

# **Participants**

Jeff Jones – Chief Financial Officer
Luis Muller – President and Chief Executive Officer

# **Analysts**

Craig Ellis – B. Riley FBR Edwin Mok – Needham and Company

## **Presentation**

#### Operator

Greetings, and welcome to the Cohu, Incorporated, 2017 Third Quarter Earnings Call. At this time, all participants are in listen-only mode. A brief question-and-answer session will follow the formal presentation. [Operator instructions]. As a reminder, this call is being recorded.

It is now my pleasure to introduce you to your host, Mr. Jeff Jones, Chief Financial Officer. Thank you. Mr. Jones, you may begin.

#### Jeff Jones - Chief Financial Officer

Good afternoon. Welcome to our discussion of Cohu's most recent financial results. I'm joined today by our President and CEO, Luis Muller. Following our opening remarks, we'll provide details of our performance for the third quarter of 2017, as well as our outlook for the fourth quarter of this year. If you need a copy of our earnings release, you may obtain one from our website, cohu.com or by contacting Cohu Investor Relations.

Before we begin, you should all be aware that during the course of this conference call, we will make forward-looking statements reflecting management's current expectations concerning the company's future business. These statements are based on current information that we have assessed, but which, by its nature, is subject to rapid and even abrupt changes. Forward-looking statements include our comments regarding market and order momentum, growth in our test contactor business, cDragon opportunities, market expansion into the inspection market, new products and customers, sales progress on PANTHER and Eclipse, share gains, future results including Q4 guidance, and any other comments we make about the company's future in response to your questions. We encourage you to review the forward-looking statements section of the earnings release as well as Cohu's filings with the Securities and Exchange Commission, including the most recently filed Form 10-K and Form 10-Q.

Our comments speak only as of today, November 2, 2017. Cohu assumes no obligation to update these statements as a result of developments occurring after this call. Farther, our comments and responses to any questions will not make reference to any specific customers as we are precluded from disclosing such information by our non-disclosure agreements.



Finally, during the call today, we will also discuss certain non-GAAP financial measures. Please refer to our earnings release for a reconciliation to the most comparable GAAP measures.

Now, I'll turn it over to Luis.

#### **Luis Muller – President and Chief Executive Officer**

Thanks, Jeff. Good afternoon, everyone. For the third quarter, both sales and gross margin were at the higher end of our guidance, with sales up 35%, year over year, to \$93.7 million, non-GAAP gross margin of approximately 41%, and non-GAAP EPS of \$0.43. Additionally, we generated significant cash in the quarter, increasing \$24 million to a quarter end balance of over \$138 million.

We had strong recurring sales, particularly in the computing market, and increasing demand for our test contactors and spring probes as we continue to capture synergies and cross-selling opportunities from the Kita acquisition. In fact, our contactor business increased to 12% of sales during the quarter. Additionally, we captured 13 design wins and continued to gain penetration across our handler customer base, primarily complementing our Pick-and-Place product offerings.

Stringent device temperature accuracy during test is a growing requirement, not only for our digitally mixed signal devices where Kita probes are often used, but also for power management and high performance RF semiconductor test requirements. For these last two device categories, our multi-beam architecture enables better thermal characteristics that are increasingly challenging where high signal integrity and signal density are required.

We received follow-on orders for our high performance cDragon contactor, following a Q2 design win at a US industrial semiconductor customer. We expect to continue gaining traction at this account over the next 18 months as we convert new and existing device applications to the cDragon platform.

We have a very attractive solution for testing precision analog devices. Four other customers are lined up in different stages of the qualification process. We're anticipating additional orders in months ahead. Although each potential customer is unique, the average annual spend on high performance contactors is about \$5 million for each of these companies.

Looking more specifically at third quarter orders, 50% were systems and 50% recurrent. By segment, Sensors represented 25% of system orders. As expected, we saw continued momentum in this segment, resulting in another strong quarter of demand, mainly for gravity handlers, combined with MEM stimulus modules for testing devices used in the automotive market. Our modules create the physical stimulus to test micro-electromechanical structures, or MEMs, emulating end user functionality. The use of MEM sensors continues to proliferate in mobile devices, industrial equipment, consumer products, and especially in vehicles where a premium is placed on safety and new automated driver system capabilities. Cohu has a strong presence in testing automotive MEMs and a strategy to expand or share in the mobile sensor market with solutions that are in development.

Digital and Mixed Signal were 19% of system orders. We captured a new application for tri-temperature Pick-and-Place, combined with active thermal control for automotive ADAS devices. Additionally, we continue to make progress at the two automotive customer targets mentioned last quarter that we expect we will convert to share gains in 2018. Our demand forecast for this segment is improving, particularly for micro-controller test applications with deliveries extending into the first quarter of next year.

Power Management and Discrete were 17% of system orders with good visibility into the next couple quarters, mainly for gravity handlers. This segment is mostly driven by demand in industrial and automotive markets and



the trend towards electrification of vehicles. We're encouraged by the many automakers that have announced plans to introduce plug-in hybrids in fully electric cars as well as the commitment China has made in this space. We expect that China's aggressive aspirations to lead in this emerging segment will benefit several semiconductor companies with established operations in the mainland, many of which are already Cohu customers.

Mixed Signal and RF were 15% of system orders, with customers utilizing various Cohu handler platforms, some on Gravity, other Turrets. We also captured a design win at a major US fabless account for our test-in-strip handler.

Small Signal Discrete [ph] was 11% and mainly on turret handlers. We had a design win in Japan where we're leveraging our Kita operational infrastructure.

LED was 7% of system orders. A leading European customer is qualifying the new Aquilae vision module and considering retrofitting its install base of Cohu handlers with this advanced vision technology.

Processors were 6% of system orders. Visibility in this segment now extends through the first six months of next year as customers are lining up handler and thermal subsystem order demands to satisfy their production requirements for next generation mobile processors.

We also made good progress on Cohu's newest products. Our lead customer for PANTHER has near-term requirements for rescreen and quality assurance applications at various test subcontractors and forecast for post-singulation tests in the second half of 2018. We also captured a new customer order for the PANTHER system for automotive device test and initial customer acceptance of our new system-level test platform.

Also during the quarter, a leading Korean IDM customer placed a repeat order for the new Eclipse configuration that supports interface to factory automation. We've forecast additional Eclipse demand in the fourth quarter as well as login production requirements in 2018.

We estimate the global handler market will grow 10% to 15% this year. As we stated in early July, Cohu is on track to outgrow the market with sales projected to increase approximately 25%, year over year, to about \$352 million. We also expect to gain market share in 2017 for new and existing products in support of achieving our mid-term operating goals.

The macroeconomic environment and recent semi-capital equipment company comments suggest another continued market growth next year. Moreover, order momentum for our products is strong in the first month of the fourth quarter, putting us on track to exceed the previous record we set in the second quarter of this year. This would represent total bookings of close to \$400 million for the full year, validating our strong market position in the robust business environment entering 2018. Some of these orders will be delivered over time, giving us good visibility into first quarter shipments while also allowing us to establish a baseline for the second quarter that supports the current growth projections for the first half of next year.

With that, I would now turn it over to Jeff for details on the Q3 financials and guidance for the fourth quarter.

### Jeff Jones - Chief Financial Officer

Thanks, Luis. Q3 was another strong quarter for Cohu, generating non-GAAP operating income of 15.7% and a 17.1% adjusted EBITDA margin, both in line with the updated operating model targets on sales of \$93.7 million. Cohu had strong cash generation from operations of \$26 million. Our cash balance increased, quarter over quarter, by \$24 million to \$138.3 million.



With the integration of Kita complete, we remain very optimistic about test contactor sales synergies and our growth opportunities in this market with this business reaching 12% of sales in the quarter.

For Q3, the GAAP to non-GAAP adjustments include approximately \$1.9 million of stock-based compensation expense, \$1.1 million of purchased intangible amortization expense, \$592,000 of costs related to the step-up in valuation of inventory acquired from Kita, and \$753,000 of other acquisition-related costs, primarily related to the valuation of the earnout. My comments that follow, including the Q4 guidance, are all based on Cohu's non-GAAP results which exclude the impact of these items.

Sales for the quarter were \$93.7 million, which was above the midpoint of our guidance of \$88 million to \$95 million, driven by higher recurring revenue, including test contactor sales. Two customers in the third quarter each exceeded 10% of sales. One customer in the automotive market represented approximately 15% of sales. One customer in the computing market represented 12% of sales.

As I mentioned on last quarter's call, we expanded our existing ERP system in Q3 to the Malaysia and Switzerland operations. The expansion was well-executed, seamless to customers, and without any notable impact to our Q3 results.

Q3 gross margin was 40.9% and at the high end of our guidance, primarily due to strong contactor and recurring revenue growth.

Operating expenses were \$23.6 million and higher than our guidance, due mainly to higher variable compensation and selling expenses, such as outside sales commission and travel.

The non-GAAP effective tax rate for Q3 was 15.4% and lower than forecasted. As I mentioned last quarter, our tax rate continues to benefit from profit generated outside the US in countries with lower statutory income tax rates and in certain countries where Cohu has income tax holidays. The tax rate also benefits from profits generated in the US which do not currently incur a tax provision because of our valuation allowance. As a result of these factors, we're expecting our effective tax rate to be approximately 15% for Q4 and for the full year 2017, both of which are below our prior expectations of approximately 17%.

Accounts receivable decreased sequentially by \$13.9 million, quarter over quarter. DSO decreased by 7 days to 79.

Inventory also decreased by 4 million sequentially as we shipped the buffer inventory we purchased in Q2 to ensure continued production and delivery of products as we transitioned to the ERP system in Malaysia and Switzerland. Inventory days decreased by 8 to 94. Accounts payable days declined by 18, quarter over quarter, to 50 because we made advanced payments to suppliers prior to our ERP transition, also to ensure continued production and delivery of products throughout Q3. Overall, the cash conversion cycle increased by 4 days to 123.

Fixed asset additions in Q3 were approximately \$2.3 million. Depreciation for the third quarter was \$1.3 million. Deferred profit at the end of September was \$6.7 million, up from \$6.3 million last quarter. The related deferred revenue at the end of Q3 was \$9.9 million and up \$1.7 million sequentially.

Cohu's Board of Directors approved a quarterly cash dividend of \$0.06 per share, payable on January 2, 2018, to shareholders of record on November 17, 2017.



Now, moving to our guidance for Q4, consistent with the guidance we provided back in July for the second half of 2017, Q4 sales will be seasonally lower than Q3 and are expected to be approximately \$84 million. Full year 2017 sales are expected to be approximately \$352 million, up 25% over 2016.

Gross margin in Q4 is expected to be approximately 41% with up to 100 basis points of risk that's driven by the pending change in revenue recognition rules that take effect from January of 2018. Operating expenses for the fourth quarter are expected to be comparable to Q3 at approximately \$24 million. However, new product development costs are expected to increase by \$1.5 million, quarter over quarter, with a corresponding offset to SG&A costs.

That concludes our prepared remarks. Now, we'll take your questions.

#### **Operator**

Thank you. We'll now be conducting the question-and-answer session. [Operator instructions.] One moment, please, while we poll for questions. The first question is from Mr. Craig Ellis, B. Riley FBR. Please go ahead.

**Q:** Yes, thanks for taking the question and getting the new name right. I appreciate that. So, just starting with a clarification, guys. First off, congratulations on a very strong execution in the third quarter. As we look ahead to the fourth quarter, can you just talk about some of the primary gives and takes as we think about the business sequentially? Anything notable that's lower quarter on quarter, and alternatively, anything that would be a partial offset to that?

#### <u>Luis Muller – President and Chief Executive Officer</u>

Hi, Craig. Thanks for the comments. For fourth quarter, we're really looking at a broad-based trend actually, coming from automotive market for power management and microcontrollers and MEM sensors. We also see strengthening mobility in IoT markets for RF and small power management devices. We are also starting to get visibility here in orders for 2019 processors or infrastructure handlers and thermal subsystems for 2019 processors. That cuts across smartphones and other processor application. We're also seeing strength in the industrial end market, which is driving analog, digital, and sensors.

So, with that said, it's pretty much a broad-based, market environment that is strong. With that, we still expect to see the typical seasonality in 2018, but much like this year, we think it will be with lower amplitude of variation on a quarter-to-quarter basis.

**Q:** Thanks for that, Luis. Then, following up on some of the prepared comments with regard to RF, you noted that within that business, which is about 15% of sales, you picked up some share. My question is, as we look at that business and going back to the leading base band supplier's view that the global smartphone industry could actually accelerate with unit growth next year from perhaps 6% this year to 8% next year. What does the potential for accelerating growth mean to your business? Maybe said differently, is your business more smartphone content-driven, more unit-driven, or do you benefit if you get one or the other?

## <u>Luis Muller – President and Chief Executive Officer</u>

Our business is very semiconductor unit IC-driven. So, obviously, an increase in content is helpful, but also an increase in final electronic product is helpful. As it relates to our business, it would really benefit the sale of our turret handlers, our new RF contactors, as well as it would have a positive impact on our new PANTHER platform.

**Q:** Super. Then, the last one is for Jeff. Jeff, you mentioned that tax is a little lower in the fourth quarter and was lower in the third quarter. Can you provide any color on what our expectations should be for 2018? Is it reasonable to think that lower tax rate would persist into 2018, or is there a different expectation?



#### Jeff Jones - Chief Financial Officer

Craig, right now, we're modeling, based on the way we see the foreign and domestic profits lining up. We're modeling about a 17% effective tax rate for next year.

Q: Thanks very much, guys. Nice going.

#### Jeff Jones - Chief Financial Officer

Thank you.

#### Operator

[Operator instructions.] The next question is from Mr. Edwin Mok, Needham and Company. Please go ahead, sir.

**Q:** Great. Thanks for taking my question. Congrats on a great quarter. The first question I have is actually on the backlog. The last three quarters, you guys have talked about strong bookings. This quarter, it sounds like you had another record booking. So, it seems like backlog is building up quite a bit. I guess your full year bookings target, it seems like it's adding, right, maybe \$40 million, that kind of range, right? Just curious, is our lead time elongating, or what's driving this basically booking ahead of backlog? When should we expect this backlog to turn into revenue?

#### **Luis Muller – President and Chief Executive Officer**

I'll make a comment here on the lead time. Edwin, the lead time for handlers remains on that 8- to 14-week range. Obviously, there are always outliers. There are systems that we can ship shorter lead times. There are systems that may have some degree of customization that take longer. Nevertheless, some of the orders that we get are for delivery across multi-quarters. Particularly when you look at the build-up of the infrastructure for next year's smartphone processors, those tend to be typically a multi-quarter delivery requirement. So, although I don't have a complete data set in front of me, we expect to ship the majority of the backlog today through the first half of next year.

**Q:** I see. Okay. Great. Is this building backlog, you seem pretty upbeat on 2018, or is it a first half of 2018? Does this building backlog give you the improved visibility, or is anything else that we're missing there?

#### **Luis Muller – President and Chief Executive Officer**

Yes, exactly. Edwin, it's like I said on my prepared remarks. It does give us good visibility to the first quarter and already setting, like I said, a baseline for the second quarter that pretty much supports the current growth projections for the first half of next year.

**Q:** Great. That's helpful to clarify. Then, other question on the contactor side, it looks like you guys are doing well with the Kita acquisition. You talk about the RF contactor or the analog contactor that has gained traction there. Maybe just a high level, do you believe you are gaining share in this space? Any thoughts on that 20% CAGR target that you guys talked about? Any updates on that?

#### **Luis Muller – President and Chief Executive Officer**

Sure. Yes, we're definitely gaining share in the space. We have specific customers and applications that we can point to in which we are gaining share. We have significantly increased the sale of Kita pins in our Cohu contactors, in fact, by 465% as compared to last year. As I mentioned during the remarks here, we're gaining traction over the cDragon contactor for some precision analog semiconductor test.



It is our plan and we believe it's sustainable, that we'll continue to grow at this clip into 2018, next year. This is not only a Kita-related strategy, but also one of extension in the high performance in the analog power market with our multi-beam contactor architecture.

Q: Is it fair to say that your contactor business has grown faster than 20%, year over year, this year?

#### **Luis Muller – President and Chief Executive Officer**

No. We're sticking to 20% by year-end. That's right.

**Q:** Okay, that's fair. Then, lastly, I had a question on the—with the wafer-level packaging product. Did I catch your comments correctly you won a new customer during the quarter? Can you give us more detail about what type of application, any way you can think about the opportunity there? With this new win, is there any other similar customer you can target for that application?

#### <u>Luis Muller – President and Chief Executive Officer</u>

Sure. Yes, we did win a new customer. It's a different application than the original leading customer we have. This one is for devices used in the automotive market. So, it is testing both at extreme cold and extreme hot. There will be opportunities for additional customers in the same market segment for PANTHER over time, yes.

**Q:** So, my understanding, seriously, on your initial product launch, my understanding is for a system and package design where the customer want to do this tests kind of singulated forms to [indiscernible] whole package. Is it the same type of reason why this customer decided to [indiscernible] product?

#### Luis Muller - President and Chief Executive Officer

No, this particular customer win, new customer win, their challenges are more associated with testing very small, singulated, obviously, devices at the extreme automotive temperatures.

Q: I see. Okay. Great. That's all I have. Thank you.

# **Operator**

Gentlemen, at this time, there are no further questions. I'd like to turn the conference back over to Cohu management for closing comments.

#### Jeff Jones - Chief Financial Officer

Before closing today's call, I want to let you know about upcoming Cohu IR events, which include the CEO Investor Summit in New York on December 6<sup>th</sup> as well as roadshows to both the East and West Coasts during the quarter. If you would like to request a meeting, please contact me, Jeff Jones, or our IR firm, Shelton Group.

We look forward to providing an update when we report our fourth quarter results. Thank you and have a good evening.