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Cirrus Logic, Inc. (CRUS)

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MANAGEMENT DISCUSSION SECTION

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Good morning, everyone. We're going to get started. Welcome to the Cirrus Logic session here at Stifel 2024 the Cross Sector Conference. My name is Tore Svanberg. I'm a senior semiconductor analyst. I cover analog, connectivity and processor companies. And it's my pleasure to introduce Cirrus Logic. With us from the company, to my immediate right here is John Forsyth, who is the company's Chief Executive Officer. And here in the front, we also have Chelsea Heffernan who runs Investor Relations and also Ulf Habermann, who is also on the finance team.

The particular format for this session is basically a fireside chat. As some of you know, if you're familiar with Cirrus Logic, they have a very large customer and John sometimes is not comfortable talking about that particular customer. But I'll try and dance around the questions as well as I can, so we can get some information out of him. With that, we'll get started.

QUESTION AND ANSWER SECTION

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Q

So, thank you, John, again for coming. Maybe we can just start with a very general introduction for those investors that may not be as familiar with Cirrus Logic?

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

A

Yeah, absolutely, and thank you. Thanks, Tore, and thanks for everybody attending today. I want to begin by just maybe correcting you on one thing. I may be a little uncomfortable talking about our largest customer. You should see how uncomfortable I get if I talk about our largest customer in detail. That's not a good place to be. So, I will, of course, give as much as color as I can on the business and our outlook.

But, yeah, just to get everybody on the same page regarding Cirrus Logic, we're a fabless, mixed-signal semiconductor company based out of Austin, Texas. We're about 1,600-and-change employees, \$1.79 billion revenue in FY 2024, which ended in March. The main sectors that we sell into the smartphone sector and then we've a growing business in PCs and then we have a kind of long-tail business, which looks much more like a kind of traditional analog semiconductor business.

The main areas where we develop and sell products traditionally has been based around audio. So, audio processing for smartphones has been the main revenue generator for the company over the past decade and a half. We expanded beyond audio into a broad category that I refer to as high-performance mixed signal. It includes a range of applications where we get to use some of the similar IP and technology as to audio, but for other things such as haptics, camera control, and increasingly, more recently, in power as well.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Q

Great. Thank you for that. So maybe I can just start talk a little bit about the industry, John, because it's been a crazy few years in the semiconductor industry. I know there's always a degree of volatility in your business, just given your customer concentration. But how did these last three years impact Cirrus Logic from a strategic direction perspective? What are some of the things that the company did right when it came to trying to fill up all that demand? And then, how did the company sort of react when things started falling off the cliff a little bit? Obviously, the Cirrus Logic did not have that same element of cyclicity as the industry, but it was still a very unique time. So, I want to hear from you what the company did right and perhaps what could have done better.

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

A

Yeah. That's – okay, very, very, broad, very interesting question. I guess – okay, to hit on a few points, and we can just drill into any particular areas of interest. If you wind back the clock over the past kind of couple of years, we're in this situation as many were of demand vastly outstripping supply. Part of our response to that was to invest more in our foundry partnerships. So, we're fabless. We believe that's the right way to go for a company like us.

But we put in place and invested in capacity reservation with foundries where we were partnering on expanding the capacity there as well, put us in a position where we could give a lot of confidence to our end customers about what capacity we had, both for existing sockets and for new sockets, which is very, very important to us. There was a period when we couldn't win new business without being able to show that we had committed capacity coming online to service that business.

More recently, we've actually continued some investment in foundry partnerships with the goal of driving a competitive environment there and also pushing the technology forward for us in the longer term, given some of the things we want to do. So, that was the period we were in. And I think, I feel that, that put us in a good position. I think we have to recognize the fact that we were short to the overall demand.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Right.

Q

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

We would have had bigger numbers on the scoreboard if we had more capacity. But I think we probably, in comparison with many of our peers, benefited on the downside in that, our particular customer concentration is with a customer that actually has ridden this cycle very well and has had comparatively resilient demand.

And so even as a lot of the semi peers that we look at have seen demand kind of really evaporate and then large inventory problems, we have, knock on wood, seen comparatively little of that. We've seen pretty sustained demand throughout. It's maybe not as kind of white hot as it was during that period where nobody seemed to know where the ceiling was. But at the same time, we're also servicing a customer and a supply chain there that is not known for wanting to sit on a lot of inventory.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Right.

Q

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

So, I feel we actually managed to – and that's more good fortune than anything else. I mean, we were fortunate enough to navigate and avoid some of the downside risks there.

So, if you then look at our – like our last fiscal year and particularly the last couple of quarters, what we've seen actually recently is, is steady and sustained demand, and that's really been the story as we reported last couple of quarters. To an extent, that was actually surprising to us. I think we were outside our guidance boundary in both cases on the upside. We don't aim to do that. We aim to provide a guide that embraces – when we guide, it's based on our most accurate view of what's likely to happen. But we came in higher than that and that was really a reflection of just steady and sustained demand throughout the period.

So I feel like in more volatile, less certain times, actually, a lot of benefits accrue from the kind of customer concentration that we have where it was very, very strong, resilient, baked in demand for many of those core products.

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Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Q

Right. No, I mean, I know you have some exposure to China smartphones. But I mean, if you would have had higher exposure, you'd have a much rougher time, that's for sure. So...

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

A

Yes.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Q

...that's pretty clear. So, John, you've been CEO now for several years, and when you came in, I think there's always been kind of pressure, at least from shareholders, to diversify the business, especially when it comes to customer concentration. Then when you came in, you basically said, well, yeah, I want to do diversification, but you did it more by technology, right?

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

A

Yeah.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

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So, I mean, when you came in, it was predominantly an audio company. You've invested heavily in mixed signal the last few years. And of course, you've seen great results from that. What I wanted to ask is, when you came in, what kind of foresight did you have? Because when you think about things like camera controller or mixed-signal technology, you think about power, there's a lot of other companies out there that had those capabilities. So, I mean, did you get sort of signals from your largest customer to start investing in that IP? Or did you say, you know what, here is a great opportunity for us because we have the underlying – or we can build the underlying IP and technology to be very competitive in some of those technologies.

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

A

Yeah. That's a great question. I think it's a mixture of those things. I think a lot of it really comes from taking an idea to a customer and finding that you were maybe half right...

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Q

Right.

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

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...and then they reveal to you, well, actually, there is an interesting problem in this space, but it's not quite that. And you struggle for a while to get your head around that. But eventually, if you're fortunate and you have smart enough engineers, you will identify areas where you have the opportunity to bring something different.

But we can get more into that, but, yeah, maybe just to back up a little, the path that we've been on, and since I came into the role, is really based around three things. So, yes, there's always been a lot of talk and pressure externally about diversification. Actually, mission number one is look after the golden goose. I mean, we have an amazing customer...

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Right.

Q

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

...where we've successfully continued to grow revenue and expand the number of sockets over time. And at a certain point, I think – and I think there has been more recognition of this.

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I understand that to some people, that's risk. There's a certain amount of risk associated with it. I think there's also a credible view that, that's really one of the things that we're very good at and kind of uniquely good at. So, there is some process power there that we have in terms of how we manage the relationships, how we uncover new opportunities, how we execute to service that customer, which is not for the faint of heart to ramp a new product, to go into hundreds of millions of devices in a single year without missing a beat again and again and again. That takes an extraordinary infrastructure, a lot of which is not that visible from the outside.

So, mission number one is really about, okay, look after this, invest in it, grow it, we have an opportunity to continue to serve that customer very well and bring new innovations to them. And I think that's been very rewarding. And then, the other side of it was, okay, yes, grow our SAM and then beyond that, I was very keen that we looked more at how we could drive profitability and free cash flow over time.

Growing the SAM really came from – there's certainly an overarching understanding that I and many others have had in Cirrus for a while that there's probably not enough audio out there for the long-term aspirations of the company. There's plenty of good audio out there, but we're at the high performance and the low power and that means investing in leading edge technology nodes. That means nothing we do is cheap. It's not cheap to do. It's not cheap to buy from us.

So if you're buying it from us, it's because you really care about performance, size, power. And there's a world of – if you want to grow – if we want to grow our SAM, we're not going to grow that by attacking audio for soundbars or something.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Right.

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John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

A lot of them are built to a price, then plugged into a main socket. They don't care about power and size. They enormously care about cost. That was never going to be enough for us.

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Now, we identified a number of areas of audio outside of smartphones where we did think there was very exciting growth opportunities, but it was very, very obvious we needed to expand into technology adjacencies, so to really, long run, expand our SAM and building beyond audio.

And our approach to that has been to focus initially – so, this is the high-performance mixed signal kind of general category that I talked about. And our approach has been to focus initially on developing those technologies in the smartphone space and that's not for tremendously sophisticated reasons. It's simply if you think about that matrix of like existing products and technologies, existing markets, new markets, new products and technologies, we kind of thought we'd mostly try to avoid the suicide quadrant of totally new technologies in a market we know nothing about.

So, we set out with this mission to say, okay, well, let's expand and win and develop IP in as many new high-performance mixed-signal areas in the smartphone as we can. We'll develop a very strong base of IP and expertise that goes well beyond audio, so into haptics, camera, power, and so on. And then, look to see how we can leverage those technologies into other applications and markets.

So we're kind of – we're somewhere along that journey right now. We're still expanding HPMS in the smartphone space, but we're also seeing – we're shipping products in power and haptics and audio into other categories, with good growth opportunities around those, I think, for the future.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

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Great. So, let's shift gears and maybe make you a little bit uncomfortable, not very uncomfortable, a little bit. So – and related to what you just talked about, there's years when you have new product ramps for your largest customer. You have some content expansion. Remind us for this particular year – I mean, there's – obviously, there's the new smart codec, new boosted amps. But remind us where we are for sort of content growth this year. And can you maybe give us a bit of a preview for [ph] what you're expecting this year (00:14:39)?

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

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No, [ph] a little bit (00:14:43). But I will talk about one – this specific new content this year and then there's also a kind of tailwind dynamic that we have going on around the camera stuff. So, maybe starting with the camera stuff. So, we call the category of product that we sell into camera modules, camera controllers. In practice, what they do is drive autofocus and stabilization systems, other lens elements and so on.

And the reason we're kind of exceptionally good at that stuff is those are applications where you need a loop from the analog world, just get to slightly geeky for a moment, from the analog world into the digital world and then back out, because what's happening is you're taking some analog input like the shake of the device. So, you're getting information from inertial sensors about that. You're calculating how to move some lens elements on the sensor to compensate for that many thousands of times per second. And then you're sending a signal back out to some motor, some kind of motor, which will move that element in space. You may also be sensing where that element is in space so that you know deterministically where it is. So, that's – so for the longest time, before we could talk about what this new product did, you will remember we referred to it as closed-loop controller...

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Q

Right.

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

A

...and I think that was actually maybe in our patent applications. But that's what it means to talk about closed loop [audio gap] (00:16:29). So we're very, very good at that because we do very good analog to digital. We do very good digital to analog. We are at an advanced process node, which means we can pack a lot of digital processing in, some more corrections per second. And we can pack that into a very, very small compact package. And as you can imagine, the camera modules in smartphones are extremely space sensitive.

So, okay, the reason I was explaining all that was we have this kind of long run favorable dynamic around camera controllers. We introduced our first one, I think in calendar 2020. In the fall of 2023, we introduced the third generation of our camera controller. So, there we have been – and each of those camera controllers has had a kind of modest ASP increase, but the total value of our camera content has continued to rise because the attach rate grows as well. And then as we see features cascade from the kind of top SKUs down through the range, there's been a very kind of healthy tailwind for us, but we just see this kind of – it's not perfectly linear, but it's been a pretty steady growth every year, almost regardless of whether we've got a new device coming in that year or not.

But that will be reflected in this fall's content for us as well in that we had a new camera controller that came out in the fall last year. We'll see that – when that comes in this year that will now be spanning two generations and so on. So, we get some accretion from that. And when I look forward, we have a very healthy roadmap around the camera stuff. Kind of expect that to continue in the future along those lines. We don't really see as yet a kind of limit to our ability to improve performance, add features and grow value there.

Then, we have all the audio and haptic content we have coming this fall. So, we have two major pieces of content coming. It's a smart codec and a boosted amplifier. Boosted amplifier, typically there's three of those in a device, in each of the device. So with the smart codec, there's one. The smart codec is responsible for a lot of A2D, D2A, routine mixing kind of is an interesting aside that I'll just bookmark for now.

Increasingly over time is doing stuff beyond audio as well. So it's very interesting scene that going on with one of our chips where when we look at that chip now, it's honestly more than 50% of the gates a bit of a non-audio kind of other mixed-signal stuff which we regard as great. But that is – that's like the central – that was really the first socket we won way back in the early stages of us being in this device before anybody was even using boosted amplifiers as the kind of central audio and mixed-signal chip in the phone.

They run for a long time now. So, as we get into replacing it, it will have been running for five-plus years, the one that we're replacing. And this year, we've got a particularly kind of interesting upgrade and it takes us from 55 nanometers to 22 nanometer as well. So, this is a very significant investment. But I think it's always worth kind of emphasizing this point because there are aspects of our business which although we're selling into a kind of consumer end market, they don't look awfully like a lot of other consumer end markets. They happen to not even look very much like the rest of the smartphone world in that, we knew we'd won that socket a long time ago. We developed the chip. It will go into devices. It will ship for multiple years [audio gap] (00:20:28). And we can kind of put some pretty decent – because of the nature of the products, that goes into some pretty decent estimates on volume over that time as well.

So actually, we have kind of reasonably high confidence in the demand that we see against it over half a decade plus. And that also enables us to drive great leverage from our R&D teams because they can go on to work on other new innovations. Boosted amplifiers, there's a lot of innovation there as well, although it's not a node transition. It's still on 55 nanometer, probably more appropriate for a boosted amplifier. But they're responsible for

driving the loudspeakers. There will be two of those for stereo playback. Then, it's also used to drive haptics as the third one, which drives the linear resonant actuator, which provides the haptic feedback. So, it used to be the case way back when, I'm sure you remember the story that there was a reluctance to change the codec in the amplifier in the same cycle.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Right.

Q

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

So, it happens this time after many, many years of planning and test silicon and so on. Everybody is comfortable enough with our execution and the technologies and the silicon that we've got that we'll see both of those chips get a meaningful upgrade this fall. As we get into the next cycle, we will again see a kind of good tailwind effect of that. So there's a tailwind effect of the camera content that I talked about, but also when we introduce a new codec and amplifier, you would expect that to have some ASP accretion. As we go into the fall of next year, that then becomes – we'll see that ASP accretion across two generations. So we get kind of a second win from that on the next cycle.

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Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Great. And not to sort of overhype things, but I mean, everything is about AI these days and everybody thinks about NVIDIA's poster child for AI for obvious reasons, Microsoft, very few people have actually talked about your largest customer in the context of AI. I personally think that they are going to be a leader in AI for edge devices. And I think they intersect really well with your IP, right, because the ultimate interface for AI for a device will be voice, which obviously means a lot of audio and voice technology and IP. But there's also clearly an intersection with AR/VR. And that's where your camera controller is an essential IP block. So, again, without pre-announcing what your largest customers working on, at least just from a big picture perspective, can you talk about how AI and AR/VR in devices, whether it's laptops or smartphones could potentially impact your business going forward?

Q

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

Yeah. That's a great question. I mean I share a lot of your thoughts and expectations there. I think one of the great things – one of the things that our largest customer is really uniquely good at is distinguishing – or is identifying what one thing might actually be for that's useful...

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Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Right.

Q

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

...once you get past the kind of excitement over the kind of flashy new technology, I think they put an extraordinary amount of effort into only delivering things – or really trying only to deliver things with a genuine use to them. And I don't think that approach is changing and I think that will be their approach in AI as well. And so, yeah, our thoughts about that and how that benefits us, obviously, in the smartphone or in any kind of device, I do

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believe like you, I think voice is going to be a central part of the experience of having – of using AI. I'm personally, like I would love have a genuinely kind of intelligent useful smart assistant that I could use my voice. Kitchen time is a great, but there is so much more that can be done there. And I think voice is just such a natural basis for that interaction.

When that – if you wind back in about a decade now to the era when the voice interface was – voice assistants were just kind of coming out of the horizon or in their infancy state, we did see – that was a period of quite a significant amount of innovation and increasing requirements around the voice interface. Typically, there was landed – many of those landed in the codec example that every signal that is coming in through the microphones is passing through our codec. So, it's great opportunity to enhance value.

And I think that that can apply across the range of devices. And so, yeah, I agree on AR and VR, that's one of the areas, when we talk about – I talked a lot about technology here in the smartphone space. But when we look at the other markets where we have content growth in both audio and high performance mixed signal, laptops is a key one. But AR and VR is another one where we've been delivering both audio and high performance mixed signal. And yeah, again like I see that as a great – great, great opportunity for us.

I think AI can drive a lot of use cases there where we fit into it is not necessarily providing the AI experience, but everything that I know about AI at the edge suggests to me that it's going to consume a lot of power and greatly increase the pressure on battery life, battery size, in a way, that it's kind of been sort of more in this part of the S curve lately the pressure on batteries and I think that that's going to increase again, which means that if you can deliver any given function at significantly lower power in a significantly smaller package, you're – that's a double win because you're creating more space for a battery and you're consuming less juice from the battery. And that's really exactly what we do. Everything we do is based around those principles. And you only get to do that by investing at the leading edge for analog mixed signal.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Q

Right. We only have few more minutes. I want to make sure I address any questions from the audience before we wrap things up. Any questions? So just a few more, John. So interesting enough, the company before you here at the stage was Texas Instruments, and they were talking about how – the reason why they do manufacturing themselves is because they worry about the cost curve of the foundry industry. And [ph] TSMC (00:27:33) is your largest foundry, I know you also have North American foundry that you work a lot with. How do you see the supply side of the economics for fabless companies going forward because there is sort of a thesis that wafer pricing is going to remain inflationary – it was very inflationary, obviously in the last few years...

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

A

Yeah, yeah.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Q

...that's going to remain inflationary. Then, obviously, you have one large customer and I'm sure they obviously would expect some sort of price declines over time. So, how should we think about those dynamics?

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

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I think the idea that it's long run inflationary, like that's a huge bad to me. And if that were true, I'd be worried about everything actually...

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

[indiscernible] (00:28:16).

Q

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

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...and like the entire kind of foundations of the products that our products go into. I think the markets have been built around expectations that certainly in the long run inflationary you get improved performance over time for a given amount of expense.

I think we've been through a disruption. Some of the basic economic – and part of the reason why – like I say there's a big bet, I also doubt it. Part of the reason I say that is there are some basic economic principles there which like I don't see how they go away, which is that it costs money to build a fab. But that gets depreciated. And there's a cost curve associated with the output from those fabs.

There is a slight difference in that perhaps the demand for mature node chips exceeded the – it did exceed for a while the capacity of mature node fab infrastructure. I don't know that that's a kind of like it'd be very weird to me and if I everything we know about markets if that's a long run truth.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Right.

Q

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

A

So, there's probably a bit more activation energy required as we have seen in order to build out some increased capacity. But that capacity will ultimately kind of respond to the same kind of laws of economics as we've seen in the past. They will get depreciated and the cost per unit will decline over time for a given facility. So, I think we're very, very thoughtful about this. One of the things that we think is essential that's a component of that is having a highly competitive environment in the foundry...

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Right.

Q

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

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...supply market. And that's where we make strategic investments to make sure that for a given product, given set of technologies, we've got multiple partners who are hungry to work with us to win the next socket.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

Right. And then on that note, I would also remind everyone that Cirrus Logic was the first ever fabless company. So they clearly have a lot of history being a fabless company.

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

Right. Thanks for that.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

[indiscernible] (00:30:30) here. So, we've run out of time, everyone. Thank you so much for joining the Cirrus Logic session. Thank you, John...

John Forsyth

President, Chief Executive Officer & Director, Cirrus Logic, Inc.

Thank you.

Tore Egil Svanberg

Analyst, Stifel, Nicolaus & Co., Inc.

...and rest of the team for coming to the conference. We really appreciate it. Enjoy the rest of our day. Thank you.

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