

Everspin Technologies

Second Quarter Financial Results

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CORPORATE PARTICIPANTS

David Allen – *Investor Relations*

Phill LoPresti – *Chief Executive Officer*

Jeff Winzeler – *Chief Financial Officer*

PRESENTATION

Operator

Good morning and welcome to the Everspin Technologies Second Quarter Financial 2017 Results Conference Call. All participants will be in listen-only mode. Should you need assistance, please signal a conference specialist by pressing the star key followed by zero. After today's presentation, there will be an opportunity to ask questions. To ask a question you may press star then one on your touchtone phone. To withdraw your question, please press star then two. Please note this event is being recorded.

I would now like to turn the conference over to Dave Allen. Please go ahead.

David Allen

Thank you, operator, and thanks to all of you for joining Everspin's Second Quarter 2017 Financial Results Conference Call. Before we begin the call, I want to remind you that this conference call contains forward-looking statements regarding future events, including, but not limited to, our expectations for Everspin's future business, financial performance, and goals; customer and industry adoption of MRAM technology; successfully bringing to market and manufacturing products in Everspin's design pipeline; the range of timing between design-ins to design wins to volume production, including the timing of Spin Torque product shipments; and the execution of its business plan.

These forward-looking statements are based on estimates, judgments, current trends, and market conditions that involve risks and uncertainties that may cause actual results to differ materially from those contained in the forward-looking statements. I would encourage you to review our SEC filings, including Everspin's second quarter 2017 financial results press release issued on August 10, 2017, the company's Quarterly Report on Form 10-Q filed with the SEC on May 15, 2017, Everspin's Annual Report on Form 10-K filed with the SEC on March 29, 2017, and other SEC filings made from time to time in which we may discuss risk factors associated with investing in Everspin. All forward-looking statements are made as of the date of this call, and, except as required by law, we do not intend to update this information.

In today's call, we will be referencing GAAP and adjusted EBITDA numbers. Adjusted EBITDA numbers are provided to enhance the investors' understanding of Everspin's operating performance as it primarily excludes certain non-cash charges for depreciation and amortization, stock-based compensation expense, and compensation expense related to the vesting of common stock held by GLOBALFOUNDRIES, resulting from our joint development agreement. The use of adjusted EBITDA is not meant to be a substitute for the results presented in accordance with GAAP but, rather, should be evaluated in conjunction with GAAP.

This conference call will be available for audio replay in the Investor Relations section of Everspin's website, www.everspin.com.

Joining me today are Everspin's CEO, Phill LoPresti; and CFO, Jeff Winzeler. I'd now like to turn the call over to Phill. Phill?

Phill LoPresti

Good morning, everyone. For those of you who might not have seen our financial results press release, you can find the press release and an updated investor slide deck on our website. After our call is completed, we will post our prepared remarks and when available, we will post the transcript from this call on the Investor section of our website.

Before I ask Jeff to discuss our Q2 results in detail and provide our Q3 guidance, I would like to quickly make a few comments about our second quarter results as well as other recent activities crucial to our future business. Revenue for Q2 2017 was \$8.9 million, a record quarter for Everspin and at the high end of our guidance of \$8.6 million to \$8.9 million.

I am encouraged by the continued execution of our business plan and the customer reception we are experiencing with our MRAM technology. Our bookings for Toggle MRAM continue to be very strong, and our new design activity for our Toggle MRAM products remained robust with a 33% increase in the number of design wins compared to the prior quarter.

With regards to our Spin Torque MRAM technology, we expect to move into production with our nvNITRO™ accelerator cards which use our 256Mb Spin Torque chips in the current quarter. At this week's Flash Memory Summit, Everspin is demonstrating our nvNITRO™ accelerator card and U.2 solutions. Early sampling of our 1Gb DDR4 Spin Torque chips to customers started in June. We expect to begin shipping preproduction customer samples by the end of 2017 and with production qualified parts available by the end of Q1 2018.

After Jeff's financial commentary, I will come back and share some additional thoughts on our Toggle and Spin Torque MRAM design activity, customer feedback and our visibility regarding ramping of our 256Mb and 1Gb Spin Torque products, and our current revenue generators. I will also briefly touch upon the competitive environment as it relates to our embedded MRAM roadmap, and our market opportunity. After that, we will then open the call to questions.

Jeff Winzeler

Thank you, Phill, and good morning, everyone. I'd like to start by reviewing the second quarter 2017 income statement. Revenue in the second quarter was \$8.9 million, with product sales representing 90% of total revenue, or \$8.1 million, while licensing, NRE and royalty contributed \$863,000 in the quarter. The Q2 2017 revenue at \$8.9 million was \$1 million or 13% higher than the revenue in Q1 2017.

Looking at product sales alone, revenue was \$8.1 million compared to \$7.2 million in product sales in Q1 2017, an increase of 12% quarter over quarter. Toggle MRAM sales represented 81% of product sales and were up \$935,000 or 17% from the first quarter of 2017. Legacy product sales were \$1.6 million and were roughly flat with Q1 2017. We did not record any Spin Torque MRAM revenues in the second quarter of 2017.

Gross profit for Q2 2017 was \$5.8 million, an increase of \$1.6 million or 37% over Q1 2017. The resulting gross margin for Q2 2017 was 65%, versus 54% in the prior quarter. The gross margin expansion in Q2 2017, when compared to the prior quarter, was largely the result of better yields for Toggle MRAM products. This yield improvement was a result of a fix in a parallel test program at final test that was falsely rejecting good units. Upon remediation of this issue, the base yields for our Toggle MRAM products improved. This is a benefit expected to provide higher yields, and therefore, lower costs in future periods. In addition to the ongoing benefit of the test program fix, we were able to process a number of previously rejected units, which provided a one-time increase of 2.3 margin points in Q2 2017.

While our product gross margins in Q2 were aided by the benefit of increased yields and one-time benefits, we are still targeting a gross margin for the company of 48% to 52 % in our financial model. Licensing, NRE and royalty revenues added another 4 margin points in the second quarter of 2017 due to the achievement of a milestone in one of our NRE agreements. Licensing, NRE, and royalty

revenues are dynamic due to contract terms, milestones and other factors. While we opportunistically look for engagements to license our technology portfolio, this revenue is not the focus of our core business and will continue to be sporadic over time.

Q2 2017 operating expenses were \$10.6 million, compared to \$10.1 million in the prior quarter, an increase of \$460,000. Breaking down operational spending, Research and Development expenses in Q2 were flat at \$6.4 million versus \$6.4 million in the previous quarter. Within R&D spending, Joint Development Agreement expenses were \$436,000 lower in Q2 than in Q1. This decrease was offset by \$148,000 of increased product engineering expenses, and \$200,000 increase in non-cash, stock comp charges associated with the vesting of Everspin shares owned by GLOBALFOUNDRIES.

SG&A spending for Q2 2017 was \$4.1 million compared to \$3.7 million in the previous quarter. The increase was due to recruiting, travel, and payroll expenses related to staffing changes in the sales and marketing groups for Everspin.

Interest expenses for Q2 2017 were \$176,000 compared to \$230,000 in Q1. Other income was \$24,000, and the loss on extinguishment of debt was \$246,000 due to the unamortized balance of the debt discount and a prepayment penalty for the Ares loan we retired in the quarter.

GAAP net loss for Q2 2017 was \$5.2 million compared to a \$6.1 million net loss in the previous quarter. The Q2 GAAP loss per share was \$0.42 compared to a \$0.49 loss per share in the previous quarter.

At this time, I would like to discuss our year-over-year income statement results. Total revenue increased by \$2.3 million or 34%, from \$6.7 million in Q2 of 2016, to \$8.9 million in Q2 of 2017. Product sales increased by \$1.5 million or 22%, from \$6.6 million during the second quarter of 2016, to \$8.1 million during the second quarter of 2017. The increase was due to \$1.5 million of increased sales volume of our Toggle MRAM products.

Licensing, NRE, and royalty revenue increased by \$800,000, from \$100,000 during Q2 2016, to \$900,000 during Q2 2017. The increase was primarily due to the achievement of NRE milestones during the second quarter of 2017. Licensing, NRE, and royalty revenue remained a highly variable revenue item characterized by a small number of transactions annually with revenues based on size and terms of each transaction.

Gross profit from the second quarter of 2017 was \$5.8 million, an increase of \$2.3 million or 65% from the same quarter last year. The resulting gross margin increased from 52.6% during the second quarter of 2016 to 64.8% during the second quarter of 2017. The increase was due to better product mix, the previously discussed higher yields on Toggle MRAM products, and the \$800,000 increase in licensing, NRE, and royalty revenue.

Focusing on operating expenses, Research and Development expenses increased by \$300,000 or 6%, from \$6.1 million during Q3 2016 to \$6.4 million during Q3 2017. The increase was due to a \$400,000 increase in expenses in our joint development agreement with GLOBALFOUNDRIES, a \$200,000 increase in depreciation expense and rent expense related to the move of our R&D laboratory and \$200,000 increased employee and contract labor-related expenses. These increases were partially offset by a \$500,000 decrease in the amount attributable to the vesting of shares of common stock issued to GLOBALFOUNDRIES.

SG&A expenses increased by \$1.7 million or 68%, from \$2.4 million during Q2 2016, to \$4.1 million during Q2 2017. The increase was attributable to personnel-related and stock-based compensation expenses due to increased headcount, as well as accounting, insurance, legal and investor relations

expenses incurred as a result of becoming a publicly-traded company.

Interest expense decreased by \$500,000 or 75%, from \$700,000 during the second quarter of 2016, to \$200,000 during the second quarter of 2017. The decrease was related to a \$400,000 decrease in the interest payable to prior convertible promissory notes and to GLOBALFOUNDRIES. Additionally, interest expense decreased by \$100,000 due to consolidation of our prior facility with Ares Venture Financial into our 2017 credit facility with Silicon Valley Bank.

Other income was \$24,000 during the second quarter of 2017 compared to \$300,000 during the second quarter of 2016. The change was primarily related to the fair value re-measurement of our warrant liabilities which were reclassified to equity upon the IPO in October of 2016. The loss on the extinguishment of debt for Q2 2017 was \$246,000 compared to \$0 in the previous year.

The company's net loss for the second quarter of 2017 was \$5.2 million compared to \$5.4 million in the same quarter last year. On an adjusted EBITDA basis, the loss for the second quarter of 2017 was \$3.8 million compared to \$3.5 million in the same quarter last year.

Now turning to the balance sheet, cash and cash equivalents were \$21.2 million at the end of the second quarter of 2017, compared to \$24.5 million at the end of the first quarter. Total assets at the end of the second quarter were \$36.8 million compared to \$37.5 million at the end of Q1 2017.

Total liabilities were \$18.8 million at the end of the second quarter, compared to \$16 million at the end of the first quarter of 2017, an increase of \$2.2 million. The refinancing of our term loan was the primary factor in the increase.

Stockholders' equity was \$18 million at the end of the second quarter 2017, compared to \$21.5 million at the end of the first quarter of 2017. Capital spending for the second quarter was \$1.7 million, the bulk of which was the relocation of our R&D laboratory in Chandler, Arizona.

Looking ahead to the third quarter of 2017, we expect revenue to range between \$9.7 million and \$10.1 million. We expect the resulting GAAP loss per share will range between a loss of \$0.48 per share to \$0.44 per share based on an average weighted share count of 12.5 million shares.

I will now turn the call back to Phill for additional comments about our existing business and expectations regarding our Spin Torque product shipments. Phill?

Phill LoPresti

Thank you, Jeff. Overall, I am pleased with our business performance, strong demand for our Toggle MRAM, as measured by our book-to-bill metric, and the execution of our business plan, particularly as it relates to our 1Gb development.

Our customer engagements with our Spin Torque MRAM products continue to advance. I am pleased that our first 256 Mb design win, which is the SMART Modular's NVM Express PCIe Card has entered production and will begin shipping in Q4.

At the Flash Memory Summit, we also officially launched four of our first planned nvNITRO™ products, just six months after we began pre-production sampling of our nvNITRO™ product in early February. As I mentioned in my opening remarks, customers attending the Flash Memory Summit have had the opportunity to see a demonstration of our nvNITRO™ and U.2 solutions.

These solutions are designed to deliver extremely fast read and write times with ultra-low latency

offering initial capacities of 1GB and 2GB. Produced in conjunction with our eco-system partners, SMART Modular, and Xilinx, we expect that these cards will be available for initial customer delivery in the fourth quarter. We are now accepting orders for the 1GB product, and will be scheduling initial shipments in Q4 with pricing at \$2,200.

Based on what we have learned to-date from our nvNITRO™ and Spin Torque customer engagements, customer evaluations of our nvNITRO™ products could take up to 9 to 12 months. Some customers have begun the process using our Alpha data platform starting in the beginning of February this year. Other customers will begin this process starting now with our production cards. Additionally, we are seeing a similar 9- to 12-month period for customers planning to use our 256Mb and 1Gb STMRAM products to move from the design-in stage to production ramp of their product.

Our 1Gb product is attracting a lot of customer interest and provides a high-endurance, persistent memory with a DDR4-compatible interface. These features will allow storage system designers to enhance the reliability and performance of storage devices and systems by providing protection against power loss without the use of supercapacitors and batteries.

We are now providing engineering samples of our 1Gb DDR4 Spin Torque MRAM to select customers. The 1Gb chips are being produced in partnership with GLOBALFOUNDRIES in their 28nm CMOS process on 300mm wafers, utilizing Everspin's patented perpendicular magnetic tunnel junction.

The focus of Everspin's sales and marketing team remains squarely on converting our Spin Torque opportunities into design-ins and then into design-wins, then ultimately into revenue generators. While we are not announcing additional Spin Torque design wins on this call, I am very encouraged by the strong customer interest our Spin Torque MRAM solutions is generating, including several significant customer engagements that may advance to design wins later this year.

As I stated in past calls, the exact timing of when customer projects will enter volume shipments using our 256Mb and 1Gb Spin Torque solutions is difficult to predict and dependent on a variety factors, many which are outside of our control. With the 1Gb chips sampling now, we believe some customers maybe re-evaluating their product plans and may consider using the 1Gb device in their initial products instead of the 256Mb. This re-evaluation of which density chip to use could result in our revenue ramp of our Spin Torque chips taking longer than we previously expected.

We can now also report that one of our four Spin Torque customer design wins we discussed on prior calls is with our 1Gb chip. We have been working closely with this customer as they chose to adopt the 1Gb product based on our early engineering samples. We expect to ship 1Gb pre-production material for this major OEM's flash array product in the fourth quarter of this year which will be used for their pilot production and inventory builds in Q1 of 2018. The customer has informed us they plan to begin volume shipments of their systems in Q2 2018. I would like to point out that the timing of this 1Gb project is a little atypical for moving to the design-in and design win stage prior to production release. As mentioned earlier most customer projects will transition to production approximately 9 to 12 months from the design-in phase.

The 1Gb Spin Torque MRAM density further expands our market opportunity. While we are initially targeting the enterprise storage market with our 1Gb capacity, longer term we expect to work with our eco-system partners and customers to offer additional solutions with other high-speed interfaces. We believe such products will significantly expand our current addressable market that would include, but not be limited to, new industrial and automotive ADAS applications. In fact, we are already engaged with industry participants, current and potential customers to address these future Everspin markets. We will provide updates to our roadmap as we make progress in these areas in subsequent earnings

calls.

Let me quickly comment on our current revenue generators. Our Toggle products, which target persistent SRAM applications with memory densities ranging from 128Kb, up to 16Mb, remain the bulk of our business. Our legacy business, along with our Toggle sales, we believe will continue to provide a stable and growing revenue stream until we see an inflection point when our Spin Torque shipments start to become a meaningful part of our revenue mix. As we ramp shipments of our Spin Torque products, we expect to begin to benefit from the financial impact that enterprise storage applications, using multiple, higher-density chips at significantly higher ASPs will provide.

Also highlighted in my introductory remarks, we continue to see a steady stream of new Toggle design wins. Let me share with you three recent Toggle design wins that represent the diversity of the types of applications that our Toggle MRAM supports.

The first example is with a repeat customer, a Japanese supplier of SSDs. This win involves our 256Kb Toggle MRAM that they plan to use for capturing data on power loss. A design win like this with existing Toggle storage customers, we believe, can lead to additional higher-density Spin Torque sales in the future.

The second win I want to highlight is in the energy management sector. Our 4Mb Toggle MRAM is being used as a data logging memory in a smart meter, recording the meter usage information.

The third recent design win is with a worldwide leader in the development of electronics for industrial automation and robotics. Our 4Mb chip will be deployed in their PLC, or Programmable Logic Controller, for recording manufacturing data and program code.

Before moving into the Q&A section of the call, let me briefly comment on potential MRAM competition and our plans for embedded MRAM. First, we are focused on application specific markets where the benefit of our products and their feature sets are valued, in other words, we are avoiding commodity markets. Second, we have shipped over 70 million MRAM chips, established a number of important eco-system partners, put in place a scalable manufacturing partnership with GLOBALFOUNDRIES, developed and implemented proven MRAM intellectual property, and have accumulated a lot of know-how and experience.

While there have been announcements by other companies, both large and small, regarding their MRAM plans, to-date we have not seen or heard of any MRAM chips being sampled or currently commercially available. We recognize that the competition will ultimately have MRAM products.

To address those likely MRAM entrants, several years ago we partnered with GLOBALFOUNDRIES to produce our Spin Torque discrete chips. GLOBALFOUNDRIES is producing these chips today on 300mm wafers at 40nm and 28nm nodes. GLOBALFOUNDRIES has already announced plans to introduce embedded MRAM using Everspin's technology to produce SOCs for their foundry customers on more advanced, smaller geometries in the future.

We have established a licensing arrangement with GLOBALFOUNDRIES to address the large embedded MRAM market, where competitors are more likely to first enter. While I cannot comment on GLOBALFOUNDRIES activities in this area, we are pleased with their decision and the progress they have made to-date which we believe will provide an important time-to-market advantage for our two firms as they initially target solutions for the low power, embedded and IoT applications. We are excited that our partner, GLOBALFOUNDRIES, has now made PDK or Process Development Kits available for customers to design embedded MRAM SOCs on their 22nm FDX™ process. We expect

this to lead to early adopter design wins.

In closing, the revenue opportunity in front of us from enterprise storage applications using our higher-density Spin Torque MRAM is considerably larger than that of our existing Toggle designs and we remain focused on expanded design wins with both Toggle and Spin Torque MRAM products. Customer adoption of our Spin Torque MRAM, we believe, provides us significant opportunities to expand existing addressable markets and achieve our business plan.

Once again, I want to again thank our employees, our eco-system and manufacturing partners and suppliers who have given us an important time-to-market, first-mover advantage over potential MRAM competitors, and, finally, to our customers and investors, without whose support we would not exist.

Now we will open the call up for questions. Operator?

QUESTIONS AND ANSWERS

Operator

We will now begin the question and answer session. To ask a question, you may press star then one on your touchtone phone. If you are using a speakerphone, please pick up your handset before pressing the keys. To withdraw your question, please press star then two. At this time, we will pause momentarily to assemble our roster.

The first question comes from Kevin Cassidy of Stifel. Please go ahead.

Kevin Cassidy

Thank you and congratulations on the good results.

Phill LoPresti

Thanks, Kevin.

Kevin Cassidy

On the gross margin, the improved yields with the Toggle products lifted gross margins but you're keeping long-term gross margins the same. Is that due to product mix? Maybe you can explain some of the moving parts on that.

Jeff Winzeler

Yes, Kevin. That's a great question. So, the reason that we're guiding, looking forward in our business model that our margin will still be targeted at 48% to 52% is because, and you said it just right, the product mix aspect of it is much more impactful than the ongoing yield improvement that we're going to get from Toggle. Our Toggle product portfolio is made up of a bunch of different products, probably 10 to 12 major products in that product family. All of those have different margins associated with them, a lot depending on density and then to the markets that we're selling. So, whenever we have a mix of products that's different quarter over quarter, it has pretty big impact in terms of our gross margins and we think that 52% to 48% is kind of the right ongoing, forward-looking target for our financial model.

Kevin Cassidy

Okay, great. I attended the Flash Memory Summit also and there seemed to be some excitement around the nvNITRO™. Can you explain maybe what some of the obstacles to adopting or for designing in with the nvNITRO™?

Phill LoPresti

Kevin, this is Phill. With a product like this that's targeted for the Enterprise class environment and mission critical opportunities, there's frequently the requirement to do a lot of thorough testing of the device. Of course, using MRAM, which is a first-to-market product by Everspin, in this case it's our 256Mb, but then again putting it in to an NVMe half-height, half-length card or into our U.2 form factor, most of the customers want to plug it into systems and do a lot of vigorous testing and evaluation of the performance of the device before they certify it to go out to their large customer base.

We expect that process is going to vary. Some of these customers started evaluating at the Alpha Data card state. That was the prefab card from Alpha Data [stage] where we were able to put our MRAM DIMMs into it. That was not our production version. Now, those parties have started evaluations but other customers preferred to wait until the actual production card was available. That's the one that we've worked and collaborated on together with SMART and we have now brought out and started sampling. As we've indicated in this call, we're now accepting orders for production.

So, it's going to vary customer to customer and application to application but we expect that to be somewhere in the 9- to 12-month range before they start ramping into production.

Kevin Cassidy

Okay, great. I'll get back in the queue. Thanks.

Phill LoPresti

Thanks, Kevin.

Operator

The next question will come from Matt Ramsey of Canaccord Genuity. Please go ahead.

Matt Ramsay

Yes, thank you very much. Good morning, gentlemen. A lot going on in the call there and congratulations very much on the 1Gb progress that you're making. I think, Phill, in your prepared script there, you guys talked a little bit about the possibility, and it sounds like one of your design wins in fact took this path of folks maybe being impressed with the progress on 1Gb maybe a little faster than the customer base had anticipated and choosing to use that higher density and more capable solution from you guys in initial products and maybe skipping over the 256Mb product. That would be great in the long term and obviously there'd be a little bit of revenue impact from that in the near term.

So, maybe you could talk through about those dynamics. One, why customers might make that decision and what that means for product timelines. Maybe, Jeff, you could talk a little bit about what that means from a revenue standpoint here over the next few quarters. Thank you.

Phill LoPresti

Sure. Thanks, Matt. As we've mentioned during our IPO Roadshow, the primary targets for the 256Mb product were in SSD applications, whether they be PCIe cards or U.2 form factors. The 1Gb chip we envisioned was also going to be able to address the SSD market but we really had more visibility into the use of that part for the RAID controller market.

Now, given the timing and the time horizon of our products with our 256Mb getting qualified by the end of the quarter, Q1 this year, and some pretty good progress that we made in getting early samples out of our chip, we obviously had customers that were capable of not only interfacing and evaluating the 256 but they wanted to evaluate the 1Gb chip. In some of those cases, we provided that silicon quite early; of course, with some errata, as we had anticipated we were going to have to do some revisions

on the chip. Some of those customers got comfortable with the result and our ability to deliver that product on their time horizon and have made decisions to move to the higher-density part, which offers them some performance advantages.

The other situations that are kind of happening, which are pretty typical in the industry, whether you're selling controllers or memory, is customer projects tend to kind of sometimes stretch out or go into stasis for a little while and then restart later. In some of those cases, when the design goes on hold and then re-emerges, the timing might be quite different for when that product is planning to go to production. They may choose at that point, considering whatever their cycle is, to transition to the 1Gb product. We do have some customers that are considering that but we don't have any conclusion to that yet. Those are some of the high-level reasons why, obviously, they might transition based on the timing.

Jeff, do you want to address his other question?

Jeff Winzeler

Yes, so, I mean, clearly, the timing of customer roll-outs has the biggest impact in terms of revenue timing. If your question is around ASP differential between 256 and 1-gig, it's an interesting market that we're selling into where we're selling into a replacement market where we're replacing existing DRAM and batteries and supercapacitors with our MRAM chips. The density of those drives and those buffers, even though they may go up, doesn't have a significant cost increase to the customer because DRAM from a scaling perspective, there's not a huge difference in cost in the different densities of DRAM, so because we have to sell into that replacement market and it really drives the ASPs that we can get for our products.

Now, moving from 256Mb to 1-gig, one of the ways that we take care of that is we do the 1-gig on a 28nm process, which significantly lowers our cost of die. We're able to keep up with that from a cost perspective but we're not going to get significant ASP upside moving from 256 to 1-gig. Even though some of those designs may move out, it's going to delay the revenue timing a little bit. We're going to get a little bit of a premium by them choosing the 1-gig product but it's not significant.

Matt Ramsay

Got it. Thank you, guys. That was helpful commentary to kind of level set where things are. I guess I wanted to ask one follow-up question about the embedded MRAM work that yourselves and GLOBALFOUNDRIES are doing together. Phill, maybe you could expand on that a little bit. It sounds like some compelling updates to that engagement and also just kind of remind folks that are listening to the call here, I think, that this is a market that goes after some of the embedded flash-type markets. My team continues to do more work about, I guess, with regards to the challenges of scaling embedded flash down to some of these smaller geometries and what that might open up for MRAM as an embedded product market over time, whether it's your solution or others, but it seems like that's a market that's really on the come and you guys are at the forefront of it.

So, any additional color there would be really helpful. Thank you.

Phill LoPresti

Thanks, Matt. We're extremely excited about the embedded MRAM market. This was something we envisioned quite early with Spin Torque. In fact, we believed that the concept of being able to take an MRAM technology and target it for different kind of memory use cases such as replacing embedded flash at small geometries or perhaps using it as a more efficient SRAM cell or even, for that matter, using it for embedded MRAM. As Everspin's already highlighted in our products, you can optimize the MRAM bit to work like an SRAM or a Toggle Generation 1 products or you can optimize it to look like

DRAM like we do in our Gen 3 Spin Torque products. You can take that same kind of versatility onto an SOC if you incorporate it into a foundry process like GLOBALFOUNDRIES has done.

With the advent of other foundries entering the embedded MRAM space, we're seeing a lot of customer traction in various application cases. With GLOBALFOUNDRIES deploying it first in their fully depleted SOI or 22nm FDX, clearly, their initial targets are low-power applications, things like controllers for IoT-type controllers, which is a very good, growing market. But there's also other process nodes that GLOBALFOUNDRIES has, like they have a 14nm FinFET. They've announced their 7nm FinFET. Each one of those process nodes target different types of applications. Obviously, a 7nm is more along the line of the processor process whereas, maybe, 14nm and even their 28nm technology nodes might be more targeted towards application processors.

What's exciting there is in each one of those process nodes, it's quite possible for a foundry like GLOBALFOUNDRIES to retarget the bit to perform something other than just embedded flash. It could perform as an SRAM cell or it could perform as an IP core memory block that could store data and codes simultaneously; in other words, a persistent SRAM. So, that allows you to get rid of the embedded flash and the SRAM process that you need for an SOC and just use one memory technology.

I think this is a market that's going to evolve a lot more over time and we'll see the adoption of embedded MRAM into further and smaller geometry process nodes in the future.

Matt Ramsay

Got it. I'll just sneak one last one in for Jeff. Maybe you could talk to us a little bit about how you see operating expenses over the next couple of quarters here with some of the changes to the maybe topline expectations here. Anything changing on the opex line that we should be aware of? Thank you, guys.

Jeff Winzeler

Yes, sure. So, the opex, I don't see a lot of major changes. The big variables in our opex are primarily on the R&D side. They have everything to do with where we are in the qualification of products. We've seen a little bit of an uptick in R&D spending in Q1 and in Q2. That's primarily related to both the GLOBALFOUNDRIES joint development expenses to develop the process technology on 28nm as well as our own internal costs to do spins of mass and radicals and test wafers to get our products qualified.

We're very much in the middle of, as Phill talked about, qualifying our 1-gig part and we're working really hard to get revs of that ready for production so that we can get this product out and have good yields and be able to generate good margins. So, that work continues. We're heads down in R&D really working on that process, and so I don't anticipate huge changes in terms of our opex spending levels because we're continuing to focus on those things. SG&A spending has increased over last year simply because we've become public. We've spent a few dollars since then in terms of our own staffing and getting ready to really go deploy the Spin Torque family of products. So, I anticipate that there shouldn't be major changes in that spending, as well.

Matt Ramsay

Thank you very much.

Phill LoPresti

Thanks, Matt.

Operator

The next question comes from Robert Mertens of Needham. Please go ahead.

Robert Mertens

Hi. Thanks for taking my question here on behalf of Raji. So, some good questions before me but I just wanted to take a step back and look at the overall market for your ST-MRAM products. We talked about how they might get pushed out a little bit due to customers maybe switching over to the 1Gb product instead of the 256Mb. I guess I wanted to wrap my head around if this is more in your view just of a timing issue, if you're thinking it's getting pushed out a quarter or two or perhaps even a little bit further. Thanks.

Phill LoPresti

Yes, I think this is still kind of consistent with prior remarks that we made is that that kind of timing is still an unpredictable factor here. It's really all dependent on customer schedules, customer program plans, their take-to-market plans for their products, when they started evaluating using our either early engineering samples or whether they started evaluating at the time that we make a production sample available. Every customer engagement is unique and has its own life of its own, so it's really hard to give you a general commentary there.

We highlighted in our prepared remarks that one of the design wins that we talked about previously is an atypical situation, exactly the point I'm trying to make. You would not normally predict that prior to having your production samples available that you're going to get a design win for a product. Of course, we've had to work extremely close with this customer because they know that we're also making revisions to the product and getting it ready for production. As we announced earlier, the 1Gb will be released for production at the end of Q1 2018. They're obviously moving ahead very aggressively with their design at a quicker pace than that so they can take advantage of exactly when we are in production to start launching their products.

Yes, it's really hard to predict that number for you. We've given you some ranges out there, which I think are reasonable. But you could certainly have outliers. You could have something as aggressive as what you see with this 1Gb customer. You can also have customers that, for various reasons, their development gets dragged out to longer than 12 months. Other than us providing support and product on time, there's not much we can do about it. We have to let the ebb and tide of their development flow and basically work with them.

Robert Mertens

Okay, great. Thanks. That clears it up some. And then, I guess as a follow-up, I think you're guiding a little bit lower than what I had you guys at for the next quarter. Maybe a chunk of that is with the timing on the ST-MRAM product. I also just wanted to get your view on the progress with your Toggle products, if you're seeing continued design win within those products and if you do break down where those design wins are, what markets are ramping there. Thanks.

Phill LoPresti

We highlighted one of the strengths of the quarter has been the increase in design wins that we see for Toggle from the prior quarter. Also, this has been a trend so far this year. We've seen our bookings strength to continue, not only during Q1 but obviously moving where we are today. I believe you see some pretty good, consistent growth there with Toggle. Jeff kind of highlighted some of the numbers, somewhere in the 12% to 13% improvement. I think that trend is pretty solid right now.

The thing about the Toggle business is that that product, once those go into production, they're fairly stable and a little bit more predictable. We have a very wide customer base, and so there's some

variability like Jeff has highlighted in mix because a big part of our cut business base is through distribution. Some are on and some are off in a given quarter and some will buy a lot and some may not buy in that quarter. On an average trend, I continue to see Toggle as being more and more interesting to customers, as they transition their designs from perhaps using a NOR Flash product or an E-Square product or an SRAM with battery backed up. As they refresh their products, they're now looking more seriously at MRAM as an alternative. Because we do provide a superior solution, we do get to see that many of those applications transition to MRAM.

Robert Mertens

Okay, great. That was very helpful.

Operator

The next question comes from Richard Shannon of Craig-Hallum Capital Group. Please go ahead.

Richard Shannon

Hi Phill and Jeff. Thanks for taking my questions, as well. Let me just ask a question on the guidance for the third quarter. I think I've got an idea but would love to have you help us nail this down a little bit better but in terms of the growth from second to third quarter here, it sounds like most of the growth here is coming from Toggle, I would imagine some from maybe 256. I wonder if you could help us out there and if there's any meaningful change in the licensing in our E-bucket as well quarter on quarter.

Jeff Winzeler

Yes, so, we really don't break down the components of that upside in guidance for Q3. I think I would characterize it as, you know, we've talked pretty at length relative to where we are of qualification of Spin Torque and where we are relative to nvNITRO™ from a revenue potential perspective. We also talked about the fact that Toggle was 17% increase from Q1 to Q2. That business continues to remain strong, continues to kind of be the bedrock of the company and we're working hard to continue to grow it because it is a great margin business and continues to provide cash to the company.

The whole NRE [ph] licensing thing, again, it's really hard to anticipate what exactly those revenues are going to be unless they come from existing engagements. So, we opportunistically take those when we can but it's very up and down, depending on the contract terms and the availability of that type of work.

I think, in general, we continue to see our base business growing at a good clip. On the spending side, as we talked about a little bit earlier, we continue to spend, especially in the R&D area, to try and get our Spin Torque products, both the nvNITRO™ family and the discrete units ready for production.

Richard Shannon

Okay. That's fair enough. Maybe hitting also on the gross margin side here, I know you talked about the longer-term models being unchanged despite the yield improvement here but you said those would benefit future quarters. At least on the product side, wouldn't those have some meaningful benefit above what you've seen, at least on a product basis, excluding licensing, so couldn't we see something near term in the mid-50s or potentially a little bit higher?

Jeff Winzeler

Assuming the product mix stays the same, I would agree with that assessment but, again, product mix is a pretty dynamic thing for us. From a long-term perspective, we always target 48% to 52%. Our immediate product mix and the fact that we have higher margins as a result of this yield increase are certainly helpful in terms of having us operate above that. We saw that in Q2. Assuming we don't have a major change in our product mix, then we certainly have an opportunity to beat our target for Q3.

Richard Shannon

Okay. That's kind of what I thought; that's helpful. Phill, maybe jumping over to you and talking about this customer that's taken a very early transition to a 1-gig product and I know you described this as an atypical situation but are there any underlying dynamics that are, that something could be extrapolated to what you might see from other customers or maybe what you're already starting to see and help us think about how fast and how much interest there is out there for the 1-gig part and these Enterprise applications.

Phill LoPresti

So, Richard, as we've highlighted frequently and I said a little bit earlier, the 1Gb does obviously bring into play the DDR4 compatible interface and it also opens up opportunities for us to address some of the lower-end RAID applications. Being that we do have compatible RAID controllers that are out there like from our ecosystem partner, Microsemi, we see certainly the opportunity and interest and traction now in these RAID customers now that the 1-gig is in this early sampling stage and becoming, of course, to them more real. As we've always highlighted, the RAID market is frequently and often timed with Intel platform launches. As they launch a new RAID system with the next platform from Intel, they have to start getting samples at a certain point in time and then they have to start doing all of their testing and validation. Then, they want to typically launch their product. Frequently, we see that happen in the spring and early summer timeframe of a year.

So, I think what we're seeing there is certainly now we can have those engagements with those RAID opportunities. In fact, we're having one with a very large OEM right now for a future RAID product opportunity, which we're excited about but there's a long way to go to get this project sealed up. Obviously, they see the benefit of allowing them to eliminate a very costly battery that they have in their server that they have to use to protect the RAID cache.

As far as the 256Mb goes, we've always felt that that was a solid solution for the SSD write caches. We've seen traction in that area. We have quite a few customers that have been evaluating the product for that space. The same thing with the RAID controller, you have timing of the availability of SSD controllers. What's happening now is some of our ecosystem partners are offering their SSD controllers with DDR4 interface, which is allowing the customer now to have an option to either use 256 or use 1-gig. Again, depending on their product cycle and scheduling which, sometimes they'll have a program and then they decide to delay it or put it on hold or even cancel it and then they resurrect it again and when they resurrect it, they decide, hey, well, we're really close to your 1-gig so let's switch to that.

Those types of things are really unpredictable. We just have to, you know, our sales and marketing team has to stay very close with our customer. We continuously update them on our product availabilities and schedules and we try to get from them what's their timing and limitations. We don't necessarily see anything that says, hey, the 1-gig performs better, per se. I think what we're seeing is it's more of a timing issue now of when their product is planning to be out in the market and when we can deliver production parts.

Richard Shannon

Okay. I appreciate that perspective, Phill. I think that's all the questions from me. I will jump out of line, guys. Thank you.

Phill LoPresti

Thanks, Richard.

Operator

Once again, if you have a question, please press star then one.

Seeing no further questions, this concludes today's question-and-answer session. I would like to turn the conference back over to Dave Allen for any closing comments.

CONCLUSION**Dave Allen**

Thank you, operator. Everspin will be participating in two investment conferences this quarter. Later today, we will be presenting at the 37th Annual Canaccord Genuity Growth Conference here in Boston. Our presentation will be webcast live at 2:00 p.m. Eastern Time today on the Investor Relations section of Everspin's website at www.investor.everspin.com. A replay will be available for those unable to listen to the live webcast from our website. On September 6, Everspin will also participate in the ROTH Datacenter and Intelligent Infrastructure Corporate Access Day in San Francisco. Investors interested in this event should contact their Roth sales rep to request a meeting with Everspin.

Thank you for your interest in Everspin, and goodbye for now.

Operator

The conference has now concluded. Thank you for attending today's presentation. You may now disconnect your lines. Have a great day.