



Q4 & FY 2017 Earnings Conference Call Prepared Remarks

Operator

Ladies and gentlemen, good afternoon. At this time, I'd like to welcome everyone to QuickLogic Corporation's Fourth Quarter and Fiscal 2017 Earnings Results Conference Call. Today's conference call is being recorded. I would like to turn the call over to the company's Investor Relations representative Ms. Moriah Shilton of LHA. Ms. Shilton, please go ahead.

Moriah Shilton - LHA

Thank you, operator. Welcome, everyone, and thank you for joining us today for QuickLogic's Fourth Quarter and Fiscal 2017 Results Conference Call. With us today are Brian Faith, President and Chief Executive Officer, and Dr. Sue Cheung, Chief Financial Officer.

Before we begin, I will read a short safe harbor statement. Some of the comments QuickLogic makes today are forward-looking statements that involve risks and uncertainties, including but not limited to stated expectations relating to revenue from new and mature products, statements pertaining to QuickLogic's future stock performance, design activity and its ability to convert new design opportunities into production shipments; timing and market acceptance of its customers' products; schedule changes and projected production start dates that could impact the timing of shipments; the company's future evaluation systems; broadening our ecosystem partners, expected results and financial expectations for revenue, gross margin, operating expenses, profitability and cash. These statements should be considered in conjunction with the cautionary warnings that appear in QuickLogic's SEC filings. For additional information, please refer to the company's SEC filings posted on its website and the SEC's website. Investors are cautioned that all forward-looking



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statements in this call involve risks and uncertainties and that future events may differ materially from the statements made. For more details of the risks, uncertainties and assumptions, please refer to those discussed under the heading “Risk Factors” in the annual report on Form 10-K for the fiscal year ended January 1, 2017 the company filed with the SEC on March 9, 2017. These forward-looking statements are made as of today, the day of the conference call, and management undertakes no obligation to revise or publicly release any revisions of the forward-looking statements in light of any new information or future events.

Please note, QuickLogic uses its website, the company blog QuickLogic HotSpot, corporate Twitter account, Facebook page, and LinkedIn page as channels of distribution of information about its products, its planned financial and other announcements, its attendance at upcoming investor and industry conferences, and other matters. Such information may be deemed material information, and QuickLogic may use these channels to comply with its disclosure obligations under Regulation FD.

The conference call is open to all and is being webcast live. A supplemental presentation management will reference on today’s call is posted at QuickLogic’s IR portion of its website and also available through today’s webcast.

We will start today’s call with the company’s strategic update from QuickLogic’s CEO Brian Faith. Then CFO Sue Cheung will provide financial results and guidance. Brian will deliver closing remarks and open the call to questions. At this time, it is my pleasure to turn the call over to Brian Faith, President and CEO. Please go ahead, Brian.



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Brian Faith – President and CEO

Thank you, Moriah and thank you all for joining our Q4 and fiscal 2017 conference call.

I'm very pleased with tangible progress we showcased in our CES suites last month and the favorable reception we received from the many customers and ecosystem partners that we met with during the show. The nine products we displayed at CES represent just a selection of the design wins that we expect will contribute to our growth this year.

We shipped EOS™ S3 to a number of customers during Q4 2017 to support initial production and prototype builds. We expect these and other EOS S3 designs will begin moving into production late this quarter, and that the number of designs and volume will ramp beginning in Q2. I believe this trend will continue to build momentum during the second half of 2018, and that we are well positioned to realize our growth and profitability objectives.

Before we get deeper into the progress we've made with our sensor processing and embedded FPGA IP licensing initiatives, let's take a minute to review 2017 and our outlook for 2018.

In Q4 2017, display bridge revenue from our lead customer was down over \$540K from Q4 2016. This was slightly more than I expected and was attributable to the customer's end product mix shifting to larger format tablets that have never required a discrete display bridge. To be clear, the decline in display bridge revenue with this customer was not due to us losing any designs.



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Offsetting this decline in Q4 2017 were increased shipments of mature products and EOS S3, as well as shipments of new higher margin display bridge designs to other customers. While these offsets drove only a modest increase in revenue, the more favorable mix resulted in a 57% increase in non-GAAP gross profit dollars relative to Q4 2016.

Last quarter, our lead display bridge customer was forecasting a significant rebound in demand for Q1 2018. However, the customer has since lowered its Q1 forecast by approximately \$500K. As a result, even with a notable uptick in revenue from EOS S3 and the possibility of an ArcticPro™ embedded FPGA IP license agreement, we are currently forecasting sequentially flat revenue for Q1. Sue will provide more detail on 2017 results and our Q1 2018 outlook later during this call.

Looking beyond Q1, we believe our baseline revenue from mature, display bridge and our existing base of connectivity business will be approximately \$2.5 million per quarter during 2018. This equates to about \$10 million in annual revenue from these three product categories. In addition to this baseline, I believe we are well-positioned to report at least \$8 million in combined revenue from Sensor Processing Solutions and embedded FPGA IP to realize our objective of greater than 50% revenue growth in 2018.

Let's start now with an update on our embedded FPGA business:

During Q4, we completed our test chip tape-out for GLOBALFOUNDRIES' 22nm FD-SOI process, which is also referred to as 22FDX®, and we are on track to finalize qualification during Q1. We believe this will mark the first qualification of FPGA technology running



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on an FD-SOI process. We have ongoing engagements with potential IP customers that are targeting this process for new designs that I believe will close later this year.

We also have ongoing engagements for new designs targeting our already qualified 40nm processes at GLOBALFOUNDRIES and SMIC that I believe will also close during 2018.

In December, we announced our collaboration with Mentor[®], a Siemens business and a world leader in software synthesis tools for semiconductor design. Through this collaborative effort, Mentor has optimized its synthesis tools to support our ArcticPro embedded FPGA architecture and work in conjunction with our updated Aurora[™] evaluation and development tool suite. We will distribute this new version of Mentor Precision Synthesis as part of our Aurora tool suite.

The combination of the two tool sets will deliver a seamless development environment supporting a complete IP evaluation and design flow, from RTL to programming bit-stream, for the embedded FPGA portion of a customer's design.

Put more simply, the combined tool suites enable our targeted customers to evaluate and implement our ArcticPro embedded FPGA technology with much higher efficiency and with less hands-on support from our engineering staff. More importantly, it has enabled us to accelerate the evaluation process with a number of leading semiconductor companies and OEMs that are considering ArcticPro embedded FPGA technology for new SoC and ASIC designs.



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Moving forward, we expect to announce license agreements with leading semiconductor companies and OEMs throughout 2018.

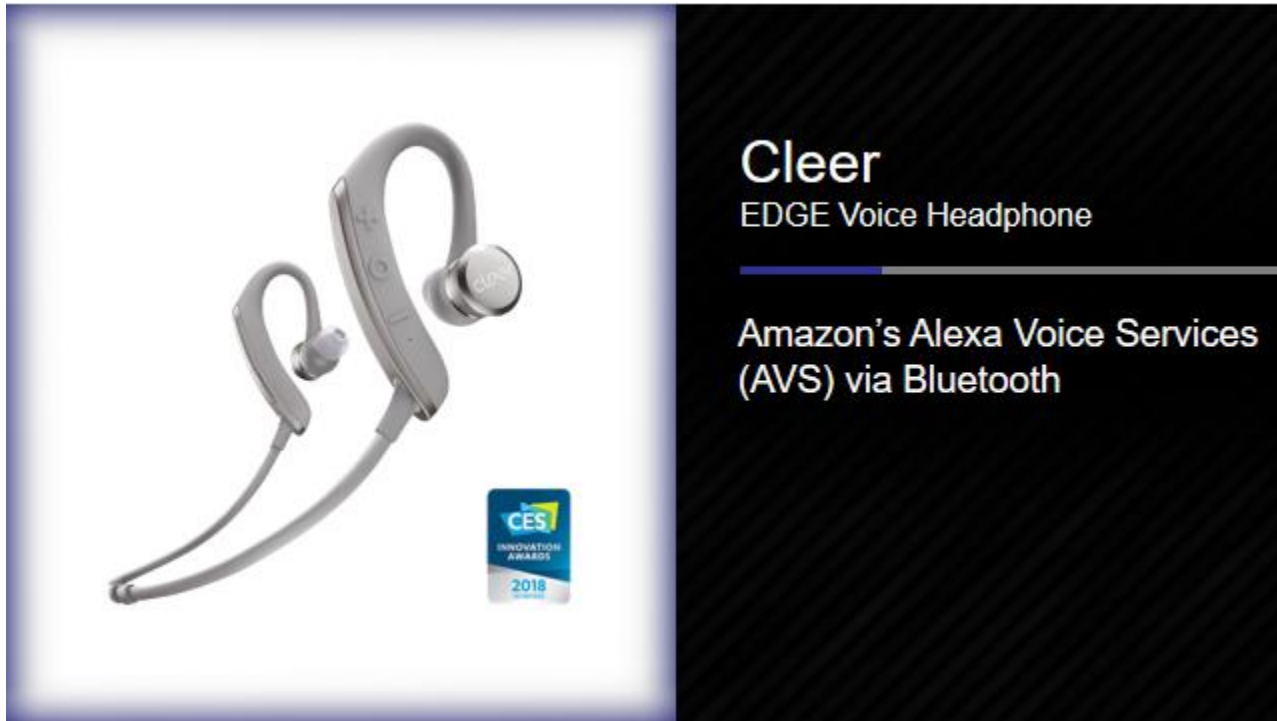
Now, turning to Sensor Processing with an initial focus on wearable, hearable and IoT design activity.

Our wearable design win with the tier one smartphone OEM that I've discussed in previous calls continues to move forward, and field testing has been expanded to include some of the OEM's targeted customers. While we do not have a production schedule commitment, I remain optimistic that it will begin during the first half of 2018.

With this same OEM, we also made progress on the consumer wearable engagement as well as the ongoing evaluation for a new hearable design, which we hope to advance to an engagement before the end of Q1. Both of these products are scheduled for mid-2018 introductions, and as consumer devices, I think the customer will hold fairly true to that schedule.

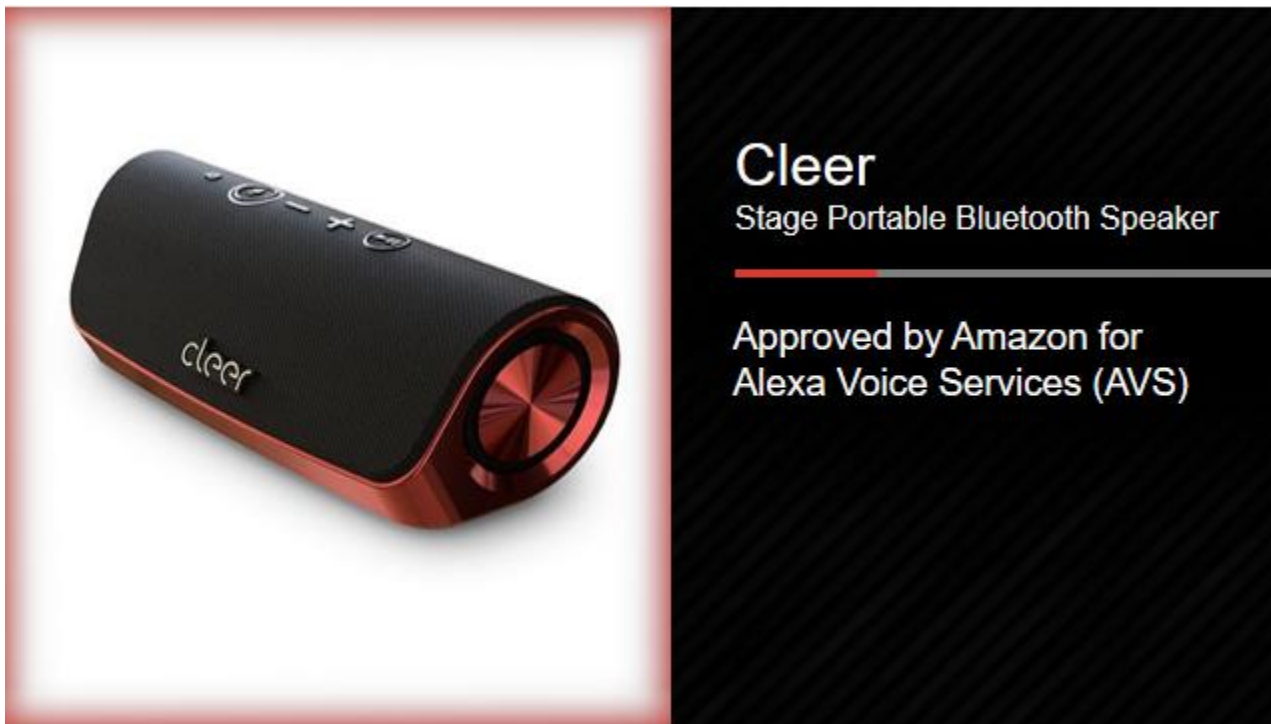
Since only a few of our investors were able to visit our suites at CES, we've prepared slides so you can see a few of the nine EOS S3 voice-enabled SoC products that we displayed in our suites.

The first two slides show new products from Cleer[®], a U.S. based OEM that has a strong presence in China and is rapidly building brand recognition for its award winning high-performance audio products.



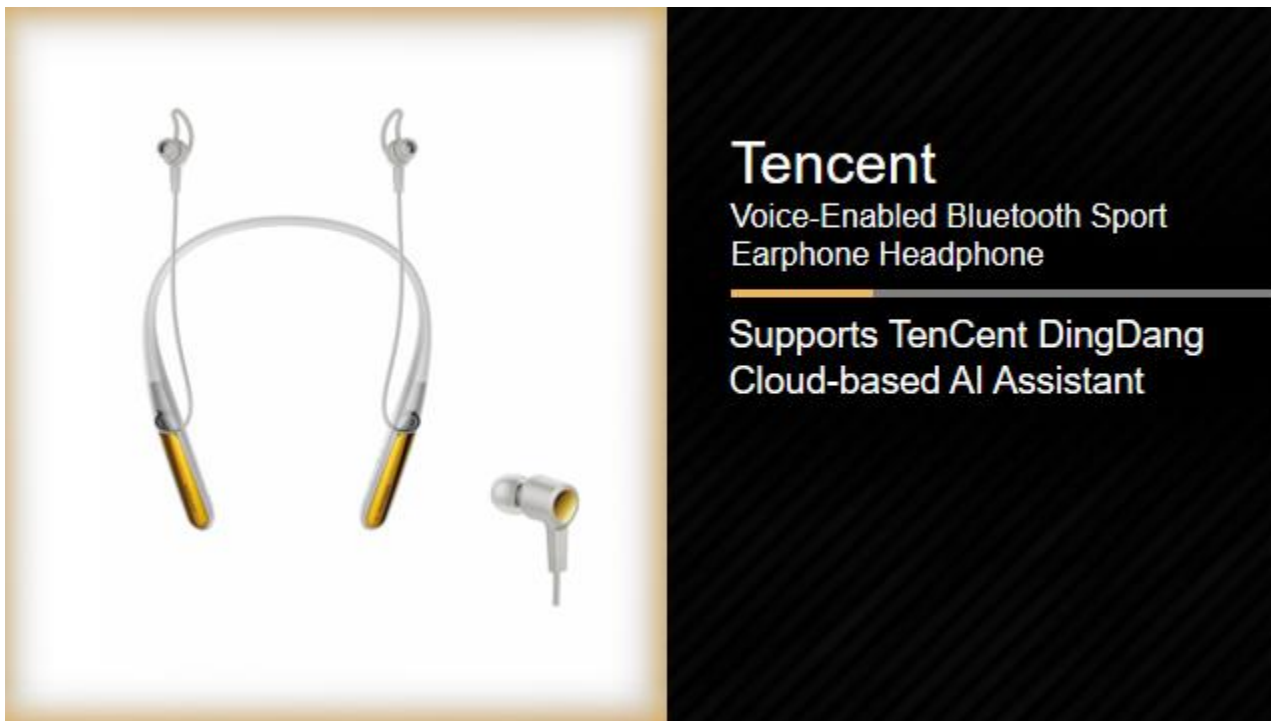
The first slide shows the new Cleer *EDGE Voice*, which won an innovation award at CES last month. The Cleer *EDGE Voice* uses our EOS S3 to enable always on / always-listening capability, recognition of the Alexa trigger word and its intelligent power management to optimize battery life; an EOS S3 feature that is leveraged in virtually all of our design wins.

Cleer is currently working with Amazon to gain co-branding approval for Alexa Voice Services in advance of Amazon releasing its formal specification for hearable devices. This approval process is a gating item for all of our hearable design wins that support Amazon Alexa Voice Services.



The second slide shows the newest generation of the Cleer Stage battery powered Bluetooth® speaker. The first generation of this speaker received a Best of Show award at the annual Consumer Electronics Weekly show in New York last June. In the new generation Cleer added our EOS S3 SoC to enable always-on / always-listening support for Amazon Alexa voice services, which Amazon has already approved for co-branding.

We shipped a modest quantity of the EOS S3 to Cleer’s manufacturing partner during Q4 2017 to support prototype builds of its Stage portable speaker and EDGE Voice hearable and we anticipate shipping initial production quantities either late this quarter or in Q2. Based on the forecasts we’ve received, we expect production volume to ramp during the second half of 2018.



The third slide shows the new voice-enabled hearable design that GGEC is manufacturing for Tencent. While Tencent is best known for its WeChat app, which boasts nearly a billion monthly users, it is actually a very large and highly diversified tech company with a market capitalization similar to Facebook. The hearable device shown in this slide was designed to support Tencent's voice enabled AI assistant that it introduced in China last April.

We shipped a modest quantity of the EOS S3 to GGEC to support its prototype build during Q4 2017, and we anticipate shipping initial production quantities either late this quarter or in Q2. We believe that Tencent is evaluating several market strategies for this design and we hope to have a clearer picture of the production ramp schedule by the end of this quarter.



In the fourth slide you'll see a picture of several other new products incorporating EOS S3 that we displayed at CES. Please note, these represent only some of the EOS S3 design wins that our customers forecast will enter production during the first half of 2018.

- **Cleer, Inc.** – EDGE Voice-Enabled Bluetooth Headset
 - Supports Amazon Alexa Voice Services (AVS) – Amazon Approval Pending
- **Cleer, Inc.** – Stage Voice-Enabled Portable Bluetooth Speaker
 - Supports Amazon Alexa Voice Services (AVS) – Approved by Amazon
- **Climax Technology Company Ltd.** – Voice Extender ZigBee Voice-Enabled Smart Home Senior Care
 - Supports voice-triggered hands-free, two-way communication
- **Dongguan Fihonest Communications Co., Ltd** – Voice-Enabled Bluetooth Headset
 - Supports Amazon Alexa Voice Services (AVS) – Amazon Approval Pending

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- **Dongguan Koppo Electronics Co., Ltd.** – Voice-Enabled Bluetooth Headset
 - Supports Amazon Alexa Voice Services (AVS) – Amazon Approval Pending

- **GuoGuang Electronic Corp., Ltd. (GGEC) for Tencent** – Voice-Enabled Bluetooth Sport Earphones
 - Supports TenCent DingDang AI Digital Voice Assistant

- **Qiwo Smartlink Technology Co., Ltd** – Voice-Enabled Bluetooth Earphone
 - Supports Amazon Alexa Voice Services (AVS) – Amazon Approval Pending

- **Shenzhen Aoni Electronic Ltd.** – Voice-Enabled Active Noise Canceling (ANC) Bluetooth Headset
 - Supports Amazon Alexa Voice Services (AVS) – Amazon Approval Pending

- **Shenzhen Reach Higher Ltd.** – Voice-Enabled Bluetooth Headset
 - Supports Amazon Alexa Voice Services (AVS) – Amazon Approval Pending

A point I want to emphasize here is that all of our hearable designs that support Alexa are awaiting Amazon's approval for co-branding. While Amazon has a formal specification for what it calls far-field devices like smart-speakers, it has not released its specification for hearable devices yet, and that means each product has to move through the approval process individually and at an unpredictable pace. This is one of several variables we are facing today as we try to provide an accurate near-term outlook.

In an effort to be proactive to anticipated questions, I'll provide a quick update on several of the design wins that we've discussed in past calls that were not shown in our CES Suites.



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The Janyun smartwatch that we introduced in a press release last year is undergoing final industrial design. Due to this, we have the printed circuit boards that will be used in the design, but not the physical smartwatch. We shipped prototype volume to Janyun during Q4 and expect its smartwatch will move into initial production during the first half of 2018.

We shipped a fairly significant volume of EOS S3 in Q4 to support initial production for the wearable design win with the large app company I've mentioned in past calls. We expect mass production for this product to ramp beginning in late Q1 or early Q2.

In our last conference call I mentioned a design win with a European company that has developed a wearable targeting B2B health and fitness applications. This design uses virtually all of the EOS S3 resources to support host processing, sensor processing and its embedded FPGA as a display driver. We expect this wearable will move into initial production during Q2.

We also have a design win for a wearable device with a European fitness company that I've mentioned in past calls. This wearable is currently scheduled to move into initial production during second half of 2018.

Beyond these design wins we have numerous hearable, wearable and IoT engagements in various stages. These include the engagement I've mentioned in past calls with a Tier One IoT company as well as engagements with other large OEMs. However, due to highly restrictive NDAs there is not much I can say today about these engagements beyond the fact

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some are very significant, and that we are making progress toward converting them to design wins.

There are a number of interesting threads that are common across many of our recent design wins; of these, I'm going to take a few minutes to highlight three.

- First, we are winning a large number of hearable designs. This is not unexpected. As I highlighted last year, forecasts such as the one I cited from the 2016 report from WiFore that predicted a surge in the hearable device market that its author thinks will build momentum going forward.
- Second, always-on / always-listening is becoming a check box requirement for new hearable, IoT and most wearable products. We are also seeing customers retrofit existing product designs to add always-on / always-listening voice enabled features. We saw this in both of our design wins with Cleer. This underscores the broader trend that we've cited in the past that voice is the interface of choice, or as WiFore predicted, the rise of "The Internet of Voice."
- Third is the increasing frequency of our EOS S3 being paired with a high-end audio Bluetooth SoC like the Qualcomm CSR8670 and 8675. We are used in conjunction with these or similar SoCs in many of our hearable and even in some of our IoT design wins. These include both of our designs with Cleer and our design with GGEC for Tencent.



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The primary driver for pairing EOS S3 with these Bluetooth SoCs is that our unique architecture and intelligent power management enables us to reduce the device power consumption for always-on / always-listening by approximately 90%. This is a big deal in all battery powered devices that want to deliver always-on / always-listening features in conjunction with high-quality audio, and an enabling factor for devices with tiny batteries like we see in hearables.

Last quarter, we updated our EOS S3 Reference Design Platform to support a direct interface to Bluetooth SoCs from Qualcomm, Vimicro and Airoha Technology. With this, customers can fast-track the integration of EOS S3 to enable always-on / always-listening voice capability and leverage our intelligent power management technology to minimize power consumption across a variety of hearable and IoT use cases. This has proven to be a very effective tool, not only for winning new product designs, but also for winning designs from customers that want to add always-on / always-listening voice capability to existing hearable and IoT devices that are already in mass production.

One of the huge benefits of EOS S3 architecture is its inherent flexibility enables us to add features and functions to support new use cases and customer design objectives without the need to modify our silicon design. This also provides us with a compelling case study that we leverage with companies that are evaluating our embedded FPGA IP with the goal of extending their roadmap for their new IC designs.

A new solution we will add later this quarter leverages our dual microphone inputs by adding beam forming technology and advanced noise cancellation. The goal here is to enhance user



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experiences in noisy environments. An example of this would be cancelling wind noise to enable accurate voice commands while driving a car with the window down.

We are also on schedule to introduce a new low voltage version of EOS later this quarter that will be called EOS S3LV. With this we will lower our power consumption for always-on / always-listening use cases by as much as 30% and extend our already significant competitive advantage over other MCU based solutions.

In looking toward the future, we are already talking with several companies that have developed unique neural net processor architectures that could eventually deliver AI in battery powered edge devices. In these cases, the companies see our EOS S3 platform as working hand in hand with their solutions and our embedded FPGA as a potentially enabling technology.

Moving now to Sensor Processing Applications in Smartphones and Tablets:

During the last year, we have been working closely with a major Japanese Smartphone OEM that is targeting EOS S3 for new models scheduled to launch in 2018. We shipped prototype units to this OEM during Q4 for a concept Smartphone that it intends to showcase at Mobile World Congress in Barcelona later this quarter. If the OEM's lead Japanese carrier mandates certain features enabled by EOS S3, the OEM will introduce a high-volume flagship Smartphone with that carrier during Q2 2018 that is based on the EOS S3 concept design.



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We have continued to move forward with other Smartphone engagements. While I believe we are well-positioned for success with these engagements, and more broadly in the smartphone market, there are still too many variables in the equation to forecast when any of these engagements might become design wins and move into production.

While we've won many display bridge designs in tablets during the last several years, we won our first EOS S3 tablet design this quarter. I'm pretty excited about this design, but for now all I can share is it is a voice-enabled tablet aimed at the educational market and that it is scheduled for mass production mid-year 2018.

We continue to win display bridge and FPGA designs in a variety of markets. With this, and the forecast from our second largest display bridge customer that shows solid demand through at least 2019, we believe our combined revenue from display bridge, legacy FPGA devices and mature products will average approximately \$2.5 million per quarter during 2018.

Now I will turn the call to Sue and return for my closing remarks before we open for Q&A.

Dr. Sue Cheung– Chief Financial Officer

Thank you, Brian. Good Afternoon and thanks to everyone for joining us today. Please note we are reporting our non-GAAP results here. You may refer to the press release we issued today for a detailed reconciliation of our GAAP to non-GAAP results and other financial



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statements. We have also posted an updated financial table on our IR web page that provides current and historical non-GAAP data.

For Q4 2017, total revenue was \$3.0 million, within our guidance range. Our new product revenue was \$1.0 million, and mature product revenue was \$2.0 million. The primary reason new product revenue was below our forecast was lower than anticipated demand from Samsung for our ArcticLink® III VX Display Bridge. Fourth quarter 2017 mature product revenue was above our forecast due to higher than anticipated demand from one of our large customers in the defense, security and aerospace industry.

Samsung accounted for 10% of total revenue during the fourth quarter, compared to 24% during the previous quarter, as we continue to diversify our customer base.

Our Q4 2017 gross margin was 52%, above our forecasted range due to higher than anticipated sales of mature products, which carry a higher gross margin, and a more favorable mix of new product sales.

Operating expenses for Q4 totaled \$4.6 million, which was within our forecasted range. R&D expenses were \$2.3 million and SG&A expenses were \$2.3 million.

The net total for other income, expense and taxes in Q4 2017 was a credit of \$65 thousand, which was due to a one-time year-end tax adjustment. This resulted in a net loss of approximately \$3.0 million, or \$0.04 per share, essentially at the midpoint of our forecasted EPS range.



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We ended the fourth quarter with approximately \$16.5 million in cash. The net cash usage during the fourth quarter was \$2.5 million, which was lower than expected, reflecting the timing of working capital requirements. The timing is specifically reflected in decreased accounts receivable.

I'll now discuss the full year 2017 results:

For the full year 2017, total revenue was \$12.1 million, up 6% compared to \$11.4 million in 2016. Our new product revenue was \$5.8 million, and mature product revenue was \$6.3 million.

During 2017, we successfully continued to diversify our customer base. For the full year 2017, revenue from Samsung decreased by \$1.5 million, or 39% compared to 2016. As a result, Samsung represented 19% of total revenue in 2017, down from 33% in 2016.

New product revenue from other customers grew by 95% to \$3.5 million in 2017. This was primarily driven by eFPGA license revenue, sales of EOS S3, and new Display Bridge designs. These increases, which were primarily driven by strategic new product sales, and diversification of our customer base, enabled us to grow total new product revenue by 4% in 2017 as compared to 2016. Mature product revenue increased 9% year over year.

Non-GAAP gross profit dollars increased by \$1.7 million, or 43%, for 2017 as compared to 2016. This increase was primarily driven by eFPGA IP license revenue and higher mature



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product revenue. With a full year of our operational realignment in place, non-GAAP operating expenses decreased by \$2.7 million or 13% in 2017. When combined with the increase in non-GAAP gross profit, this resulted in \$4.4 million or 26% decrease in our non-GAAP operating loss in 2017 when compared to 2016.

Turning to the first quarter 2018 outlook:

Our revenue guidance for Q1 is approximately \$3.0 million, plus or minus 10%. Total revenue is expected to be comprised of approximately \$1.3 million of new product revenue and \$1.7 million of mature product revenue.

On a non-GAAP basis, we expect gross margin to be approximately 45% plus or minus 3 percent. The sequential decrease in gross margin is expected to be driven mostly by the product mix.

We are currently forecasting non-GAAP operating expenses at approximately \$4.7 million, plus or minus \$300 thousand. We expect our non-GAAP R&D expenses to be approximately \$2.4 million and non-GAAP SG&A expenses to be approximately \$2.3 million.

We expect our other income, expense and taxes will be a charge of approximately \$60 thousand.

At the midpoint of our forecast, our non-GAAP loss is expected to be approximately \$3.4 million, or \$0.04 per share.



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As was the case in prior quarters, the main difference between our GAAP to non-GAAP results is our stock-based compensation expense, which we expect to be approximately \$450 thousand for the 1st quarter.

In Q1, we expect to use between \$3.5 million and \$4 million in cash. The forecasted cash usage is expected to be driven by working capital needs, capital expenditure associated with our eFPGA development efforts, an expansion of EOS S3 voice related software, and the annual payroll tax reset at beginning of the year.

The new Tax Act signed into law late last year introduced a broad range of tax reform measures that significantly change the federal income tax laws and are generally effective in tax years beginning after December 31, 2017. We have evaluated the impact of certain provisions under ASC 740 and we do not expect this change to affect us materially in 2018 due to the full valuation allowance provided against our deferred tax assets. You can find more disclosures on the income tax footnote in our 2017 10-K.

With that, let me now turn the call back over to Brian for his closing remarks.

Brian Faith – President and CEO

Thank you, Sue.



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2017 marked an inflection point for QuickLogic, and CES provided us an opportunity to illustrate the momentum we have going into 2018 with a display showing some of the new customer products that are enabled with our EOS S3 SoC.

With ArcticPro eFPGA IP licenses established with two fabrication partners, and a third fab running our technology in production, we are very well positioned to finalize IP agreements with major semiconductor companies and OEMs for new SoC and ASIC designs. We currently have meaningful engagement activity targeting 40nm processes at GLOBALFOUNDRIES and SMIC, as well as numerous engagements targeting our soon to be released 22nm FD-SOI eFPGA IP at GLOBALFOUNDRIES.

As I look forward to 2018, I do so with a very high level of confidence. QuickLogic has never been positioned as well as it is today for sustainable growth, and I think we will clearly illustrate that as we move through the year.

I'd like to open the call for Q&A.

Thanks everyone for joining our call today.

We will be participating at the following events:

- The 30th Annual ROTH Conference at Dana Point, California, March 12th & 13th.
- The Design and Reuse, IP-SoC Days in Santa Clara, CA on April 5th. Our CTO and SVP Engineering, Dr. Tim Saxe, will be presenting on "eFPGA for AI and IoT Applications."



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Our next conference call is scheduled for Wednesday May 9th at 2:30 PM Pacific Time.

Thank you for your continued support, and good bye!

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