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<<Edwin Mok, Managing Director & Senior Equity Research Analyst at Needham>>

All right, good morning everyone, thanks for coming to our conference. I'm Edwin Mok, I cover semi-cap here in Needham, with Mike Ludwig is here, just come up and tell us about FormFactor.

<<Unidentified Company Representative>>

I can sit up here? Thank you, Edwin. Good morning everyone, and it's a pleasure to see a lot of faces that we know, and I appreciate you guys taking an interest in the story of FormFactor, and definitely want to update you on where we are, some positive developments, and then update you with respect to how we're moving through the integration with the Cascade Microtech acquisition. I'll let you guys do a quick read of the forward-looking statements, cautionary, and we'll move on to the investment theme. So again, very pleased with kind of where we are with where we are sitting right now with FormFactor. FormFactor is the largest supplier of semiconductor probe cards and engineering systems. Even prior to the Cascade acquisition FormFactor had a leading share of the advanced probe card market at about 25% of that market. With the acquisition of Cascade Microtech, the market share in the advanced probe card market went up to low 30s, and certainly as we finish out 2016 we expect that number to be into the mid 30s. So very pleased with respect to kind of where we are on the probe card side of the business.

In addition to that though in the Cascade acquisition we acquired a systems engineering business, which has been a very nice acquisition as well, increased our total available market, and that business has a 25% market share, and they lead their particular industry with respect to market share there as well. So again, very well positioned, provides for a nice scale and good opportunity for us. The other thing is our products are lined with the technology trends in mobility, connectivity, and in the enterprise infrastructure. When you look at the mobility side, the products that we have that address those particular verticals, we have application processors, which we're very strong in, we also have mobile DRAM, and in addition to that the flash side of the business is picking up with respect to opportunities in mobility. In the connectivity or what some people would call the Internet of Things, we produce several products that address that particular vertical as well. And we have products that -- modems that address modems. We have products that certainly address the increasing filtered content in handsets. In addition, another broad area that's growing quite nicely is the sensor. So certainly those are areas like automotive sensors and whatnot.

So when we look at connectivity and mobility we certainly are having products that really address those markets very nicely. And lastly, is the enterprise infrastructure. So when you think about that, that CPUs certainly our largest customers. Big CPU customer of ours, and in addition to enterprise or server DRAM, and again flash is playing a bigger part in that. What's interesting about each of these areas, they each have a different growth characteristic. So in the area of mobility, we’re seeing that growing at probably mid single digits, but the area of connectivity is actually growing at greater than 20% per year, so we feel good about our position there. And again, on the enterprise infrastructure, that business is growing at approximately 6% a year. So all the businesses, our products are positioned well in each of these verticals. And each of these are growing probably faster than the semiconductor market as a whole.

Another theme that we have is the technology leadership which enables our customers’ most critical roadmap. So we know, for instance, that our customers are facing more challenging – more challenge with respect to advanced nodes, right. What we’re seeing is increased density, smaller geometries, higher frequencies, all of those are providing more challenges for our customers with respect to them going to the next node. Obviously Moore’s Law slowing down, so each of these presents a unique challenge to our customers, and the products and the technologies that FormFactor and Cascade bring to the table certainly enable our customers’ roadmap to move forward.

I think the last investment theme that we want to talk about is the structural profitability of the company. Certainly FormFactor was making good strides on its own, but if you look at the acquisition of Cascade Microtech, and how that has accelerated the financial performance of the company, I’d say we’re very pleased with that, with the ability to leverage that investment, and grow earnings, and grow cash flow. And we’ll show you that example of that a little later. So overall I think we’re very thrilled with what this acquisition brings to FormFactor. I think we talked a little bit already about aligning the technology trends in mobility, connectivity, and enterprise. And again, you can see the growth rates of those particular areas down below.

One of the things that I think we’re very thrilled with this acquisition is the addition of the engineering development piece of the business from Cascade. It has allowed us to move upstream with respect to the lifecycle of our customers’ devices. So if you look at what that allows us to do, it allows us to participate throughout the entire lifecycle of our customers’ product. And so if you look at what an engineering system does, it’s in the R&D phase, so it’s not in the production phase. FormFactor has been in the production phase from first silicon through production for a number of years. This allows us to get involved with the customer and the customer’s device much earlier. And so it allows a sort of a sneak preview in terms of what their technology roadmap looks like. It’s been – certainly we think allows for some real good opportunities to combine what’s happening in production probes as well as the engineering systems.

If you think about engineering systems, so what is an engineering system? It’s basically a system that is a probe system that holds wafers, touches down on the wafer, and takes specific measurements of the performance of that wafer, it does the electrical characterization of the components on that wafer, and provides data early in the process which allows them to take that data and them make whatever adjustments they need on the production side in order to have a successful semiconductor chip. So from that perspective being involved in that we think is very beneficial. And it certainly allows for, not only early characterization, but allows for increased yields early on in the process.

Again, something we touched on a little earlier, as we discussed, our customers face increased technical demands in producing next generation silicone nodes. So we partner with our customers to develop and produce products that address these challenges. They depend on our technology. As requirements get more difficult few of our competitors can meet both the technical and production challenges associated with these increasing and more challenging demands. And these increased customer demands really sort of fuel our current and future revenue growth. And if you look at areas that we've been able to utilize our technological advantages in order to grow the business starts with foundry and logics, right, where we have the continued adoption of copper pillar at the foundries, and that's been a significant growth component for FormFactor for the years 2014 through 2016. It has certainly enabled the proliferation of application processors, and has really helped grow our business.

In addition to that, copper pillar, right, not only with our largest customers, but certainly in all other fabs has been instrumental in enabling the transition to 10 nanometer nodes. That's been again a good growth area for us, and will continue to be a good growth area for us as we get into 2017. And in fact, in 2017, we expect to be delivering probe cards to every foundry out there that is producing at the 10 nanometer node. It's an area that we've had significant investment, significant focus on, and we think it's going to come to fruition, and we expect it to come to fruition in 2017. So we're very excited about that opportunity and the growth opportunity in 2017. In addition, when you look at the technology that we produce, certainly on the DRAM side, it has allowed our customers to, again, adopt more advanced technology nodes.

We know a lot of our DRAM customers are at the 20 nanometer and below at this point in time. We expect that to be again another good growth area for us in 2017 as we continue to enable our customers to go the transition to nodes below 20 nanometers. And in fact, obviously, one of our significant DRAM customers is producing at 18 nanometers; the other two are producing at 20 nanometers. And again, when we look at that, we're going to see the second half of '16 was better than the first half of '16. And we expect the first half of '17 to be more positive with respect to the DRAM business than the second half of 2016. So from that perspective we're encouraged by what we're seeing on the DRAM side.

In the flash side, again, certainly with higher speeds, a little more density on the flash side, we believe that our Matrix product will continue to enable continued growth in our flash business as the requirements of flash become a little more complex and feed into our more advanced architectures there, so, again a good opportunity for us in 2017 and beyond. And again, what we talked about early on is the acquisition of Cascade Microtech was very instrumental with respect to increasing our total available market. So you can see on the left, our total available market was before the Cascade acquisition at about $1.1 billion for 2015. When you add in the cascade business, primarily the engineering systems business, at $300 million, the TAM increased from $1.1 million to $1.4 million, so again, we're excited about that increase in the TAM.

And in addition I think the other piece I want to point out here is if you look at the foundry and logic section of this chart, which is on the right side of both of the diagrams, $550 million market opportunity. And in 2015, FormFactor on its own had 25% of that opportunity. When we combine FormFactor with Cascade the market share is 37%. And what we believe we will have is something higher than that as we exit 2016, again, because a lot of our effort and a lot of the growth that we have is really right in the sweet spot of that foundry and logic business.

So we feel, again, good about not only expanding the TAM but also having products that address the fastest growing market of the advanced probe card market. And as we look out to 2020 we expect the growth to be to $1.8 billion. So again, semiconductors are growing at 2% to 3%, this market is growing at the – more like mid single digits, which from that perspective – and in addition to that we'll continue to gain market share. So again, we feel very good about what the Cascade acquisition has brought to us with respect to growth opportunities in growing segments of the probe card and the engineering systems business.

The other thing that it does is it certainly brought diversification to our revenue base. So if you look at the FormFactor business on the production side, prior to the acquisition, we'd had 90% of our revenues were focused on production revenues, and only 3% was focused on engineering revenues. With the acquisition of Cascade the production revenues are now at 75%, and the engineering piece grew to 25%. So again, a little more diversification certainly allows for greater predictability, less cyclicality, so we're certainly happy about that. The other piece with respect to the diversification that's not on here that from our standpoint, from FormFactor's standpoint one of the things that was important to us was to diversify away from just our large dependence on the DRAM business.

So if you look back at 2012 prior to the MicroProbe acquisition, the company and the advanced probe cards had 70% of its revenues were DRAM, 15% were foundry and logic, and 15% were flash. If we look at where the business is today, including the engineering systems business, 60% of our business now is foundry and logic, less than 20% of our business is in DRAM, a little less than 20% is in engineering systems, and probably somewhere in the ballpark of around less than 5% is in flash. So we've made a significant effort to diversify the business. And we think over the last four years we've done a very nice job with these two very transformative acquisitions of diversifying the business and reducing the reliance on DRAM. In addition the other one is the less reliance on our top customers with respect to concentration of the business. So our top 10 customers at FormFactor prior to the MicroProbe acquisition accounted for 83% of our revenues. With Cascade now the top 10 customers represent 62% of the revenue. So we definitely have expanded the customer base there.

So I think certainly as the CFO at FormFactor, this is a picture that really is near and dear to my heart, which is the significant accretion that the Cascade acquisition allow us. So you can see from 2011, '12, and '13, that FormFactor on its own was increasing the profitability, bettering the financial performance. But certainly if you look out at the right, in terms of the 2015, and you look at the impact that the Cascade Microtech had on our financials, it's pretty meaningful. So FormFactor on its own in 2015 had revenues of $282 million, when you add the Cascade revenues to it, it's $426 million. But more importantly if you look at the gross margin expansion, so the FormFactor gross margin was – the non-GAAP gross margin was 37%. When you add in the Cascade business it grows to – non-GAAP gross margin grows to 42%. Likewise, on the earnings per share the FormFactor non-GAAP earnings per share was $0.37 in 2015 on a pro forma basis when you add in the Cascade, add in $7 million of synergies but then take out $4 million for the interest cost associated with the borrowings that we had to buy Cascade, the earnings per share, the accretion still went from $0.37, accreted up to $0.65 or $0.28 per share or greater than 70% increase with respect to the earnings per share. So certainly this was a financially transformative transaction for us.

And I think when you show you the third quarter numbers you'll see again how nice the financials look. Equally important on this, is it allows FormFactor to utilize the $300 million of NOLs that are on its books because the Cascade revenues and profits were being driven primarily within the U.S., so great opportunity. Not only did we increase margins but certainly we increased bottom line by increasing margins but as well as the utilization of NOLs going forward.

So looking at the integration update, so the one thing I think I want to point out with respect to the integration philosophy of FormFactor was what we wanted to do is similar to how we did the MicroProbe integration. We're focused heavily on getting synergies out of the sales structure and out of the G&A structures. And we're going to move, and we have moved with more deliberate actions with respect to, and more measured actions with respect to any synergies that we're going to get from either R&D or from operations. We didn't do this transaction because of the great financial synergies we got out of it, we did it because of the putting the – the effect of putting the two businesses together, and what it did from both the top line as well as the margin perspective. That being said, we certainly have committed to achieving $10 million to $12 million of annual synergies within 18 to 24 months. And as we reported in our third quarter, we had achieved $1.3 million for the third quarter or about $5.2 million annualized. And we think we're still very much on track to achieve our $10 million to $12 million on an annual basis in 18 to 24 months consistent with our commitment.

The other thing that we've done is we've unified the sales and service team for a single voice to the customer, which has been very well received. And we talked about again the conservative approach to operations and R&D. So again, I think when we look at it we are certainly on track to achieve all that we wanted to certainly from a synergistic standpoint, but I think also from both the top line and a bottom line perspective this transaction is turning out to be exactly what we thought it would be, and exactly how we communicated it to investors, so we're definitely very, very pleased about that.

At this stage I would say certainly one of the more positive findings that we have had is that when you look at the engineering system business for the Cascade over the last three to four years it really has not experienced any organic growth. And in fact, in some years this has even shrunk. But as we look at this year, and we look at the engineering systems business it actually is going to grow probably somewhere in the mid single digits. So we feel good about that, but again I think that also goes to show you the importance of the engineering systems business within our particular customers – fulfilling and helping our customers overcome some of the real challenges with respect to moving to advanced technology nodes, and where this plays in that opportunity. So good growth in 2016 with respect to the engineering systems business, and we expect continued growth in that business in 2017 again.

So we look at some of the recent results for FormFactor, so again, in the third quarter we delivered revenues of $123.6 million, we had a non-GAAP gross margin of 43%, and diluted

EPS of $0.22, and again another item that we're thrilled about was the free cash flow at $16 million. And again, this is really a very accretive acquisition. And certainly will continue to generate very good free cash flow. And you can see the guidance here in terms of Q4. The guidance on the revenue side was $116 million to $124 million.

When you look at some of the themes around the fourth quarter guidance, so what we had talked about is demand normalization in the foundry and logic business, particularly for our largest customer, who we doubled the revenues for in 2016 versus 2015, but it wasn't necessarily as smooth throughout the year with respect to how those revenues came in. But if you look at it, it more or less normalized in the fourth quarter, and we expect that normalization to continue to occur in the first quarter as we move forward. The other thing that we saw again, I talked about the very positive effects of the engineering system business and the growth that we saw there. They had continued positive order flow in Q4. So again, we think that's another good sign going into Q1.

And lastly, didn't really say a lot about it other than on the DRAM side. Again, we're looking at DRAM to be more positive in the first half of 2017 versus what we saw in the second half of 2016. So those are all three items that I think impact not only Q4, but probably will impact our first half of the year of 2017. That said, again, we look at gross margins in the 41% to 45% range, and EPS $0.15 to $0.21. But again want to remind people that the fourth quarter included a 14th week because of the way our calendar lined up, which is unusual for us. It happens once every seven years, and this was the year that it happened. So again we don't feel like we get much revenue benefit from that because of where that 14th week falls.

Obviously it's between December 25 and December 31, but we do have expenses associated with that. So as we really think about the strategic focus areas as we look ahead, our real focus area for 2017 is really to focus on delivering and executing on the promise around this Cascade Microtech acquisition. We certainly have – we have the ability to get share gains in the line of sight components, particularly foundry and logic and DRAM and in flash. And we want to continue to drive execution to achieve that. To the extent that we have opportunities to look at other M&A transactions they're going to be around the test and measurement and yield enhancements, things that are consistent with what both our probe cards do, as well as our engineering systems do.

So to the extent we would look at any either tuck-ins or other M&A transactions it's going to be along those lines. And again, I think as we deliver against the promise of this opportunity we're going to really continue to focus on greater operating efficiency, getting greater economies of scale, and continuing to grow profitability for this company and the combined company.

So, thank you very much for your interest.

Q&A

<Q>: Two questions; at the bottom of the side of FormFactor's revenues, bleed a lot of cash, can you give us any thoughts on what the company would look like in the next downturn, and can you be cash flow neutral? And another thought is how big of a deal could you do [indiscernible]

(0:31:23) to be very successful? So can you do another \$300 million or \$400 million transaction in theory?

<A>: Yes, so let me address the first question first, right. So certainly from our perspective one of the things that we strive hard to do right is to structure the business so that in a down quarter, down cycle, that we will still be, we'll say, at a minimum cash flow neutral. So I think from our perspective – and what would a down quarter look like. Down quarter probably looks like somewhere around \$95 million, maybe \$100 million in terms of – so when you think about the quarter we just delivered at \$123 million right at \$95 million in a quarter, that's down 25%. So that probably is pretty dramatic, but I think we can structure the business so that we could probably be, I'd say, cash flow neutral around that level. So I think the point is we'll structure the business so we're not bleeding cash in a down cycle.

<Q>: [Question Inaudible]?

<A>: Boy, that's really a tough one. I mean, right now we're very focused on really integrating and absorbing this one. Certainly if you're looking a couple years out, and again, so the MicroProbe transaction in 2012, we did the Cascade transaction in 2016. So if are looking two or three years out I don't think there's a reason why we couldn't do a transaction the same size, maybe slightly larger than that transaction. It really depends on how we generate cash, how we pay down the debt, what capital structure that we would implement we'll call it couple of years down the road. So certainly I think we could do that but that's not where our focus is at this point in time.

<Q>: [Question Inaudible]?

<A>: Yes, so if you look at the balance sheet, so right now we'll end the year at somewhere just north of \$100 million of cash. We'll have approximately a little over \$140 million of debt. So from our perspective and you look at the cash flow generation of this, we'll call it – so we generate free cash flow in the third quarter of \$16 million. We guided \$11 million to \$13 million in the fourth quarter. Sort of add those two up, and you're generating \$50 million to \$60-plus million of free cash flow.

And I think for us, Edwin, I think what we're going to be looking for is, absent any real transaction that happens in the next year or two, I think we're going to look to pay down the debt I'd say pretty aggressively. We have a backend loaded amortization schedule on the debt. But I think from our perspective even though we've done a nice job of entering interest rate swap and locking in the majority of that debt at something less than 3%, the fact is I think we still would like to pay that down ahead of schedule in order to allow us more flexibility, because again, that debt does come with covenants and whatnot.

<Q>: [Question Inaudible]?

<A>: Yes, I think if you look at the business historically I would say that seasonality, again, second quarter, third quarters tend to be higher revenue quarters than the first quarter or fourth quarter. So first quarter tends to be a down quarter, that being said, given the nature of the

Cascade business that we acquired I think we still see seasonality, but it's certainly not nearly as volatile as it has been. But yes, certainly Q1 tends to be one of the lower quarters along with Q4.

<Q>: [Question Inaudible]?

<A>: Yes, so I think when we look at the – and obviously we haven't necessarily run all the models five, six, seven years out, but we do have a sense that the $300 million of NOLs, so when we continue to run at sort of current rates, continue to get normal growth, right. We don't see any major economic impacts here. The $300 million probably goes into the early to mid 2020s, but in fact the NOLs have an expiration date of around 2028 to 2032. So I think from our perspective, everything kind of staying consistent, I would say we definitely will utilize all the NOLs.

I'm sorry. The second question was the CapEx. So I think normal CapEx run rate will be somewhere in the ballpark of $16 million to $20 million. I'd really say even going forward it might be more like $16 million to $18 million. But again, we may have to make some investments on the system side in order to – as we bring these two companies together we may have to make some, I'll call it, incremental investments in the first year or so in order to drive some system opportunities that we have. But in general, I think the number is probably in the ballpark of $16 million to $18 million.

<Q>: [Question Inaudible]?

<A>: Yes, I'd say the health of the end markets right now certainly feel pretty good. Certainly if you look at the end markets and you say, okay, so foundry and logic, we talked about that in terms of the issues that are – what's driving that, what's driving the foundry and logic. It's actually mobility is driving it; areas of connectivity are driving it. And again, we talked about how our products are lined up for what's happening in those markets, in those trends, so we feel very good about that. And also when we look at the DRAM side again, we see customers moving to the next technology nodes and actually yielding now in the next technology nodes, and therefore running more devices on the next technology nodes, whether that be in 18 nanometer and 20 nanometers. And so that along with we'd say good pricing environments and whatnot encourages them to run more. So I think on the DRAM side again we feel pretty good about where that market is as it enters into 2017.

Now certainly from – so from our perspective we think that's good. Obviously the NAND – the NAND flash market is very good as well, with 3D NAND continuing to increase big growth. So when you look at all those, plus the need for engineering systems because of the increased challenges of new devices. So, all of that looks like it's very positive from an end market perspective, certainly as we are in the first half of 2017. From our perspective one of the challenges is because we – our turns business is – we have 50% turns business that we book and ship in any particular quarter. So hard to say right now maybe what the second half looks like of 2017, but certainly we feel pretty good about the first half of 2017. Not seeing any real clouds out there for the second half, but on the other hand it's a little hard to say what that looks like right now.

<Q>: [Question Inaudible]?

<A>: Well, it's not just that, it's mobile DRAM as well. So it's mobile DRAM, plus it's smartphones in terms of application processors, modems, and filters in terms of the increased filter content of smartphones as well.

<Q>: What kind of price environment are you seeing right now…

<A>: You're talking about price environment from…

<Q>: [Question Inaudible]?

<A>: Yes. So, look, we're in a technology space, so it's always a challenging pricing environment. And when you look at some of our more significant customers they certainly will give us volume, but they do it at certainly – we'll say prices that allow us to make some money but certainly we don't get rich off of those. So the fact is the pricing environment is always a challenge for us.

<Q>: [Question Inaudible]?

<A>: No, look, I think it depends on the – when you look at foundry and logic I think we've got some really good competitors, but I think the pricing and the competitive is rational. On the DRAM side it's at time a little less rational, but even right now it seems like it's not bad.

<<Unidentified Company Representative>>

Any other? Great. Thank you, and appreciate it.