REFINITIV STREETEVENTS

EDITED TRANSCRIPT

ADI.OQ - Analog Devices Inc at Morgan Stanley Technology, Media and Telecom Conference (Virtual)

EVENT DATE/TIME: MARCH 01, 2021 / 3:15PM GMT



CORPORATE PARTICIPANTS

Vincent T. Roche Analog Devices, Inc. - President, CEO & Director

CONFERENCE CALL PARTICIPANTS

Craig Matthew Hettenbach Morgan Stanley, Research Division - VP

PRESENTATION

Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

Joining us at the TMT Virtual conference this year, very pleased to have with us the CEO of Analog Devices, Vincent Roche. So welcome, Vince.

Vincent T. Roche - Analog Devices, Inc. - President, CEO & Director

Thank you, Craig. Great to be here.

Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

Great. Before we kick in, I just have to read a disclosure for investors. You can find the disclosures at the Morgan Stanley website, www.morganstanley.com\researchdisclosures.

QUESTIONS AND ANSWERS

Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

So with that, Vince, I thought we can maybe just start with the current supply chain. I know we definitely want to dig into the growth drivers, but there's so much focus in terms of some of the tightness and shortages, and it's something that came up on your last earnings call as well. So just how does ADI see things today? And importantly for ADI, can you kind of touch on your supply chain kind of internally, what you do internal versus outsourced? And what that means for you today and on a longer-term basis?

Vincent T. Roche - Analog Devices, Inc. - President, CEO & Director

Yes. Sure, Craig. So I think, first and foremost, when we look back over the last year, the first half of 2020 was characterized by the onslaught of the pandemic, the disruption to the supply chain. Certainly, we were deeply affected on the back end of things. But clearly, the advanced communications sector, health care, instrumentation, all of those sectors did particularly well in terms of demand, supply/demand in areas like factory automation, consumer, to some extent, where an automotive, of course, were deeply compressed, let's say, during the first half of the year. Second half of the year, pretty much everything came back on stream, as did our supply chain.

So when I look at things now, what I see is, on the supply side of things, a real tightening, particularly on the silicon side, but also we're beginning to see some tightening on the back end. And I think that's driven by a couple of things. It's the the ramp and digitalization of our lives and the economy. So I think we're seeing a lot of long-term tailwinds in areas like communications, like the building of cloud, health care. Factory automation is really back on the right track as well, I would say, but still a long way to go in terms of being able to reach the peaks of where we were.

I think what the pandemic did as well, it created a short-term tailwind for areas like computing, gaming, lots of consumer products. My sense is that will moderate over the next few months, but I still believe that the longer-term tailwinds that I've just outlined will continue.



And we, as a company, have responded well. When we had a significant issue last summer, we decided that once we got employees back to work that we would capitalize the business for a bigger footprint and that we would build inventory. So I think ADI is in a good position now. You saw our earnings report recently, where we talked about the quarter that we're now in on -- in terms of demand and supply, a record level. So I'm feeling confident about where we are as a company and the cycle that we're in as an industry.

Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

Got it. And if I think about on the manufacturing side, fab life has worked well for you. I think you do roughly half internal, half external. Do you think that's still the right approach is a longer term and kind of where you sit in the supply chain?

Vincent T. Roche - Analog Devices, Inc. - President, CEO & Director

Yes, depends how you look at it, Craig. I think on the front end, we're a little over half internal. We've many fabs inside the company, many different process, recipes, and a little less than half externally. Again, it depends on which particular market sector is doing what.

But our back end is the assembly is largely -- the product assembly is largely side ADI, but the back end is proportionally the majority is inside the company. So we've always believed in a hybrid manufacturing system and a system that has lots of resilience built in due to the diversity of the -- all the aspects of the supply chain. So I think that's the pathway. It's been the pathway for the last decade. It will be the pathway in the years ahead as well.

Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

Got it. And you spent some time in the earnings call just talking about kind of climate in the environment, and I'd love to kind of extend that in terms of just some of the things from a technology perspective what ADI is doing in terms of. It could be power consumption. It could be on EVs. Can you touch on just where your technology is kind of intersecting some of these important themes today?

Vincent T. Roche - Analog Devices, Inc. - President, CEO & Director

Yes, sure, Craig. Well, I think let me just go through the -- the biggest business inside ADI is our industrial business, so it's factory automation, process automation, instrumentation, health care as well as aerospace and defense. And all of those sectors have seen very robust growth over the last several years.

And first and foremost, our first call on R&D within ADI is to serve the broad market. So when we think about product portfolios, we think about the broad franchise of the company and making sure that we've got the R&D adequately positioned in those areas. I mean our health care business has been growing even prior to the pandemic on a compounded rate of about 10% per year for the last several years. Our factory automation business, we've clearly been getting market share there, growing market share there. Instrumentation has -- we benefited from the strong signal processing portfolio that's existed in ADI, but also the Hittite orphan microwave portfolio has enabled us to take some new white space there, too.

And I think the secular trend in Industry 4.0, where we're going to see a lot more automation of human routines and factories to make everything more resilient, more robust, I believe that will continue for the long term.

When I think of our communications business, too, we have 2 parts of that. We've got the wireless and wireline. Both of those businesses have performed strongly over the past 5 or 7 years, and those businesses, together, have grown at a compounded rate of about 7% over the past 3 years. And I expect that to continue with 5G being the primary driver in wireless and our optical portfolio, either the power side of things or the optical control franchise, doing well as speed rates, bit rates continue to go into the 400-gig and terabit per second over the next several years.



We've had 2 headwinds really in the company for the past couple of years, one in automotive, the other consumer. And I'm glad to say the consumer business, we've turned a corner. We had one large customer, one large socket that, over time, was dilutive. That position was diluted, but we're back on a good path. We have a lot more diversity in our consumer business. And it's really 2 pieces. It's what we call prosumer audio/video as well as the portable electronics side of things. And we're in a much better position from a product diversity, application diversity, customer diversity. My sense is we will see our consumer business back on a growth path in the years ahead.

Automotive, we have really 3 positions there at a high level. We have cabin electronics. We've had that for many, many decades now, very strong position, a leading position built around our digital signal processors and rendering high-end audio capabilities.

We've been adding the A2B, the SLIM media bus, which -- in which we've been able to -- from which we've been able to penetrate more than 20 OEMs, and that's on a very significant growth track.

And lately as well, our road -- active road noise cancellation portfolio has been doing particularly well, again based on that platform.

Electric vehicles. We've got a leading position in both the wired, wireless BMS technologies. And I think I said on the earnings call that there's expected to be around 200 million-plus electric vehicles by the end of this decade, up from less than 10 million today. So there's a huge growth trajectory in that area. And I feel confident given the position that we've got in the high-performance side of things there.

And obviously, our power portfolio. When I look across the entire franchise of ADI and areas like automotive, the cross-connect, the cross-selling of the LT power portfolio is now well and truly underway. We've been able to generate during the past year, even through the pandemic, about \$0.5 billion worth of lifetime revenue that's now beginning from that franchise, that LT franchise.

So there are -- that's a look across the markets and the key technologies that are driving things.

Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

Excellent. Maybe we could build on that last thing from Linear. And particularly, I want to talk about scale, right? So you bought Hittite, Linear. You're in the process of trying to buy Maxim. How important is that for you in terms of what you're trying to do and accomplish with your customers as you grow the business going forward from a scale perspective?

Vincent T. Roche - Analog Devices, Inc. - President, CEO & Director

Yes. Well, clearly, when I look at the analog business, in general, it's an area where the skill sets at our customers are getting thinner and thinner, are becoming more and more depleted. And all the acquisitions that we've done have added capabilities to ADI. So it's my sense that there's an asymmetry developing between the capabilities that we have, the scale of the talent pool that we have to be able to take on more of our customers' toughest challenges in more places and more applications, more customers across all geographies.

So -- and Maxim certainly adds to that mission, I would say. We have a lot of synergy at the technology level. We're opportunity-rich, and we're adding more and more skill set to be able to enable ADI to tackle more of the customers' problems, play at the high end in more and more places. So that's the basic fees.

The other side is, of course, we do get efficiencies. We will be able to get some, what I would call, natural inefficiencies from the business and obviously make the P&L and the balance sheet more attractive. And just the sheer scale of the company as well gives us more buying power when it comes to cost of goods, when it comes to getting all the materials and the services that we need for a more highly scaled company.



Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

Got it. And the Linear Tech deal has gone well. Can you talk about just maybe some of the things that you've learned through that type of acquisition as you look to complete the Maxim acquisition in terms of things you learned and how that could help you as you go forward?

Vincent T. Roche - Analog Devices, Inc. - President, CEO & Director

Yes. Well, I think, first and foremost, anytime that you acquire a high-quality company, you're buying some great assets. And the first thing is to make sure that you preserve the assets that you've acquired.

And one of the things, Craig, I think that's really important when acquiring a company is to understand the cultures, the cultures of both companies, where you're similar, where you're dissimilar and where you can improve things.

So first and foremost, with LT, highly logically, both companies were very, very similar. But we have -- we've looked at the best of both in terms of how we go to market, how we develop products, how we do our manufacturing and finding ways to combine the assets as fast as possible.

I think that's really, really important and preserve the essence of the good things that we do together, and all will strive to be best in class. Step back, reflect, take a look and find ways to make the combined entities better. And that takes a lot of patient work. I think making sure that we spend the time to properly reflect, listen to each other and understand what is truly best of both, what best of class looks like and that becomes your North Star.

Everything is well. Nothing is perfect. And I think in all the acquisitions that we've done so far, we've had to inject capital to make the assets better, particularly on the manufacturing side of things. And I think, for me, when you acquire great companies, it's about preservation and fostering of a better, better culture. I think that, for me, is number one.

Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

Excellent. All right, I want to circle back to just some of the end markets and drivers. And you touched on factory automation had been really weak but is now starting to rebound. What type of signals are you getting from your customers? And what are the prospects over the next year for that segment within industrial?

Vincent T. Roche - Analog Devices, Inc. - President, CEO & Director

Yes. So we -- there is very -- I think, across the board, if I just look tactically, there's a lot of inventory depletion that's taken place really over the last couple of years. I mean the automation business was beginning to slow down somewhere around the late '18 time frame into '19. So first and foremost, I think inventories have been very, very lean. But we've been purposefully building our R&D stream, pointing our R&D technologies -- R&D and technology to make sure that we take more and more and more of the signal chain in the factory automation area, making sure that we connect the OTC portfolio, bring the power side into our business.

So I think when you look at our -- the business, both in our large customers and small customers in the factory automation area, we're in a much better place. We've been taking share. That's demonstrated by the various numbers that we and our competitors are putting up, and we're touching more customers. We are touching more applications. And my sense is that, that is a business that can grow 5% plus on a compounded basis now for several years ahead. And the big tailwind there, of course, as well is the onslaught of Industry 4.0 or 5.0, some people call it now, where more and more routines that were human are now being carried out by machines.

And I read an interesting statistic lately that, by 2025, for the first time in human history, machines will carry out more routine than humans. So that is certainly the trend that we're in. And given our focus there over the past decade and what is -- it's a market with very highest risks. It takes



a long time. From the time you make your investments till you see the investments come good, it takes 5, 7 years. And I believe we're seeing the benefits now of our stronger customer engagements as well as the quality of our product portfolio really take deeper root.

Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

Got it. And as you highlight, I mean, the industrial segment, you have many subsegments, right? You have test and measurement, health care, aerospace, defense, factory automation. As you look out over time, are there any of these subsegments that you say from a secular drivers that kind of rank towards the top in terms of what you expect out of the business the next number of years?

Vincent T. Roche - Analog Devices, Inc. - President, CEO & Director

Yes. Well, I think they're all playing critical parts. I just talked about factory automation.

If I look at health care, that business, Craig, has been growing at the rate of about 10% for the past 5 years, and I don't see any reason that we cannot continue to see that business grow at that rate plus.

We're going to see more and more of our technologies are becoming adopted in areas like very high-fidelity image systems, where we are integrating more of the complexity for our customers into our solutions, areas like molecular sensing, areas like more and more point-of-care solutions, moving health care out of the clinical environment and being able to do it with clinical-grade technologies in the home environment. That process is well on its way now, so I believe that is an area where we have several secular tailwinds behind us.

Our aerospace and defense business, the space part of it has been doing particularly well over the past -- past 3 or 4 years. And a lot of the impetus there has come from the orphan microwave portfolio, that Hittite brought us 6 years ago or so when we acquired them.

And between aerospace as well as defense, we are better penetrated than we've ever been, again around the portfolios that center around LT power, the orphan microwave technologies and the mixed-signal technologies of ADI.

So my sense is the entire industrial business, if I integrate everything, it's the most diverse business we have. It's gotten great secular tailwinds and R&D tailwinds that we've built over the last decade or so. So my sense is that business should be able to grow at 5% kind of area through the ups and downs over the next decade.

Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

Got it. Maybe we can shift towards the wireless infrastructure market. And there's some near-term headwinds from the Huawei restrictions, also kind of a little bit of a loan spending. But just, again, on a multiyear basis, what's the expectations for growth in wireless infrastructure? And how important is the transition to 5G that's happening for ADI?

Vincent T. Roche - Analog Devices, Inc. - President, CEO & Director

Well, it's a really important part of our communication story. That business now is well over \$1 billion for the company in total. We got about 60% of our business from the wireless sector, of which 5G is the biggest piece. And also, the remainder comes -- we're getting a little over 2/3 of our business these days from the wireline side of things.

And in wireline, it's a case of data center is a piece of what we do. We build the most precise control -- optical control systems for managing the electro optical interface, and that problem is getting tougher by the year. As the speed levels go up, we're trying to compress more and more performance into smaller and smaller spaces. We've been growing in the communications business compounded about 7% for the last 3 years, and I believe in the region of 7% to 10% is a good way to think about the potential growth in that business in the years ahead.



And a couple of things -- a couple of points I want to make on 5G. It's largely been, so far, a story of Asia building out 5G infrastructure first and fast. I believe the next several years, we'll see the U.S. There's been a lot of spectrum acquired. That spectrum has to be put out to very, very good use. So our expectation is that at the back end of this year and into next year, we begin to see the build-out of 5G in earnest in the U.S. And in 2022, I believe we'll see the early stages of the build-out in Europe.

The other part of 5G, I think, that people forget is that I think by the end of this decade, for every dollar generated in 5G infrastructure in the consumer area, there will be about \$1 of infrastructure value created in the big space as well.

So the great promise of 5G is not only the additional channel density or the spectral density that we get the bit density in a given channel. It's also about -- it's the permanistic features that we can now flexibly apportion quality of service into mission-critical applications like health care, like industrial, perhaps automotive.

So 5G has a lot of legs, I think, compared to any of the other technology generations that have come before it. So I see it as a long-term value driver for the B2B space as well as consumer. And certainly, ADI is the leader in radio technologies at the air interface.

Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

Got it. Maybe we could shift towards the automotive market. And I know in BMS that the company has led that market with technology, and now you're first with wireless BMS. So can you just talk about how important that is in terms of being at the leading edge and where that positions you as the EV market continues to inflect?

Vincent T. Roche - Analog Devices, Inc. - President, CEO & Director

Yes. Our focus, Craig, is making sure — I mean the early stages have all been about efficiency, being able to use the battery packs to squeeze the most energy efficiently from them. So the approach we're taking, by the way, as a company, is that we're looking at the complete life cycle of the battery, the formation of the battery, the deployment and use of the battery in its target application in automotive as well as the end of lifing of the battery in energy storage systems. And we play a part in that entire ecosystem.

So first and foremost, we have 2 approaches. One is the wired approach. And that is what most of the -- that is the connection, if you like, to most of the battery packs today. But the future, I think, is wireless, and we've just introduced our first generation of wireless technologies.

But not only we do -- whether it's wireline or wired or wireless battery monitoring and connectivity, not only do we get the highest efficiency given the high performance of our precision signal processing portfolio, but when it comes to the wireless technology, you've seen recently General Motors announced that their entire fleet is going to be based on wireless technology and ADI's wireless BMS technology at that. And what we get there is the ability to flexibly configure battery packs. It's a more robust technology in the sense that it doesn't suffer from the -- a lot of the inherent reliability issues with the wired technology.

So whether it's wired or wireless, depending on how customers build their batteries, configure them and deploy them, we're there. So it's based on efficiency, flexibility and configurability. And we're always, of course, trying to make sure as well that we get ahead of the new battery chemistries that are coming. And so we have a long road map of products and technologies that enable us to play across the board from the fully electric vehicle to the hydrogen.

Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

That's great. Okay. I think we are coming up on time here, Vince, but really appreciate the discussion today and to hear some of the really exciting growth drivers that you have. And with that, I appreciate it, and hope everyone has a great day.



Vincent T. Roche - Analog Devices, Inc. - President, CEO & Director

Take care, Craig. Thank you. Bye-bye.

Craig Matthew Hettenbach - Morgan Stanley, Research Division - VP

Thank you.

DISCLAIMER

Refinitiv reserves the right to make changes to documents, content, or other information on this web site without obligation to notify any person of such changes.

In the conference calls upon which Event Transcripts are based, companies may make projections or other forward-looking statements regarding a variety of items. Such forward-looking statements are based upon current expectations and involve risks and uncertainties. Actual results may differ materially from those stated in any forward-looking statement based on a number of important factors and risks, which are more specifically identified in the companies' most recent SEC filings. Although the companies may indicate and believe that the assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward-looking statements will be realized.

THE INFORMATION CONTAINED IN EVENTTRANSCRIPTS IS A TEXTUAL REPRESENTATION OF THE APPLICABLE COMPANY'S CONFERENCE CALL AND WHILE EFFORTS ARE MADE TO PROVIDE AN ACCURACTE TRANSCRIPTION, THERE MAY BE MATERIAL ERRORS, OMISSIONS, OR INACCURACIES IN THE REPORTING OF THE SUBSTANCE OF THE CONFERENCE CALLS. IN NO WAY DOES REFINITIV OR THE APPLICABLE COMPANY ASSUME ANY RESPONSIBILITY FOR ANY INVESTMENT OR OTHER DECISIONS MADE BASED UPON THE INFORMATION PROVIDED ON THIS WEB SITE OR IN ANY EVENT TRANSCRIPT. USERS ARE ADVISED TO REVIEW THE APPLICABLE COMPANY'S CONFERENCE CALL ITSELF AND THE APPLICABLE COMPANY'S SEC FILINGS BEFORE MAKING ANY INVESTMENT OR OTHER DECISIONS.

©2021, Refinitiv. All Rights Reserved.

