our ability to market and sell our products. We may not