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PRESENTATION

Operator

Good afternoon, and welcome to the Adesto Technologies Second Quarter Financial Results Conference Call. (Operator Instructions)

As a reminder, this conference call is being recorded today, August 1, 2018.

I would now like to turn the call over to Joel Achramowicz. Joel, please go ahead.

Joel Achramowicz

Thank you. Good afternoon, everyone, and welcome to Adesto Technologies' second quarter 2018 earnings conference call.

I'm Joel Achramowicz, Managing Director of the Shelton group, Adesto's Investor Relations firm.

Joining me today on the call are Narbeh Derhacobian, Adesto's President and CEO; and Ron Shelton, Chief Financial Officer.

Now before I turn the call over to Narbeh, I would like to remind our listeners that during the course of this conference call, the company will provide financial guidance, projections, comments and other forward-looking statements regarding future market developments, the future financial performance of the company, new products or other matters.

These statements are subject to the risks and uncertainties that we discuss in detail in our documents filed with the SEC, specifically the final prospectus related to our initial public offering, our 10-K and our most recent 10-Q, which identify important risk factors that could cause actual results to differ materially from those contained in the forward-looking statements.

Also, the company's press release and management statements during this conference call will include discussions of certain non-GAAP financial measures. These financial measures and related GAAP to non-GAAP reconciliations are provided in the company's press release and related current report on Form 8-K, which can be found at the Investor Relations section of Adesto's website at www.adestotech.com.

For those of you unable to listen to the entire call at this time, a recording will be available via webcast on the company's website.

And now, it's my pleasure to turn the call over to Adesto's President and CEO, Narbeh Derhacobian, Narbeh?

Narbeh Derhacobian - *Adesto Technologies Corporation - Co-Founder, President, CEO & Director*

Thank you, Joel. Welcome everyone joining us today. Adesto's revenue in the second quarter was $18.2 million, and in line with our preliminary results announcements, representing our fifth consecutive quarter of above 30% year-over-year revenue growth.

As we mentioned in our announcement, our newest DataFlash-L products targeted for smart home applications ramped lower than anticipated in the quarter.

We continue to believe this is a growing and healthy market opportunity for us as we saw the sampling activity more than double from 80 in the second half of 2017 to over 170 unique opportunities in the first half of 2018.

We continue to get design wins and expect the growth to kick back in later in the year.

We also made solid progress integrating S3 Semiconductors during the quarter, with its results at the high-end of our expectations. We remain very excited about the market and content expansion opportunities we are able to pursue globally, with the addition of S3 Semiconductors broad analog RF and mixed signal expertise.

Also highlighting the quarter was the achievement of another record quarter of design wins for our memory products, further adding to the momentum we've gained over the past year.

Contributing to this success was continued execution on our strategy to expand our Tier 1 OEM customer base, with Standard Serial Flash products. This strategy continues to produce expanded opportunities for our higher value-added solutions at these customers.

For example, one of these leading OEMs that we've started to get traction with our Standard Flash products is now designing us into over 20 different programs, and some of these include Fusion and DataFlash higher-margin parts.

We continue to secure new design wins from Tier 1 OEM customers as well as across other product portfolios, further validating the success of our approach.

The second quarter revenue breakdown by verticals for top 20 customers consists of approximately 52% from the industrial market, 35% from consumer. The spike in the consumer segment indicates the penetration into the Tier 1 OEM opportunities that was indicated earlier.

Computing, communication, medical and automotive constituted the remaining 13%.

Now starting with an overview of memory products. Our business activities with current and new customers remained robust during the second quarter as we secured a record number of design wins. Almost 60% of the design wins in the quarter were with new customers indicating continued expansion of our global footprint.

In addition to consumer sector, we continue to see increasing traction in industrial markets with more wins in the global metering platforms, GPS tracking, access control devices as well as sampling activity in the medical and connected health areas and industrial centers.

In fact, during the quarter, we had some exciting announcements with customers such as Fibaro and Alexa consumer products. Fibaro is a leading manufacturer of smart home IoT devices and is using our DataFlash-L memories across its product line.

Alexa is employing our DataFlash products across its line of Dome Home security products using the Z-Wave chipset, which incorporates our memory as a standard reference design.

We introduced the Fusion family in 2014, for what was then an emerging-market in Bluetooth low energy. And it became a huge success for Adesto's driving growth in '15 and '16 and '17.

Over the last year, we started to see markets shifting to higher density 16 megabits and 32 megabit versions for Fusion and hence, commenced to bring to market the next generation of higher-density Fusion products.

During the second quarter, we received samples for our recently taped out Fusion HD family. The early silicon from Fusion HD is working well, and we expect early samples in Q4 of 2018.

Fusion HD is also based on 65 nanometer nodes. Originally fusion was at 110 nanometer node. So it has a significant better cost structure for us. We're planning to begin sampling Fusion HD with customers in the fourth quarter.

Target applications for these devices include fitness and asset trackers, remote control devices and voice-enabled products.

In terms of our EcoXiP family, we continue to work closely with our MCU partner NXP in co-marketing activity. NXP will soon be featuring EcoXiP on its partner page website in August, and will also be highlighting these products during NXP-connect roadshow in China, and NXP technology days across North America.

Meanwhile, our EcoXiP 128 megabit part is moving through internal validation and characterization with excellent results. And we expect to have early samples by end of the current quarter.

Outside partnerships with MCU suppliers like NXP and STMicro, we're making progress sampling EcoXiP with other system companies as a standalone product. I'm happy to announce that we have our first design-in, in an audio reference design targeting voice-activated appliances.

Customer is finishing its system design and is expected to go to production in second half of 2019 with EcoXiP.

During Q2, we sampled 64 kilobit and 128 kilobit MavriqCM PARTS in the remaining top camera module manufacturer customers and had another module maker qualify the products.

Now, we're in the process of looking for module makers to secure opportunities with their end customer OEMs for the camera module.

As we work to secure our first production orders this year in the camera module market, we also started to look at other opportunities for the MavriqCM outside the camera module market itself. I'm happy to say that we actually have now secured a design win for MavriqCM in the medical sensor market. The end application is a continuous glucose monitoring patch.

We received our first orders and customer is expected to ramp starting in 2019. We won this socket for low-power benefits, form factor benefits as well as the ability of MavriqCM to withstand medical sterilization conditions.

Additionally, we also recently announced a licensing agreement with DB Hitek, who has is licensed our proprietary CBRAM resistive RAM technology for its with 180-nanometer, and mixed-signal manufacturing process, with an option to extend to 130 and 90 nanometers node as well.

DongBu HiTek has been evaluating the maturity of our CBRAM technology for almost 1 year. And by choosing Adesto to partner with and putting in place an aggressive plan to ramp-in their fab has validated our claim that we have a leading position in resistive RAM technology.

This is a royalty bearing agreement, once the technology is brought up in their staff .

Now I'd like to provide an update on our integration of S3 Semiconductors as well as our progress on our ASIC division in the quarter.

As I mentioned, revenues from S3 Semi in this first partial quarter of contribution came in at the high-end of our expectation.

Active ASIC programs today include: one for satellite communication, which is expected to go to production in the second half of '19; and ASIC for a mobile medical application, again, expected to go into production in the second half of '19; and then ASIC for broadband wireless application for broadband to residential and commercial markets.

Our high performance data converter IP is also being ported for an ultra low-power MCU at 22 nanometer node, as well as an LTE-based IoT device customer.

Looking at our ASIC pipeline opportunities, we have significant opportunities in several emerging and growing markets, including next-generation consumer voice-based appliances as well as additional satellite communication for broadband to home markets.

We have also begun creating revenue synergies with our ASIC group. In Europe and North America, where we have a solid industrial customer base, we have started to explore opportunities by engaging in a targeted way with our current customers from the memory side. We believe these engagements will lead to further enhancements of our growth rate for the ASIC business, with Adesto's reputation as a reliable chip supplier and -- supporting the ASIC chip business and with S3 Semi's reputation of delivering high-quality and cost-effective solutions to these end markets.

In addition to integration of S3 Semi we are diligently working to close the Echelon acquisition in the third quarter, following approval by Echelon shareholders.

Our recently completed equity offering provides the necessary capital to fund this transaction. Together, these 2 acquisitions greatly expand Adesto's served addressable market, product portfolio and content opportunities across the IoT space, specifically in the industrial market.

The combination of 3 organizations under one roof set the foundation of a company where solutions become absolutely relevant to how IoT needs to be implemented from ground up, especially in the industrial segment.

In summary, last 6 months have been very transformative for Adesto. While continuing to build on our success in expanding our memory business, with design wins and Tier 1 OEM penetrations across different IoT applications in the different sectors, we are entering the second half of 2018 with more dimensions to our opportunities.

With the integration of our newly acquired ASIC division well underway, we are also seeing equal excitement from our customers and channel partners. Clearly, this solid foundation for growth will be enhanced further by the acquisition of Echelon, which is expected to close in the coming months.

With that, I will now turn the call over to Ron to review the second quarter financial results, and third quarter guidance before opening the call to questions. Ron?

Ronald K. Shelton - *Adesto Technologies Corporation - CFO & Secretary*

Thanks, Narbeh, and thanks everyone for joining this afternoon.

Before I begin my commentary, I wanted to remind all of you that our results for the second quarter include the operations of S3 since May 9, which is the day we closed. So that's approximately half the quarter.

Revenue in the second quarter was $18.2 million, that's up 35.6% from the $13.4 million in the second quarter of 2017, and up approximately 18.8% from $15.3 million last quarter.

Gross margin in the second quarter was 42.7%, that's compared to 50.1% in the second quarter of 2017, and 46.9% last quarter.

As Narbeh mentioned, and as we've discussed in the past, we continue to use our Standard Serial Flash memory products to establish and expand our relationships with new and existing Tier 1 OEM customers.

Consistent with our previous comments, as revenue with these customers continues to grow, our overall product mix and margins may fluctuate from one quarter to the next. However, we are seeing major accounts adopting higher margin products, and this should lead to a long-term positive margin impact on a consolidated basis going forward.

That is reflected in our gross margin guidance for the third quarter.

GAAP operating expenses in second quarter were $11.7 million, that's compared to $8.3 million in the prior year quarter, and $8.1 million last quarter.

On a non-GAAP basis, operating expenses in the second quarter of 2018 were $8.3 million. That's compared to $7.0 million in the second quarter of 2017, and $7.4 million last quarter.

Now as we look at non-GAAP OpEx in a little more detail. R&D expenses were $4.0 million, that's compared to $3.2 million in the second quarter of 2017 and $3.4 million in the prior quarter.

We continue to focus our R&D resources on market opportunities that we believe can drive near-term revenue contribution, while also positioning us for growth later in 2018, and into 2019 from new product families such as EcoXiP and Mavriq.

And with our S3 acquisition, we're making additional investments in system chip design to drive top line growth and higher margins from volume sales of advanced IoT ASIC.

Non-GAAP sales and marketing expenses were $2.9 million, that's compared to $2.5 million in the second quarter of last year, and $2.5 million last quarter.

Non-GAAP G&A expenses were $3.4 million, that's compared to $1.2 million in the prior quarter and $1.6 million last quarter.

Stock-based comp in the second quarter was $720,000. Amortization of intangible assets was $687,000.

Depreciation and amortization was $574,000, and interest expense was approximately $1.2 million.

Accounting for all of these items, adjusted EBITDA for the second quarter of 2018 was a positive $100,000, compared to a positive $100,000 in the second quarter of 2017, and a positive $300,000 last quarter.

GAAP net loss for the second quarter of 2018 was $5.1 million or a loss of $0.24 per share. That's compared to a net loss of $1.8 million or a loss of $0.11 per share in the second quarter of 2017, and a net loss of $1.1 million or $0.05 per share in the prior quarter.

Second quarter non-GAAP net loss was $1.6 million or a loss of $0.08 per share, compared to a net loss of $500,000 or $0.03 per share in the second quarter of 2017. And a net loss of $400,000 or $0.02 per share in the prior quarter.

Share count used to compute second quarter 2018 GAAP and non-GAAP results was 21.4 million shares.

In terms of the balance sheet, we used cash in operations this quarter of approximately $5.5 million. That was due largely to a sequential increase of $3.8 million in inventory, which was driven primarily by 2 factors.

The first we engaged in a last-time buy of product manufactured using a process node that's been discontinued. And secondly, we started carrying higher levels of inventory for high volume products for which we are anticipating revenue growth going forward.

Our targeted inventory turns are a minimum of 4x, and we expect to reach those levels, again, within the next 2 to 3 quarters.

We ended the quarter with about $7.9 million in cash and subsequent to quarter end raised more than $43 million in additional capital, which is necessary to complete our proposed purchase of Echelon, which is subject to close later this quarter.

Accounts receivables was $17.2 million at the end of the quarter, that's up from $12.2 million in the first quarter.

And our Day Sales Outstanding was 51 days, and that's slightly above our target of 45 days.

Now let me turn to our guidance for the third quarter of 2018. As we mentioned earlier, we expect that the Echelon acquisition will close later this quarter. But for purposes of guidance, we're excluding all Echelon activities.

Revenue is expected to range between $19 million and $21 million, that represents approximately a 32% increase year-over-year at the midpoint. This will be our sixth consecutive quarter of year-over-year revenue growth of more than 30%.

Gross margins for the third quarter expected to range between 45% and 48%.

GAAP operating expenses are expected to range between $11.1 million and $11.4 million and non-GAAP operating expenses between $9.2 million and $9.5 million.

Stock-based comp in the third quarter will be approximately $900,000. Amortization of intangible assets will be approximately $1 million, and depreciation and amortization will be approximately $650,000.

Interest expense is expected to be approximately $1.4 million, and that includes about $0.4 million associated with amortizing fair value warrants, which we issued in connection with the credit facility.

Weighted average shares outstanding are expected to be approximately 29.3 million shares for the third quarter.

So lastly, I wanted to talk a little about our outlook for Q4, which will give you a sense for why we're excited about the opportunities that lie ahead of us.

Of course, in this discussion, the underlying assumption is that the Echelon acquisition will close in the third quarter. And assuming that's the case, we would expect revenues in the fourth quarter to increase by more than 65% over the $16.2 million in revenue we reported in the fourth quarter of 2017.

In addition, we also expect pro forma gross margins to be approximately 50%. And as you know, we previously disclosed and discussed cost synergies that we expect to be able to attain related to the acquisition. And as we work through those, we will become a larger, growing, more profitable company providing a broader set of solutions across more than 2,000 customers with a focus on the industrial sector.

This in turn will drive a financial model that over time should provide operating and EBITDA margins of more than 20%.

So with that, we'll open the call to questions.

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) Our first question comes from Karl Ackerman with Cowen and Company.

Karl Fredrick Ackerman - *Cowen and Company, LLC, Research Division - Director & Senior Research Analyst*

I had 2 questions. So first, I had a first question on S3. So it sounds like S3 is growing better than you initially expected. And I think one of the primary catalysts of that deal has been the acknowledgment that you have a better opportunity to drive wins of the company's custom ASIC chips to Tier 1 industrial OEMs. Could you talk about that progress there today? And how we should think about that business opportunity as we move into the back half of 2018? And then I have a follow up, please.

Narbeh Derhacobian - *Adesto Technologies Corporation - Co-Founder, President, CEO & Director*

Hi, this is Narbeh. Yes, so as we indicated even prior to acquisition, completing the acquisition of S3, we talked about exactly what you said. When we were doing our diligence with S3, we saw that the opportunities that they were able to close were far fewer than the opportunities that were in the pipeline. And the number one reason that they were unable to close, especially on some of the Tier 1 industrial customers was because they didn't have a reputation as a chip supplier. And that's where we saw a potential revenue synergy between the 2 companies. I also said that the worst thing we can do is to basically complete the acquisition and open the floodgates of our 2,000-plus customers, over half of which are in the industrial space, to start with a complete blanket approach of expanding the opportunities for S3. So what we said we'll do is, we'll do it in a very targeted way. So specifically, if you look at the profiles of ASIC deals that they're very good in terms of delivering and also very good in terms of quality and cost performance metrics. It falls in the category where if you look at our customer base, especially our top 50 customer base, there is a half a dozen to a dozen or so customers, these are large industrial companies that will be targeted to go first. So what we've done so far is that we've opened the channel discussions with roughly, 4 of these customers, 2 in the North America and 2 in Europe to start that engagement. These things usually take time, again, these are industrial customers and it's an ASIC opportunity. So that process has begun and we'll report any milestones that have occurred -- that will occur on that in the coming quarters. So we're executing on the plan that we will do. And initial reaction from the customers and the channels, again, I indicated have been very positive as we've added this dimensionality to our portfolio.

Karl Fredrick Ackerman - *Cowen and Company, LLC, Research Division - Director & Senior Research Analyst*

I appreciate that. I guess, moving over to gross margins for a moment. I think one of the headwinds on gross margins this quarter was both the mix and uplift of Serial Flash, both as an overall portion of the combined company and also within Serial. It sounds like you're reducing the costs of your Fusion products from a lithography shrink. But are there any other product families we should expect you reduce fixed cost over the next few quarters that would drive margins from here?

Narbeh Derhacobian - *Adesto Technologies Corporation - Co-Founder, President, CEO & Director*

Yes, so that's a good question. I indicated that we had -- if you look at our revenue makeup, we had a spike in the consumer side of 35%. So I want to also indicate that the issue -- the margin pressure is not coming necessarily from a sector or its not coming from a product line. It's a combination of a product line and a particular customer within the consumer space. Just to give you an example, if I go back to Q4 of 2017, I believe we reported our consumer business was about 40% bigger than what it was last quarter. But our gross margin was actually 49% for that quarter. So we are able to actually extract good gross margin in the consumer space, even with our standard products, definitely with the Fusion and DataFlash and other products. But when we started to embark into this path, to get business from these Tier 1 OEMs, I did indicate that the way to go in there is basically to go in as -- with our standard products, one of several suppliers, get a market share, become a valued, certified supplier and then you start to get other engagement, which is what happening today. But that first initial step, obviously, to go in and get your footprint inside the door has margin pressure. And that's what transpired in Q2, and you saw the margin pressure. So on cost reduction question, yes, fusion HD, again at 65 nanometer, the new products make sense, the 16 and 32 megabits. But the ones that we are selling today with good gross margins, it actually not cost effective to migrate out to those nodes. You know memory is a funny thing that depending on the density of the chip, you have a sweet spot where it's the most cost-effective slot, and with a price that you can get. And sometimes when you migrate to a more advanced node, unlike logic, you're not able to shrink all parts of it to get the cost reduction. As the density gets bigger, then it makes sense to move to a certain point. It didn't make sense for the 16 and 32 Fusion to be done on 110-nanometer. That would've been horrible margin.

So when you saw this market emerging about a year ago, we made a push that, okay, going forward on 16 and 32, we migrated into that node. We did something similar to this with the DataFlash about 1.5 years, 2 years ago to maintain the cost on that. So we do monitor that and we do the shift based on what makes sense from a particular product family, particular density cost perspective.

Operator

Our next question comes from Mike Walkley with Canaccord Genuity.

Unidentified Analyst

This is Josh for Mike. I believe you talked about a record number of designs wins in the quarter. Can you talk a little bit about how broad-based those are across the product lines? Or just give us some more color on that?

Narbeh Derhacobian - *Adesto Technologies Corporation - Co-Founder, President, CEO & Director*

For the design wins?

Unidentified Analyst

Yes.

Narbeh Derhacobian - *Adesto Technologies Corporation - Co-Founder, President, CEO & Director*

Yes, one second. I will -- yes, so first of all, as we indicated in the quarter, the -- roughly 60% of the design wins came from new customers, right. And from an end market perspective, we had this quarter about 50% were in the consumer, 20% were in industrial, and about 30% were in the rest, in consumer -- sorry, in communication, automotive and computing.

Unidentified Analyst

Okay, great. And then just a question -- another question on gross margin. It sounds like the issue in Q2 there was kind of a one-off for the year. Do you expect any other new large customers throughout the year, where this could happen again? Or do you just kind of see that as a large one-off issue?

Ronald K. Shelton - *Adesto Technologies Corporation - CFO & Secretary*

Hey Josh, it's Ron. Look, I think it was a one-off issue this quarter and we've been pretty consistent in the commentary. I mean, we're going to continue to go after large OEM Tier 1 customers, right. And in this case it was one. We're not in a position to say it couldn't happen again. I think there were some very large companies that we want as customers and we're going to go after them. Now the fact is, this quarter, though, you did see the bounce back -- and -- or for Q3, you're seeing a bounce back in the margins. But again, I think as we gain scale, that would -- these types of things will have much, much less of an impact on the results.

Operator

Our next question comes from Rajvindra Gill with Needham & Company.

Rajvindra S. Gill - *Needham & Company, LLC, Research Division - Senior Analyst of Microcontrollers, Analog & Mixed Signal, Consumer IC & Multi-Market*

A question on the Q4 guidance. So is it 65% year-over-year growth from last year, that implies a contribution of -- close to $3.7 million from Echelon. So I just wanted to make sure that is kind of to accurate. And if I kind of strip out Echelon and S3 for Q4 and compare it to Q4 of last year, it implies that the core business is growing about 21 -- 20%, 21%. So just wanted to make sure I'm all set with those kind of figures.

Ronald K. Shelton - *Adesto Technologies Corporation - CFO & Secretary*

So hey Raji, it's Ron. I think I wouldn't -- the intent of Q4 guidance like wasn't to get that granular, right. I think what we're trying to was give you and others a sense for, like what's the business going to look like when all this is done. And we expect it to close in Q3, and we're looking at a consolidated basis. And what we've said that we think it's at least 65% higher than Q4. Once it closes, and we've been consistent with this, we'll come to the market with some fairly detailed commentary on what the combined company looks like. But again, I think the idea was to point out that look, there's -- significantly larger coming off Q4. Its margins, I said approximately 50 so -- its starting with a 5. It's a really good customer base and it's going to be profitable and that's what we're driving for, so that was the intent. Again, I think with respect to -- if you want to break it down by product lines. I think the way to think about the memory business right now is what we talked about last quarter in the preannouncement where we've seen, probably a little bit of a push out in the smart home market. But as Narbeh talked about in his comments, there's significant activity there. So I think that's going to be a really strong healthy market for us that's just pushed out a little bit.

Rajvindra S. Gill - *Needham & Company, LLC, Research Division - Senior Analyst of Microcontrollers, Analog & Mixed Signal, Consumer IC & Multi-Market*

I appreciate that. But kind of looking into 2019, I think Echelon historically has done about $32 million, $33 million of revenue. So how should we be thinking about '19 when it comes to kind of contribution from Echelon and S3?

Ronald K. Shelton - *Adesto Technologies Corporation - CFO & Secretary*

So look, I appreciate what we're trying to get to here. But Echelon hasn't closed, right. And I think until that, I mean, they're still an independent company. And they're going to run that way. They've had a historical run rate. And I think if people are trying to think about '19, and how to model it, I'm not going to tell people how to do that. I mean, I think they're public and their numbers are out there. I think again, what we're trying to communicate to you and others is look, when the companies are together, and we'd expect that to be in Q4, it's a much, much different looking company than it is today.

Operator

Our next question comes from Suji DeSilva with Roth Capital.

Sujeeva Desilva - *Roth Capital Partners, LLC, Research Division - Senior Research Analyst*

Perhaps a clarification on Standard Serial Flash. What percent of memory revenue is it maybe in the second quarter? And what's the mix of end markets for Stranded Serial Flash versus the overall memory business, just to get a feel there?

Ronald K. Shelton - *Adesto Technologies Corporation - CFO & Secretary*

Yes, hey, Suji, it's Ron. So as I think by overall percentage, look, historically DataFlash has been in the 70% range, right. I think this quarter it came down about 10%. And most of that went to the standard flash. Now in terms of end markets, I think it's -- you would say most of it is consumer-oriented.

And again, I think Narbeh pointed out within that segment, there was one customer in particular that had quite a large influence on the margin profile this quarter.

Sujeeva Desilva - *Roth Capital Partners, LLC, Research Division - Senior Research Analyst*

Okay, that's helpful. And am I correct to understand the balance sheet, the inventory increase was similarly -- is going to be for that large customer? Or what end market customers is the inventory increase plan for (inaudible)?

Ronald K. Shelton - *Adesto Technologies Corporation - CFO & Secretary*

Yes, so there are a couple of things going on. So one, we manufactured -- we were manufacturing some products in an older process node. And that process node is being discontinued, so that's part of it. So we're building up inventory for those products. And then the second one is there's an inventory for high-running products, some of which are the ones for the consumer company that we talked about and others are kind of broadly -- it could be DataFlash product, could be anything that's a high-running product that we want to have little higher levels of inventory for.

Sujeeva Desilva - *Roth Capital Partners, LLC, Research Division - Senior Research Analyst*

And then last question on S3. What -- for these industrial customers you're targeting to cross sell who is the incumbent ASIC supplier there today?

Narbeh Derhacobian - *Adesto Technologies Corporation - Co-Founder, President, CEO & Director*

Okay, so in terms of where S3 plays is -- what they do is they don't go necessarily in replacing an ASIC supplier. So usually these companies, when it makes sense to go into ASIC is that when you're running a system that is using off-the-shelf products whether it's a standard general-purpose microcontroller with a combination of analog or mixed signal, other components inside, or it's a FPGA-based system. When the volumes start to hit a certain level depending on the economics of that particular system, it doesn't make sense anymore to buy off-the-shelf product. That's where an ASIC play happens. So none of the opportunities with our industrial customers are replacing another ASIC. We're actually going in and looking, bidding for the business in terms of opportunities for a new system that they are developing or they have a cost reduction of an existing system that's being done. But typically, I indicated in the past that if you look at the ASIC world itself, you have the ASIC companies that are tied to foundries whose main purpose is to really drive volume, greater volume. They basically focus on consumer markets and communication markets. Those are -- SMIC has Brite Semiconductor, TSMC has a company called GUC, UMC has Faraday. So those are very digital-heavy sort of ASICs that they run. This is not where we're playing. We're playing in an area where the ASIC itself is heavily RF and mixed signal and analog with digital, but if you were to balance the 2 it's less of a digital play and more of an analog and mixed-signal play. And this tends to be usually be found in industrial applications, command-and-control applications, machine-to-machine communication applications.

Operator

Our next question comes from Gary Mobley with Benchmark.

Gary Wade Mobley - *The Benchmark Company, LLC, Research Division - Research Analyst*

I wanted to start off with a question about clarifying the revenue contribution from S3 in the quarter. Am I correct in assuming that S3 contributed about $1.6 million in Q2?

Ronald K. Shelton - *Adesto Technologies Corporation - CFO & Secretary*

No, Gary, I think in the release it indicated about $2 million.

Gary Wade Mobley - *The Benchmark Company, LLC, Research Division - Research Analyst*

$2 million, okay. All right, so based on your preliminary Q4 guidance and your Q3 guidance, it seems as though the core Adesto business, the memory business is growing low single-digit to mid-single-digit percent sequentially in the second half of the year. And historically, it's been more in line with 5% to 10%. You spoke about some softness or some delayed ramp in the smart home market. But are you also seeing some weakness in the European smart meter market as there's a transition -- generational transition going on there in that market and is it that impacting you as well?

Narbeh Derhacobian - *Adesto Technologies Corporation - Co-Founder, President, CEO & Director*

No, we don't see that in the meter market. In fact, we continue to secure with our top metering customers, continue to secure new design wins new opportunities. And again, from a revenue contribution perspective, they end up to be in the top five, top seven customers consistently, moving every quarter up and down slightly. Now in terms of the growth. Look, if you think about what we said in the -- specifically related to the DataFlash end market, right, the smart home market. And if you kind of do look at what we were expecting going into the second half, it's essentially, we're seeing about a quarter of push out on the -- overall and the memory business in general. Primarily coming from the DataFlash [pressure]. We had done a lot of work last year, as I indicated, second half we had 80 -- just from a sampling activity, 80 sampling activities in '17. First half, this market is not going away. We had more than double of those sampling activities. So market is very -- we believe there is still some inventory in the channel, not by us, by some of the older designs that are being rolled out. But we just had a meeting with the main customer that's driving the reference design on that a few weeks ago and they're extremely bullish, even more bullish than before on that end market opportunity. So we think this is just a push-out and we have no evidence to say otherwise on that. So that commentary I think should go well with whatever analysis you did on the first versus second half.

Gary Wade Mobley - *The Benchmark Company, LLC, Research Division - Research Analyst*

I had a question about the CBRAM license agreement with DongBu. Is there a high-margin NRE nonrecurring engineering fee associated with that ahead of us, perhaps, in the third quarter?

Narbeh Derhacobian - *Adesto Technologies Corporation - Co-Founder, President, CEO & Director*

We haven't outlined the detail of the agreement. But the agreement involves basically, like a standard licensing agreement. It does involve an upfront licensing fee as well as potentially some, like you said, NRE activity. And then at the end, there is a royalty-bearing, [wafer] level royalty-bearing agreement.

Operator

Our next question comes from Aman Gulani with B. Riley.

Aman Raj Gulani - *B. Riley FBR, Inc., Research Division - Associate Analyst*

How do you expect the mix of Standard Serial Flash to evolve overtime in the coming quarters? And then also, what are you seeing in terms of pricing trends for low-density flash memory?

Narbeh Derhacobian - *Adesto Technologies Corporation - Co-Founder, President, CEO & Director*

Low-density flash memory pricing is -- again, when we say low-density I'm personally referring to anything below 8 megabit, 16 megabit. That pricing is doing -- we see very stable. We've seen this over the last 3 to 4 years because there's no new capacity coming online, there's no new fabs, and not necessarily new suppliers coming at those densities that is going to change the supply and demand. If anything, demand is very robust into this really -- again I'm talking about the commodity flash into this IoT ramping in the different sectors. In terms of standard flash, again, we are expecting that -- remember, I want to again emphasize that the low margin pressure is not coming just from standard flash itself, right. It's coming from a combination of a strategy to go into Tier 1 with the standard flash as the reference to go inside Tier 1, then to be able to expand the business there. So that business, that particular business that created the low-margin pressure, I'm expecting it not to. As we talk about the margins bouncing back next quarter that is going to grow. But this is the way that we're penetrating the Tier 1 OEMs and if I look in the future, it's possible that, again, there will be a quarter where, for product mix that your memory gross margin will start to move around. In the long term, if I look at my non-Tier 1 OEM and non-standard product margins, those margins are very healthy. They're staying where they are. They're close to the top end of our corporate [dollars] that we've been reporting. So from that perspective, really this is truly a combination of product mix and customer mix that has come together for Q2.

Operator

Our next question comes from Gus Richard with Northland.

Auguste Philip Richard - *Northland Capital Markets, Research Division - MD & Senior Research Analyst*

I was hoping you'd help me out on how to think about gross margins with just the combined S3 and Adesto. Is it a broader range? I know it, obviously, would be dependent on mix. But what would be the range going forward if I just assume those 2 companies glued together?

Ronald K. Shelton - *Adesto Technologies Corporation - CFO & Secretary*

So S3 and Adesto well, what you're seeing today is, for Q3 the guidance is just S3 and Echelon and that's a partial bounce back, I think, from what we saw in Q2 -- S3 and Adesto, my apologies. I think going forward, again, it's historically a long-term model for the memory business itself has been 45 to 50. So I think as memory gets back into that range, you should expect margins to trend higher. And as S3 becomes a bigger part of the business, I mean, it'll move even higher more quickly. But right now, I think it'll over time start pushing towards the 50 mark.

Auguste Philip Richard - *Northland Capital Markets, Research Division - MD & Senior Research Analyst*

Got it. And then on the Mavriq, do you guys expect a design win in a camera model this year? Or can you give a little bit color, do expect somebody to take that to production?

Narbeh Derhacobian - *Adesto Technologies Corporation - Co-Founder, President, CEO & Director*

Yes, that's our expectation, Gus. And today, we have opportunities in the middle of the year, end of Q1, beginning of Q2. On the 64 kilobits, one -- the one that we actually got first qualified. But that was on a price that we didn't want to take that one opportunity. So we sort of pushed that out to the side and customer went with a generic [W] from a supplier from China. 128 kilobit, we think there is a lot more opportunities and at price points which is going to be much more attractive for us. And again, if you remember when I said about the camera module, really [60% of it] is to basically get the part in the door. 128 kilobit is very good gross margin. And as the market shifts to 256 K, it's very, very high gross margin for the part. So we're -- again I'm expected to get -- that's our target, to get a design win this year in that. And we know the part works. We know it's been qualified with at least 2 module makers so it passes their grade. And now we're also sampling with some of the rest of the module makers that we have targeted and some of these are the ones that are more 128 K [demanders]. So I'll report on that in the next earnings call.

Aman Raj Gulani - *B. Riley FBR, Inc., Research Division - Associate Analyst*

Great. And a final one from me. You sort of put out an expectation for Q4 when you combined Echelon and I just want to make sure I understand it. You're expecting that combined entity with a full quarter of Echelon to be up 65% relative to Q4 of '17, did I understand that correctly?

Ronald K. Shelton - *Adesto Technologies Corporation - CFO & Secretary*

Yes. I think what we said was, again, that we would expect it to be up at least 65% over the Adesto reported results for Q4 last year.

Operator

And I show no further questions in queue. So I'd like to turn the conference back over to Mr. Derhacobian for closing remarks.

Narbeh Derhacobian - *Adesto Technologies Corporation - Co-Founder, President, CEO & Director*

Thanks for participation on today's call. Before closing today's call, I want to mention that we'll be attending the Canaccord conference in Boston next week; the Jefferies conference in Chicago later in the month, and both the Roth IoT corporate access day as well as the Gateway conference in San Francisco on September 5 and 6, respectively.

And for those of you participating in the upcoming] [Look] Capital TMT Silicon Valley bus tour, we look forward to seeing you here at our facility. We'll have refreshments here.

And finally, please contact the Shelton Group if you'd like to meet with us at any of these events. Thanks again for joining us on today's call, and we look forward to providing further updates next quarter.

Operator, you may now disconnect.

Operator

Ladies and gentlemen, that does conclude today's conference. Thank you very much for your participation. You may all disconnect.
