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ADI - Analog Devices Inc at Credit Suisse Technology Conference

EVENT DATE/TIME: DECEMBER 02, 2014 / 5:30PM GMT

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CONFERENCE CALL PARTICIPANTS

Unidentified Audience Member

PRESENTATION

John Pitzer - *Credit Suisse - Analyst*

Good morning. I'd like to welcome everyone to the ADI presentation. My name is John Pitzer. I cover semiconductors here at Credit Suisse. It's my pleasure this morning to introduce Dave Zinsner, who is the Chief Financial Officer of Analog Devices. We've got about 25 minutes to go through fireside chat conversation with David. As always I encourage participation, we will have mikes around the room.

But Dave, maybe I can start things off. You just reported earnings last week. Why don't you give us a little bit of a rundown of kind of what the key takeaways from your perspective or from the earnings call. Clearly, given some of the concern about where we are in the semiconductor cycle, expectations were pretty low.

David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

Yes.

John Pitzer - *Credit Suisse - Analyst*

And relative to those expectations, you came in a lot better than peers. So maybe you can go through and kind of give us the key highlights from earnings last [year].

David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

Well, that's -- I think hits it right on the head actually. We did -- and in fact, actually we -- I think, once some of the reporting came out in October, we started to worry about what kind of -- what the business situation was like and started to question our own judgment of -- as how business was progressing. And then, after a few weeks and just looking at the order levels, they just continue to be strong really through the end of the quarter and really leading up to the earnings call, continue to be strong.

So as you mentioned, our revenue ended up towards the high end of the guidance. I'd say one area in particular that we did pretty well is at Hittite. Our Hittite business, which we now call ADI Chelmsford, we were thinking that revenue would be kind of in the mid to high [$70 million] for the fourth quarter. They did actually $81 million in the fourth quarter. So they definitely knocked the cover off the ball in terms of their performance.

But really, I mean, every end market, I thought did pretty well and kind of in line with where we thought they'd be. And quite honestly, we thought that there was an opportunity for us to hit a little bit higher than the midpoint of the guidance if everything worked out according to plan and it did, so that was great. And the margins did better than we expected, margins were actually pretty much flat with the last quarter, I think 10 basis points down. We actually thought they might be down a little bit more than that, so that was actually a great outcome.

We actually came in right where we thought operating expenses would be -- so everything I felt like was operating exactly according to plan, if not a little bit better. And then this situation with the downturn and the stock price ended up being a great opportunity for us, but the stock came down. We have somewhat of an algorithmic approach to the buyback and it just executed on its own every day and we bought back $187 million worth of stock, which was at a very good price, now in the [$40s]. So that was a little pleasant extra surprise in terms of the numbers.

John Pitzer - *Credit Suisse - Analyst*

I'm always a little bit worried about using normal seasonality in this space, because the variance around normal seasonality is so high. But when you look at your January guidance versus kind of your peer groups' December guidance, you guided a little bit better than what the three to five year seasonality would have suggested and your peers guided a little bit worse.

Couple of things. To what extent is that Hittite? And secondly, to what extent is that just having an extra month's worth of visibility and what was a close -- a soft close to the second half of September actually didn't turn out to be a trend and it started reversing in October and November?

David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

Well, I think if we had closed out at the end of September and had a couple of weeks in October, absent what the noise going on from some of the other peers, I think we would have still been in generally the same place that we guided. So I don't really think that the extra week was incrementally so positive, but that's why we did better. And quite honestly, I think the business is just holding up and doing really well.

Hittite is actually holding up nicely. I think they will have a number that's around in the $80 million zip code, again next quarter, so -- and definitely beat the expectations that we've built in when we originally acquired them. So that's one key driver of it. Communications, which ordinarily can have a really weak first quarter when there isn't a lot of pull through in demand and people are trying to adjust their inventory levels.

In reality, the business is actually holding up pretty well and I think because of some of the OEMs, last year, had gotten themselves into trouble by turning down the inventory levels too significantly. I think this time they've been cognizant of that and so they haven't done as much, so I think communications will actually certainly be down, but I think it will be down maybe even a little bit better than what normally you would have in the first quarter.

Auto, I think, will do what it's going to do, but that's generally in line with expectation. And quite honestly, consumer likely normally is -- I don't know mid-teens, maybe sometimes even into the 20% sequentially down. They have been in the past, this has been a headwind. That one is going to be kind of in line with the corporate average, which is unusual for our first quarter for consumer, so I think that's helping out as well.

John Pitzer - *Credit Suisse - Analyst*

Not a desired distinction, but you're one of the few semi companies this year that didn't get multiple expansion. And in fact, this was definitely true before you reported earnings where your [E] was up or at least Street consensus estimates were up more year-to-date than the stock price was. And the feedback, I always get is that's because there is a growth of concern on ADI. And that growth concern is a function of your dominant share in data converters. Now, what's interesting is, if you go back and look at the data over a three and five year period, you tend to always outgrow the Analog space by about 20 bps. So I'm not sure it actually depends on the data. Maybe you can help us understand what is your market share in the converter market, where do you think it can go? How do you think about the long-term growth rate of the overall business and then I'll start talking about individual sub-segments as we get into the --

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David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

So [data converter] market share is kind of in the, like high-40s depending on which analysis you use. Sometimes you get as high as 50% in certain views of it. I would say it's getting increasingly difficult to really estimate the stuff as it kind of integrates into other functions that perform not only conversion, but other points of -- in the signal chain. And so some of it I think has skewed a little bit towards that. I think we can continue to outperform in that space. I think the bigger issue for us in terms of what will add to the multiple, what's called, compression, but where we didn't get the expansion that everyone else saw or a majority saw and why I think that change is, I think partly it was -- we have for the last few years moved away from consumer.

It was a relatively painful process. We reduced our investments in there we're still investing in there, but had a much more modest level and when you do that you get an instantaneous reaction. The next time a design cycle comes up, you are up. And so we had a massive headwind in that. We were willing to take the pain, because we wanted to move that R&D investment into the other areas that we think we can differentiate and where we think we can gain share in, like the industrial space, like the communication space, like the automotive space. And so unfortunately, but those market, they take a long time to actually get the return on the R&D that you pushed over there.

So where you're getting the instantaneous reaction in consumer, you're getting three, four, five, six year wait periods to get the offsetting return. And I think this year, we finally actually started to see consumer kind of bottomed in the middle of 2014. And the rest of the markets did quite well and so I actually think we're on the beginning of a really good growth rate for us holistically, the entire business because consumer no longer becomes a headwind. There are few things that I think will lead to some performance that's certainly better than what it's been in the past, it might actually show some growth on a go-forward basis.

And then all the investments that we've made in the other markets, I think start to translate into revenue. We've already seen the pipeline increase meaningfully in the non-consumer business in 2014 versus 2013. That ends up translating into revenue in 2015 and beyond. And so, I'm very optimistic that we will reverse that and we'll see -- I get benefit of a more favorable multiple, whatever that might be.

The other thing I think that, quite honestly, we probably didn't get a lot of benefit in terms of the accretion that we were seeing from Hittite. And that was maybe a little bit more unusual than some other companies that have announced transactions in the most recent past. And I think that's just because we'd never get anything and other companies have more of history in it. And so I think most investors said all right, let's just kind of see how that plays out and if we start to see the accretion, we'll give you credit for it, but we want to see it and not give you credit for just what you promised.

And I think the fourth quarter was exemplary of what we're going to see out of Hittite on a go-forward basis. We are going to see that accretion and we'll start to see the benefit from that. Already -- and again it's a long-winded answer, but already in the fourth quarter, we had meaningful benefit from Hittite, not only because they did better from a performance level basis, but there were businesses that we wouldn't have won even the sockets that we could deliver that because we had the combined solution with Hittite, we actually came in with and won the entire -- basically the entire Board of at least the Analog and wireless capability in that space, there are several of them.

I mean, it's been incredible how much traction, and quite honestly, in my history of doing M&A, which is actually pretty decent, I've never seen this kind of traction this early in the process. And really when we talked about accretion, we really weren't even factoring in the revenue portion, because we didn't think it would come in the first couple of years. I'm optimistic that we'll actually start to see some benefits.

John Pitzer - *Credit Suisse - Analyst*

Well, I mean, that's a good segue to go to the bottoms-up segment model and communication is a good place to start. To me there's two drivers. The one is the Hittite and I guess as a clarification, winning socket, given the design cycle there, is this actual revenue that materialized in the quarter or [is that what you] expect to see six, nine months from now?

David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

No, it's couple of years out probably, but nevertheless it's still a very good sign for what that business can do.

John Pitzer - *Credit Suisse - Analyst*

And as we do our checks around Hittite acquisition, especially in the distribution channel, your distribution partners love this, because Hittite had great product, but they didn't quite have the scale of go-to market of an ADI. So as you think about that $81 million quarterly run rate that Hittite put up in the October quarter, where can that go over the next couple of years?

David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

Well, Hittite didn't even just -- I mean, they actually completely ignored (technical difficulty) they had a couple of percent in distribution and I think it was reluctantly. So yeah, we take the really large distributors obviously Arrow and Avnet, but even some of the other ones like World Peace. So we are pushing -- we've already pushed the line into those distributors in terms of an offering, so that's why I think we get the near-term benefit in terms of revenue.

And you're right that the distributors love this product, they wanted the opportunity to sell. Those kind of products didn't have the opportunity and now a fairly large company has that capability to do that. So I think that's a win-win for us, it's a win for the distributors.

I think ideally what we like to see is this business grow in the double-digits on an annual basis. Quite honestly, we didn't build that into our assumptions. We were conservative in what we thought we would achieve, but I think we have the opportunity to see that kind of growth out of this business. I think certainly in the communications infrastructure because they need to move more and more data around wirelessly as we kind of evolve into more and more devices connected wirelessly and that will not only be a personal devices, but homes and refrigerators and whatever else that's going to get connected, but also in the industrial space as well, I think there's tremendous opportunity for those products.

So we are very optimistic that this thing is going to go really well for us and that's why I think we're now almost five months into it and it's been fantastic.

John Pitzer - *Credit Suisse - Analyst*

The other vector of growth in com infrastructure, everyone talks about content increases from 3G to 4G base stations. You guys were actually showing content increases. Can you talk a little bit about what the expected content increase is as we move to 4G and I guess more importantly where do you think we are in that deployment cycle globally?

David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

Yeah. So I think one thing about this 4G kind of cycle for us is, it's a little bit more about the radios. They're putting more radios into macro base stations and that's by virtue of the fact that we're in every one of the radios, we get more dollar content per base station and that's what's driving our performance.

I think in 2015, what I expect to happen is that carrier start to move some of their capital if not a meaningful amount of their capital into the small cells for us, that's actually even a better story, because it's a per radio kind of opportunity for us and our BOM in a small cell is actually better as a percent of the total cost of that product versus what it is in a macro base station. And as a result I actually think they spend the same amount of capital, but deploy it more to small cell. We actually do incrementally better because the radio count goes up and that's more beneficial to us.

Where we are -- for some reason and I'd tell you internally we always scratch our head at the China kind of story seems to be the predominant focus. And to some extent that's right to think about that. I mean, it's a pretty big deployment, there is no question about it, but we are in -- we're really across the globe in terms of our exposure, we're in literally every OEM's products. So we're almost agnostic to who deploys, just that somebody is deploying. And I think given this continual increase, our need for more bandwidth to stream more and more data, I think that over the next three to five years it's a consistent story of deployments.

Could it be lumpy at times? Yes, it could be lumpy. China suddenly went to zero in a quarter, there's no question that impacts us a little bit. But volatility aside, I think this business has a fairly steady march, a pretty meaningful growth over the next few years as we kind of build out this kind of higher speed network.

John Pitzer - *Credit Suisse - Analyst*

The other bucket is industrial and that tongue-in-cheek I always say that industrials where chip companies call the product where they don't know where --

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David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

I [don't] think that's true.

John Pitzer - *Credit Suisse - Analyst*

And sort of this catch-all phase -- this race, can you demystify industrial and kind of talk about maybe the sub buckets underneath that broad heading that we as investors should be focusing on and being particularly strong areas of growth for ADI?

David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

Yeah. So I'd say the two bigger sub segment in industrial are factory automation and instrumentation. So factory automation is like ABB and Siemens and those kind of guys. Instrumentation is Agilent and National Instruments (inaudible) where Agilent's new name, but whatever. So that's probably combined, that's probably half the revenue of industrial, it's just those two markets. And I think in each case, they're going to do pretty well over the next few years. I think partly because certainly factories are going to automate, so that's certainly helpful.

Also this IoT dynamic, which has been mainly more of a kind of consumer story so far, I think does migrate eventually over into these industrial businesses as they want to read every -- I mean, we were talking to I think with Honeywell and they were talking about how they want to read this standby power supply that goes into aircraft and they want to be able to get a reading from that which they don't get now. They actually rely on the airlines to tell them how much usage they've had of these power supplies and quite honestly, questionable whether they actually tell the truth.

So in this case, they'll actually have a legitimate reading constantly. So all, there's tons and tons of those kind of applications that are going to materialize over the next five, 10 years, but I think we'll drive good demand in those markets.

Beyond that, Healthcare is a big component of our business. Healthcare also will have an IoT like story as we move towards kind of clinical grade, vital signs monitoring. Today, the stuff that -- the licensing stuff, that's not clinical grade, I mean you're getting a kind of a reading. But if you died, somebody may show up. But in the case of like deploying these in hospitals, they really got to know that the stuff is actually reading correctly, that's not just a higher performance part, a very high performance part and so those are opportunities for us. That's a pretty meaningful part of our revenue in the industrial.

Military now has suddenly become a big portion of our business as we merge in the Hittite business in with ADI. That's become a meaningful business and it's probably not a fast grower, but we are focused in areas that I think have investment going into them like drillings and so forth. So that's going to be -- I think that's going to be a decent opportunity for us and the margins there are very strong.

And then the last one which is kind of maybe our only really pure ASSP business within industrial, because most of this is 100,000 customers kind of distributed is this kind of energy management business, which is industrial or other meters and control systems back at the main utility. Again, that's also going to -- there's going to be an IoT component to that.

John Pitzer - *Credit Suisse - Analyst*

Maybe as a follow-on on the medical monitoring, do you think that what you do is always going to stay as a specialized in the hospital under doctor, physician or can you leverage the IP there back into the consumable market -- or the consumer market, sorry, for things like wearables?

David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

Well, quite honestly we are in the wearables. I mean, that's -- because we saw this kind of evolution occurring in the clinical side and we wanted to make some early investments and it helps to have a little revenue cover. We started actually in the wearable space to help fund some of these programs. So we're already in there, I think it does first go then to the clinical side, but I think there is also going to be this kind of in-between area which is where you're monitoring your health perhaps at home, but you're using high performance.

These aren't going to be like -- I don't even know what one of these devices cost actually. So it's not going to be $100 a unit. It's going to be something more than that, but it's not going to be something that hospital necessarily would ordinarily at this point be purchasing, some of it actually might be disposable. So -- but the performance had to be there and when that's the critical requirement, that's generally a good answer for us.

John Pitzer - *Credit Suisse - Analyst*

And then Dave, the last sort of bucket fundable within your revenues stream from an end market perspective is autos. It's been a good business for you, it's been a good business for the semi-industry. How do you think about the growth rate there longer-term and from the conference call of last week, it sounds like you've got sort of line of sight to design wins that could become meaningful exiting 2015, going into 2016. Can you talk specifically what there excites you?

David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

Yeah. I think 2016 just by a way of -- we know what our design wins are. It's all a matter of those things getting traction at the -- maybe not at the Tier 1s, but at the -- actually at the OEMs. Assuming that happens, I think we're in very good shape in automotive to see, I don't know, double-digit growth 10%, maybe even a little bit better than that kind of growth rate on a kind of a five-year CAGR basis.

And we have a pretty good sense for that, because it takes so long to get to this point in terms of design. Generally, once you're in, you're kind of in. Most of the applications center around safety, not surprisingly lane departure, vehicle stabilization and so forth. So that's a big component, but I think it could be a big driver of growth. On top of that, we actually have a Powertrain business, and Powertrain has never been that interesting for people, well, it hasn't been for a while. But now increasingly it's become more interesting, because they want higher performance, better fuel efficiency.

And one of the ironically, we put a lot of investments in the hybrid electric and electric vehicles and they have done okay, that's been decent business. But what we really have done well is in the regular combustible engine with start-stop battery management, which is pretty pervasive in Europe. It hasn't really come into the US yet in a big way, but will. It might get annoying to start with, but actually, I think you get used to it and it really dramatically changes the fuel efficiency, so I think that's going to be a big opportunity for us.

On top of that our exposure in Asia has been relative to the size of those OEMs has been relatively low. I'm talking at the OEM level, not at the end consumer level. And some of that is because there's -- some of the Asian markets are more vertically integrated, but we're making some serious inroads in that space. And I think the market share gains in Asia over the next five years in auto for us are going to really impressive.

John Pitzer - *Credit Suisse - Analyst*

Any questions from the audience? There you go.

QUESTIONS AND ANSWERS

Unidentified Audience Member

Just talking about the automotive. How do you think about sort of content growth in the automotive market. I was thinking the autos relative to other end products have a very, very low percentage of the BOM from semiconductors. So how do you think about sort of the potential for semis to increase as a percentage of the BOM in autos. And I guess maybe specifically what kind of additional functions should we expect to see maybe in the next three to five years in cars that are semi drivers?

David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

Yeah. So it usually runs at two to three times the underlying unit growth or it has been and I think that's pretty much how it's going to trend over the next few years. I mean, we deal with Audi. Audi has a separate program. Now, when we end up selling, we sell to Tier 1s, but they actually have a separate program just for semiconductors with just a handful of companies that actually deal with them on a regular basis, because they actually think of the semiconductor content as the differentiator for their product relative to a lot of other products.

I mean, I think eventually, we're migrating our way to driverless vehicles [that's behind], the lane departure and the stopping in front, emergency stopping, I think are just kind of beginnings that what will eventually be a driverless vehicle. Where we are going to be particularly good at is in the microwave requirements, because right now the 24 gigahertz is moving up to 77 gigahertz, which is obviously in a microwave spectrum. We just bought a company that is -- was a dominant player in the microwave space. So we're going to have a really good position in those products.

And radar is not a significant part of the BOM as of yet. I think they will put more and more sensors in cars just overall, sensors to detect the stability of the car, sensors to detect whether it's lighting, pressure sensors, anything that they can put into cars they will spend and send it up to a central head unit or whatever. And so I think that's going to be where a lot of it the content is too. And then really eventually this thing is like a mini smartphone, [they're having our] giant smartphone I should say. So it's going to have some very sophisticated connectivity that eventually will go into these cars to lower the weight, improve the communication and so that's probably an area of increasing content as well.

John Pitzer - *Credit Suisse - Analyst*

Great. With that, we run out of time in this session. But I want to thank Dave this morning. That was fantastic.

David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

Thanks.

John Pitzer - *Credit Suisse - Analyst*

I appreciate everyone for attending. Thank you.

David Zinsner - *Analog Devices, Inc. - SVP - Finance and CFO*

All right. Thank you.