

# **AIXTRON SE**

## **Analyst Earnings Conference Call**

### **Q2/2018 Results July 2018**

Prepared Remarks

**Executive Board**

**Dr. Felix Grawert**

**Dr. Bernd Schulte**

**Finance & Administration**

**Charles Russell**

The spoken word applies

## **Slides 1, 2 – Operator & Forward-Looking Statements**

### **Operator**

Good morning, ladies and gentlemen, and welcome to AIXTRON's Q2/2018 results conference call. Please note that today's call is being recorded. Let me now hand you over to Mr. Guido Pickert, VP of IR & Corporate Communications at AIXTRON, for opening remarks and introductions.

### **Guido Pickert**

*Investor Relations & Corporate Communications*

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Thank you, operator. Let me start by welcoming you all to AIXTRON's Q2/2018 results conference call.

I'd like to welcome our Executive Board represented by Dr. Felix Grawert and Dr. Bernd Schulte, as well as our VP of Finance and Administration Charles Russell.

As the operator indicated, this call is being recorded by AIXTRON and is considered copyright material. As such, it cannot be recorded or re-broadcast without express permission. Your participation in this call implies your consent to this recording.

Please note that our SafeHarbor statement on page 2 of our results presentation applies throughout this conference call. You may also wish to have a look at our latest IR presentation, which includes additional information on AIXTRON's markets and its technologies, and is available on our website.

We will place an audio file of the recording or a transcript on our website at some point after the call. I would now like to hand you over to Dr. Bernd Schulte for opening remarks.

Bernd?

## **Slide 3 – Q2/2018 Important Events, Guidance**

### **Dr. Bernd Schulte**

*Executive Board*

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Many thanks Guido.

Welcome to the presentation of AIXTRON's First half 2018 results.

Let me start the presentation with an overview of the key developments in the quarter before handing over to Charles Russell, our VP Finance and Administration, who will elaborate on some important details of our financial performance. This will then be followed by Felix Grawert, my colleague on the AIXTRON Executive Board, who will discuss our view going forward as well as doing a quick wrap up before handing over to the Q&A session.

We had a solid second quarter and as a result we can confirm our 2018 full year guidance for revenue and profit which we presented at our two recent Result Calls.

The order intake in Q2 continued to be strong at 75 million Euros. The major growth driver was, as in the previous quarter, the demand for our AIX2800G4 MOCVD systems for Laser and ROY LED applications. We continue to see very encouraging signals from our customers with clear market preparation and positioning activity from major global players specifically targeting 3D sensing and optical datacom applications and specialty LED solutions. In addition to those areas, we believe that the power electronics area could become a growing driver for AIXTRON in the coming quarters.

With this positive development of the order intake we are raising our order guidance to a range between 260 and 290 million Euros from 230 to 260 million Euros previously.

Revenues, however, at 55 million Euros in Q2 were below the 62 million Euros we generated in Q1, which is due to the scheduled shipment agreements we have with our customers, causing usual quarter-to-quarter fluctuations of shipments. We are confirming our guidance for revenues to be around 260 million Euros, hence, revenues in the second half of the year will be stronger than in the first two quarters.

Gross Margin in Q2 was again strong at 43%, which was due to a favorable product and regional mix and supported by a strengthening US Dollar through the course of the quarter.

EBIT and net income were around 4 million Euros in Q2. Both were ahead of the same quarter last year but below Q1 due to the just mentioned lower sales volumes.

At this point; let me now hand you over to Charles for a more detailed overview of the Q2/2018 numbers.

## **Slides 4-7 – Key Financials Q2/2018, P&L, Cash Flow, Balance Sheet**

### **Charles Russell**

*Finance and Administration*

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Thanks Bernd and hello to everyone.

Starting on **slide 4**, we had a good first half of the year with an order intake of 154 million Euros, up 20% on the same period last year.

On a quarterly basis Q2 was similar to Q1 with order intake of 75 million Euros.

Consequently, we ended the first half of 2018 with an equipment backlog of 138 million Euros, up 48% on last year, 20% ahead of Q1 and the highest backlog since 2011.

This gives us good visibility for the remainder of the year, and into the start of 2019.

This positive development, as Bernd mentioned, is mainly due to the high demand for equipment used for Lasers and Red-Orange-Yellow LEDs.

Revenues in the first half of the year were 3% ahead of 2017 but the improved product and regional mix produced a Gross Margin of 43% in both quarters and a profit at both EBIT and net income level.

EBIT for the first half was 12 million Euros, compared with a loss of 24 million Euros in the first half of 2017.

Net income was higher than EBIT in the first half because of the deferred tax assets we recognized in Q1.

Moving to the **next slide**, let me go into more depth on the income statement.

Total revenues recorded during the first half of 2018 were 117 million Euros, up from 114 million Euros the previous year.

On a quarterly basis Q2 revenues were 55 million Euros, compared with 62 million Euros generated in the previous quarter. This reflects the scheduled shipments to customers.

The favorable product and regional mix we had in Q1 continued into Q2 with gross margins remaining at 43%.

This is a considerable increase over the 25% in the comparable period in 2017 when inventories were being cleared.

Operating expenses of 39 million Euros in the first half of 2018 were 26% lower than same period last year.

The results last year included 12 million Euros in write downs related to the frozen activities as well as the operating expenses of the ALD CVD activity which we sold.

In a quarterly comparison, operating costs increased slightly to 20 million Euros compared with 19 million Euros in Q1.

The main reason was expense from the translation of dollar based customer advance payments at the quarter end exchange rate. This will be reflected in higher revenues as these orders get recognized as sales.

Selling expenses of 5 million Euros in the first half of 2018 were down 13% year on year. At 4% of revenues this is the sort of level we expect in future.

In the first half of 2018, G & A expense reduced to 8.7 million Euros from 9.4 million in the same period last year.

The previous year's figure included legal and other fees related to the sale of ALD/CVD.

On a quarterly basis, G & A expense of 4 million Euros was in line with the previous quarter.

Research and development costs in the first half of 2018 were 6% less year on year to 27 million Euros mainly due to the sale of the Memory business and the freezing of development activities. On a quarterly basis, R&D costs in Q2 of 13 million Euros were slightly lower than Q1's 14 million Euros. Our R&D costs in 2018 take into account the development work on OLED.

The sales volume, gross margin, and lower operating expense combined to produce an EBIT for the first half of 12 million Euros, a substantial improvement over H1/2017.

Net Income was 16 million Euros

Moving to **slide 6**, which shows our cash flow statement.

Operating cash flow was 12 million Euros in Q2 and minus 9 million Euros for the first half. This is after the payments related to the ALD CVD sale which were explained in last quarter's call.

Overall working capital reduced in the quarter because of an increase in advance payments from customers. This was partly offset by increased work in progress and receivables related to the increases in sales and regional mix of customers.

We expect a positive operating cash flow for 2018.

Cash at the end of June was 234 million Euros compared with 247 million Euros at the end of 2017.

Turning to the **next slide** – our Balance Sheet.

The principal changes in AIXTRON's balance sheet this period are a reflection of the improving business:

Shareholder's equity continues to improve with profitability.

Inventories and advance payments from customers have increased substantially because of increased orders.

And receivables have increased in line with sales.

Now let me hand you over to Felix.

## Slide 8 – 2018 Wrap-Up and Guidance

### **Dr. Felix Grawert,**

*Executive Board*

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Thank you Charles.

Let me give you a brief outlook on our perspective on our focus markets and target applications.

We continue to have strong order intake as well as a growing equipment order backlog, totaling 138 million Euros at the end of Q2, which gives us confidence about the rest of this year. We currently see strong growth drivers in the coming quarters in the areas of lasers and specialty LEDs.

Our equipment enables the development and production of key end products and components in growth areas such as 3D sensing for phones and automobiles, fine pitch displays and optical data communications.

In opto-electronics, we see fast growing interest of customers for our products in the area of mini- and micro-LED displays.

In power electronics, we observe a beginning volume ramp in the area of SiC MOSFETs, while we expect for GaN power switches the tipping point from R&D stage to volume production to be reached within the next 1-2 years. We see strong customer interest in our next generation equipment solutions for these areas, which gives us good assurance around our technology roadmap.

In OLED, our first pilot product is currently tested by the customer and we expect fab-in into the customer facility soon. We are still in discussions with potential JV partners. These discussions have not materialized to a point of conclusion yet, but we expect this in the near future.

In summary;

Q2 was a strong quarter in terms of continued high order intake and revenues within our guided expectation.

With a strong order book and continuing solid interest from customers for our solutions we are confident about what we expect will be a strong second half of the year.

Based on these results, we refine our 2018 full year guidance for revenue and profit and increase our guidance for orders:

We expect revenues to be around 260 million Euros, with orders for 2018 between 260 and 290 million Euros, up from the 230-260 million Euro range we had previously expected. We expect gross margin to be around 40% of revenues, and EBIT margin to be around 10% - both being at the top end of the originally guided ranges. We also expect to achieve a positive Operating Cash Flow for the year.

With that I'll pass you back to Guido before we take some questions.

**Guido Pickert**

*Investor Relations & Corporate Communications*

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Thank you, Bernd, Felix and Charles.

Operator, we'll now take the questions.



## **Andrew Gardiner – Barclays**

I was interested in understanding a little bit more within the optoelectronics side of things. Clearly, that's driving a lot of volume at the moment. I was just wondering if you could talk about the breadth of customers that you're seeing taking the tools there?

One of your high-profile partners, IQE, has talked about their own sort of production ramp about the installation of tools. But away from there, I'm wondering, are you seeing others sort of still in preproduction qualification phase, and so therefore, sort of taking 1 or 2 tools here or there? Or are there signs of other parties in this part of the market preparing for much more high volume production ramps? Do you have a better visibility into those ramps beginning?

## **A - Bernd Schulte**

I think we published our close collaboration with IQE, and that we have shipped tools into their new factory, which they are currently building up. This is ongoing as we speak. Moreover, the number of customers who are adding volume in terms of manufacturing capacity is also increasing. There are, I would say, 3, 4 other customers who are in the range. And we made a publication about our customer VPEC in Taiwan, who comes in this arena. Where do they stand in detail with the qualification with their end customers? That is not clearly known to us. But one can expect if our customers are ramping significantly; they have high confidence in their qualification.

## **Andrew Gardiner – Barclays**

Also, just a quick one on the comment you made, Felix, on OLED and APEVA. I understand it's sort of a bit uncertain, but if you could brought a bit more clarity around the statement, it would be helpful. So from what you described there, the customer is in the process or sort of ready to install the machine in their own fab. Do you actually have orders for that? Is there indeed an intent now for actual sort of production level tools? And therefore, the discussions you alluded to with the JV partner, that is more a question of sort of commercial and sort of practical terms rather than a go-, no-go type decisions?

## **A - Felix Grawert**

As we have discussed in this place in previous quarters, currently, we test a product together with the customer. It is installed in a facility in Asia, and together with engineers of the customers, this product is being tested. However, this product is a smaller scale Gen2 R&D prototype. Think about an A4 sized paper, this kind of the size. The customer will then take the tool into their factory to test manufacturing OLEDs on that one. And after that, the next step would be a larger-scale prototype which would be developed and built by APEVA, and then also be tested by the customer in its factory. And if such a large-scale prototype is successful as well, then our customer would think about moving towards a volume production. So in the end, the

OLED development is a multi-step development together with the customer. And we talk here today with the current tool about the step still being on smaller samples of laboratory size, as we have stated in previous calls.

**Janardan Menon - Liberum**

I have a couple. The first one is the shipment. The levels seem to have come down in Q2 versus Q1. You attributed that to the scheduling by customers. Was that a rescheduling? Did you see any pushouts at all of customers who had originally said, I want it in Q1 or Q2 and have taken it to Q3? Or was that as part of the initial contract itself? Just as a follow-up with that, when you look at the second half, you said, second half will be higher in revenues than the first half. Can you give a little bit more linearity there? Do you expect Q4 to be higher than Q3 based on your current scheduling with customers? Or would it be more flattish profile? And I have a brief follow-up.

**A - Bernd Schulte**

The shipments in second quarter, the EUR 55 million being slightly below the first quarter, has originated from the contracts we made. The order intake pattern in Q4 last year was pretty much close towards the Christmas time. And with that, some of those shipments have been scheduled for Q3. So I want to say very clear, there is no request for pushout. It simply reflects the contractual agreement we have with customers. Regarding the second half revenues, we're seeing probably an increase from second to third quarter, and we'd also expect a slight increase from third to fourth quarter.

**Janardan Menon - Liberum**

Understood. And also on the order level, you've raised your guidance to EUR 260 million to EUR 290 million for the full year. But you've taken EUR 154 million in the first half, which sort of suggests that even at the high end, you will see a slight decline in orders in the second half. Is that you just being prudent, because you don't have full visibility on what kind of orders you could get towards the latter half of the year? Or is there anything specific there which makes you think that your orders could decline in the second half of the year?

**A - Bernd Schulte**

There is nothing specific. Mathematically, it's very simple to understand what you're saying here. So the difference between EUR 290 million, if you take the upper end, and what we already have is less. We're seeing a good momentum, but visibility 4, 5 months ahead, is always somewhat limited. We have to take this into account. We feel very confident with the EUR 260 million to EUR 290 million. And we see this guidance as realistic. And there is nothing that we can say, i.e. there is a change in the market or some specific things may happen. It is just you have to keep in mind also that the first half was very good.

**Uwe Schupp – Deutsche Bank**

Two questions, please. First is on prepayments. We are obviously seeing some very credible signs out of the Chinese LED market now for the first time in many years. And it has been a long time since you received larger LED orders or frame contract. Could you maybe briefly remind us about your bookings policy for such larger orders, if received? Reason I ask is, obviously the 90% or so increase in prepayments, 90, right, if I saw it correctly. You've shown in Q2 versus Q1. In the quarter, where you showed order flattish quarter-on-quarter or even slightly down. So any color you could give us here would be highly appreciated.

And then secondly, Bernd, just on your earlier comment, is the impression correct that you are incrementally seeing more business for edge-emitting lasers (EELs) rather than VCSELs (vertical cavity surface emitting lasers) in the second half? Or do you think that the activity is actually quite similar and remains high for both technologies as regards of 3D sensing? And then, maybe where you think those deployments would be going, whether this is indeed for Android in 2019, as you previously indicated at the Capital Markets Day.

**A - Bernd Schulte**

Let me start with the second question, the edge-emitting. As we elaborated in earlier calls, it's very hard for us to distinguish whether a tool in the end will be used for edge-emitters (EELs) or for vertical cavity surface emitting lasers (VCSELs). The tools are almost the same or pretty much the same, so you can use the same tool for both devices. And you have to look more in the applications. If you ask me straight, do we see edge-emitting lasers (EELs) coming stronger in use for 3D sensing? We do not see this right now. But we cannot exclude that, because we are certainly not involved in all the product development work of the end customer. We just want to highlight with respect to my comments that when we sell a tool, it can be used for both - a VCSEL and an edge-emitter.

Regarding the prepayments, Charles may also comment to that a little bit more, but let me talk about the booking policy. We book orders when we have security in terms of the payments, and depending on the customer and the history of the customer, typically, we do that, if we have received down payments, if we have the required documentation to ship the tool. Or if that we have no concern that this documentation will be issued, I'm talking about export licenses. We need a contract and we need a clear shipment date. That policy we have since, I recall, working here, and it has not been changed. So the increase or the change in the prepayments depends on various factors. It depends how much you ship in the quarter, because then the prepayments get reduced by the amounts of the prepayment of the shipped tool. And it depends on the order intake and it depends exactly when does the down payment arrives. Customers with a long history, with a good history in payments, we also take the order

intake without having necessarily the money in the bank. But, Charles, you may add to this.

**A - Charles Russell**

I would compare the advance payments received with the order backlog rather than with the order intake. Because those are the more relevant metrics. And over the last 12 months, the ratio of one to the other has been between 42% and 25%, and it's currently 38%. So there is nothing particularly unusual about the level of customer deposits we have relative to the order backlog at the moment. And earlier in the year, when it was perhaps a lower proportion, maybe we had a higher proportion of orders from the larger western companies, which we don't necessarily take so many deposits from.

**Uwe Schupp – Deutsche Bank**

That's very clear. And I would have a follow-up, if I may. Felix, you indicated in your prepared remarks that the silicon carbide (SiC) opportunity coming nearer and potentially being a growth opportunity, I think you said for the next quarters, did I get you correctly? And then maybe if that is correct, what would be the some of the visible signs that we should be looking for that indeed this is a reality that is becoming or that's something that is becoming real for you guys? Is it more cars in the market? How can we get comfort basically that your new machine is really indeed receiving the receptance that you would hope for it to get?

**A - Felix Grawert**

I heard two questions out of that, right? So the one is the timing question about the market, and demand that we would see. In the second question, as I got it about the growth drivers behind this and our product. As far as the timing goes, we do expect growth over the next quarters, in fact, quarters and years. In the near term, demand is picking up for silicon carbide, because the industry is preparing for a ramp. We all know that the silicon carbide (SiC) demand starts from a relatively small base today, however, with very significant high double-digit growth rates. And it remains to be determined how many tools that relates to. I would not want to quantify that opportunity right now. In terms of what growth drivers, what end market? We do see in the initial phase, the growth of silicon carbide (SiC) being strongly driven by industrial applications, – with, at a later stage, especially electric vehicles kicking in. If you look to a time frame, maybe 3 to 5 years out, which is longer into the future, there are strong indications that automotive applications will take as much as 40% or 50% of the total market. And of course, the automotive industry has certain requirements in terms of quality, in terms of standards, and we are preparing accordingly in order to satisfy the demands of these customers.

Relating to our products, we have a new range of products under development with significantly higher throughput, meaning significantly improved cost of ownership for our customers. The product is in the development stage, but according to the target

specification and the results we have in our laboratories, we see very strong customer interest. And over the next half year to 1 year, we would then see that confirmed from customers.

## **Jürgen Wagner – Main First**

I have a follow-up on OLED. You mentioned that it's a multi-step process. And what are the total costs you carry in your P&L at the moment? And what will that be in 2019? And the second question would be, how much is, edge-emitting laser (EEL)/VCSEL laser equipment in your current order guidance for the full year?

## **A - Felix Grawert**

We mentioned it's multi-step, from a small substrate to scaling at a later stage then becoming a volume line from a customer. We are expecting, for the year 2018, a cost for OLED in our P&L to be around EUR 25 million, as we have previously said. For 2019, it would be too early for us to give an exact number. However, for 2019, we expect a significant net reduction of this number. The reduction would simply be due to the fact that certain elements of the development have been completed, and we expect to see in 2019 the beginning of a revenue stream against development cost.

## **A - Bernd Schulte**

And let me comment on your question regarding our backlog and how much is attributed to laser applications. As I elaborated, we cannot really distinguish what is in the end, final use of the tool. But in terms of laser applications for consumer optoelectronics, our backlog is between, I would say, 35% and 45% dedicated for these laser applications.

## **Guenther Hollfelder – Baader Helvea**

Just two brief follow-up questions. One was on the structure of your order intake. Do you expect a change this year -- looking into the second half in terms of the share of Opto, LED and power compared to the first half?

## **A - Bernd Schulte**

–the structure always fluctuates. This quarter, for example, we had more impact by red-orange-yellow (ROY) LED order intake and the quarter before, we had a relative high order intake for lasers, but probably weaker on power electronics. I would think that for the remainder of the year, we expect the power electronics to slightly increase. But the level is lower than the Opto part. Within the power part, we will see, if you compare H1 power to H2 power, a significant increase.

## **Guenther Hollfelder – Baader Helvea**

Which is driven by gallium nitride (GaN) at the moment or...?

**A - Bernd Schulte**

Both, gallium nitride (GaN) and silicon carbide (SiC). But gallium nitride (GaN) is more short term. Probably you are right, it will be coming slightly sooner.

**Guenther Hollfelder – Baader Helvea**

And the second question, the order of backlog, is everything shippable in 2018 of what you currently have?

**A - Bernd Schulte**

No, not everything. The majority is shippable, but not everything.

**Janardan Menon - Liberum**

I just had a follow-up on the OLED comment that you made that your OpEx, your R&D would reduce materially next year. So even if you were to get another order for a larger size development tool during the course of the next few quarters or would it be dependent on that?

And on a separate topic, on micro-LED, has your view changed at all? Because, in terms of the timing of the introduction of micro-LED TVs, there has been some noises from people like Samsung on that. I mean, they're probably not exactly micro-LED, they're probably more mini LED. But, has there been any change in your view of that market in the last 3 to 6 months in terms of how the potential customers are developing the technology?

**A - Felix Grawert**

Let us get started with the OLED topic. Yes, we would expect lower OpEx. Also, if we received a follow up order. One thing should be clear, as we have declared previously, we will only continue our OLED activities IF we get another order. Receiving a follow-on order for gradually scaling, from the small-scale prototype to a larger prototype, and then later on moving towards volume, that is the prerequisite for this business at some point reaching breakeven and then turning into profit. In case we should not get a follow-on order for the current prototype development, as stated previously, we would then NOT continue the OLED activity, because we are not willing to accept that this would continually be a cash drain. However, we have no signs that things may not develop as we expect and desire them to develop.

**A - Bernd Schulte**

Let me try to answer your questions on the micro-LED. Let me make a general statement and then a little bit more detail to it. Generally, we do not see that the timing of micro-LED into a volume market has changed. I think this is still something between 3 to 5 years out. What we see at the moment is very interesting and we're watching this of course. There are quite some positioning activities of end customers or end companies to the end customer, like Samsung and also other display companies. They are enhancing their activities into micro-LED. But you have to

understand all the products you see there in the market; these are really positioning products. They are far away from being manufacturable in high volumes. So these are areas we want or we need to develop. But I think in terms of the positioning activities, including the supply chain of these companies have in the last three months become more active and are getting more pushed by the end customer. And so our activities in these areas have also increased because we are providing an essential production step to the micro-LED which is also essential to the cost basis and the performance. So our activities internally with customers, who are in the supply chain for micro-LEDs, have indeed increased over the last months. Nevertheless, I think the overall timeline, until this gets in high-volume manufacturing and become available for the retail market, is unchanged, meaning 3 to 5 years.

**Guido Pickert**

Thank you. This concludes our results conference call. Please get in touch if you have any follow-up or additional questions. Thank you, and bye-bye.