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MANAGEMENT DISCUSSION SECTION

Mark L. Edelstone

Managing Director, Morgan Stanley

All right. Good afternoon, everybody. I'm Mark Edelstone with Morgan Stanley. Thank you so much for joining us. It's great to see people here in person. So hope the conference is going well for all of you. Honored to have John Forsyth with us, the CEO of Cirrus Logic. And I'm going to drive the conversation, but we'll definitely have time for questions from you guys if you would like them.

QUESTION AND ANSWER SECTION

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

And let me just kind of start with a high level, John. Cirrus have been around for a long time. It's a great company, lots of really good technology. You've been here since 2014. You've been CEO for just over a year. As you've kind of moved into that role and just sort of thinking about broader strategy, capabilities, things like that for the company, what's your kind of high level assessment of where the company is positioned today and where you think you can take it here going forward?

John Forsyth

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

A

Yeah. Thanks, Mark. And, first of all, thanks for having us here. It's really great to be meeting people in 3D form after all this time. Yeah. My assessment of where we're at today is we're on a growth path that opens a whole new frontier for Cirrus in the high-performance mixed-signal space. So we have a multiyear growth plan. The biggest driver of that is the high-performance mixed-signal category. And, yeah, we've already seen some really good results around that, which show that we can execute against it.

So, in the past year, we saw our first power conversion and control chip come to market. That really, I think, gave some credibility to the strategy that we've been talking about – about expanding into new areas. That's been very, very successful. It was an incredibly challenging project from a technical perspective and we executed it really flawlessly. It's been a major contributor to our revenue. And then alongside that we've had some other key milestones in, for example, acquiring Lion Semiconductor, again in the high-performance mixed-signal area for us, bringing more complementary power and charging technology into our portfolio. And then most recently, we reported all-time record revenue quarter.

So, I'm very excited about where we're at. We still believe that there's growth and opportunity in audio, but to have this entirely new frontier of growth opportunity in the high-performance mixed-signal is very, very motivating to everyone at Cirrus.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Yeah. And big increase in your SAM as well, so your core audio market is still growing, but this SAM expansion is pretty dramatic. So, maybe kind of talk about that a little bit of where you see that going over the next several years.

John Forsyth

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

A

Yeah, exactly. Yeah. So by our estimation, the SAM expansion that we're looking at over a five-year period, we actually baselined it in 2020 when we were really kind of pulling together this strategy and we started talking about future power conversion and control chips. But we were expecting a SAM expansion over a five-year period that more than doubles to around \$6.5 billion worth of SAM. And most of the growth of that is being driven by the high-performance mixed-signal areas. We still see some growth in the audio SAM from, I think, \$2.3 billion to about \$3 billion, total audio. But then the balance of that, so \$3.5 billion is being really added to our SAM driven by the high-performance mixed-signal categories that we're targeting.

And as I say, I think getting that power conversion chip into market on the back of – in the previous cycle we'd brought camera controller technology to market really demonstrated our ability to execute when we target these new segments. I think nobody doubts our ability to execute in audio. I think everybody knew we're really good at that but I think we've been proving that that we have tremendous strengths in other areas of mixed-signal as well.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Right. So what's kind of a – when you think about the longer term vision of where you can go as you go from a company that's always had great culture, great capabilities, that people thought about use kind of narrowly defined. Clearly, you're much broader than that. You can leverage all these other core competencies your engineers have, high quality product and get products to market quickly and so on. What's kind of just the bigger vision of where you want to take Cirrus Logic in the next decade, let's say?

John Forsyth

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

A

Yeah. Audio is a real core part of who Cirrus is. But when you look – when you step back and look at what we're good at, it's really advanced mixed-signal engineering and relentless execution. And one of the reasons we have such high degrees of trust from our biggest customers who are some of the most demanding customers in the world is our ability to execute. When we give them a plan even – everything we do is really tricky mixed-signal stuff, so those plans are ones that they know they can take to the bank. And that ability to execute on really – solving really hard mixed-signal problems is key.

So my vision is that we want to take that capability and apply that to new technology opportunities, new product areas, so continue to broaden the base of technology and products that we offer. And that ultimately over time that's going to broaden the customers and markets that we can serve as well. All while staying true to the values

of just really – really, high precision, high-performance mixed-signal advanced engineering and solving problems that there just aren't many people out there that can solve.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Right. So maybe on that point, can you talk a little bit about the competitive landscape that you see for what people would have thought of historically of the audio-based Cirrus, and as you expand into these other markets, what do you see as that competitive environment, and where do your sort of core competencies stack up against them?

John Forsyth

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

A

Right. Yeah, that's a good question. In the audio space, the competitive picture there has evolved over time, and ultimately it's kind of been more thinning out than anything. Clearly, there are low-cost competitors in certain segments, but we try not to play in those. If you're using Cirrus, you're typically choosing Cirrus not because we're the cheapest, we're unlikely to be. You are choosing us because you want the best performance, the lowest power, some kind of advanced feature set that you're not able to get elsewhere.

So what that means from an audio competition perspective is we are in most of the sockets that we want to be in and, for example, in the smartphone space at this point in time. If we go out and target an audio socket, there's a very good chance that we're going to be able to win that based on superior technology.

When you look at the other areas beyond audio where we're growing our business, so haptics, camera controllers, power and so on, they do take us into areas where we see a slightly different competitor set that people who you would imagine because they have – they're established in mixed-signal semiconductors in general. But our approach is based on a couple things. One is to be trying to bring innovation rather than – we're not going to show up and do me-too products. So if you take the power conversion and control chip, for example, didn't replace anything, entirely new category of product. They're driving the power and battery related experience of the device, it's improving battery health over time. But the key thing for us is – the reason for going after that – that particular product area is it was a greenfield that's driven by innovation rather than going and displacing somebody else. And I think that's our approach in general.

Where we see competitors that do have solutions or we're maybe in more direct competition, we'll still look to exploit the investments we've made in really advanced geometry, mixed-signal engineering. This is something that people don't always appreciate that we have spent huge amount of R&D effort doing audio and other mixed-signal engineering at 55-nanometer, 28-nanometer, 22-nanometer and so on. These are comparatively advanced nodes. So if you're looking at people in the power space, they would more typically be on 130 for example and so on.

If you are going to incorporate a lot of intelligence, smarts and more digital control in the product, then the chances are it's going to be advantageous to be on these advanced – more advanced processes and geometries. So we're really looking for the opportunities which fit that kind of shape, where there's a real benefit to a more advanced feature set, more digital logic in there and that's where we can exploit the fact that we've got this advantage, this beachhead of long term investment in advanced geometries.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Right. And generally good for ASPs and just value proposition that you're delivering, right?

John Forsyth

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

Exactly. Exactly, yes.

A

Mark L. Edelstone

Managing Director, Morgan Stanley

Yeah. Maybe just talk about the audio market because there's still plenty of opportunities there. I think we all probably use microphones that aren't great in this work-from-home, learn-from-home type of world or the hybrid world that we'll be in the future. So just give us a sense as to where this could go in the future for you guys. I know it's a pretty mature part of your business, still going to grow, but just where do you still see the opportunities in audio broadly speaking?

Q

John Forsyth

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

That's right. It's still – we still believe it's going to grow. We want to continue to consolidate the strength and leadership we have there. And on top of that, and most of that's in the smartphone space. But then on top of that, attack and win new profitable areas of audio opportunity for us. I think what's important – the flip side of the point I made earlier about the fact that we're really invested at the advanced end of our performance and technology nodes and so on. The benefits of that are a lot more smarts and processing in a small package, lower power consumption and so on. But there are going to be audio-based products where you don't care about that and it's going to be a fistfight over a few cents. We're not going to go after that kind of stuff, so there is a lot of audio content out there or audio SAM out there which we're not specifically targeting.

A

Smartphones remain the biggest units driver for the kind of audio that we're – our benefits really, really count, size, performance, power consumption. But then beyond that, we've been seeing opportunities in other typically battery-based devices come over the horizon, which look really good to us. Clearly, wearables and tablets, we've had some success in to-date. Increasingly, as we go forward, we also see laptops as being a relevant area. My belief is, is that laptops over time are going to look more and more like smartphones from an architectural perspective. They are going to get thinner and thinner over time. That's clearly desirable. It's one of the absolute certainties that you can hang your hat on when it comes to consumer products. If you can make it thinner, you should. That's going to mean that people want smaller and smaller speaker cavities. It's going to mean that to drive good audio, which has not historically been a feature of laptops, you are going to need boosted amplifiers. And so for us, that represents a good opportunity for growth. Is it as big as the opportunities we see around high-performance mixed-signal? It's not, but it's a very accessible adjacency for us. It's leveraging technology and IP investment we've already made in boosted amplifiers.

So over time, I think we'll see that happen in laptops. And there's quite a strong likelihood that we also see an increase in haptics in laptops as well. Again, because you can make the device thinner, you remove some of the mechanical constraints.

Mark L. Edelstone

Managing Director, Morgan Stanley

Right. Just before we move off the smartphones, what else do you see there in terms of just your overall ability to take more silicon area in smartphones going forward?

Q

John Forsyth

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

A

Well, that's been working out for us very well so far. That's driving our current path of revenue growth is, is expansion into adjacencies within smartphones. So yeah, we believe that there is still plenty of opportunity and headroom ahead of us to be able to do that. That's principally not going to be in the audio space, I've said – I think we're in most of the audio sockets, we would want to be in, in the smartphone space at this point but beyond that in these adjacent technology areas is great opportunity to kind of continue the average revenue per device for us.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Yeah. So when you think about [ph] your FTEs, I guess, you have (13:23) about 1,600 employees, something like that today.

John Forsyth

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

A

Yeah...

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

How do you...

John Forsyth

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

A

...knocking on the door of that.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

How do you just proportion that out between audio and these other SAM expanders that you're doing, as you're – are you moving people off who would have been audio into something different or when you have new hires is all going into the haptics and battery and camera and so on?

John Forsyth

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

A

It's a great question. So there's a degree of cyclical to it, and there'll be a period when we talk publicly about, for example, developing a test chip for a future 22-nanometer codec. And that's – that's audio, that represents still a decent amount of R&D being focused on audio and so on. But the big picture has been a significant shift towards the high-performance mixed-signal drivers. So the camera especially and power and battery related stuff.

And I will say that one of the things that we've seen over the past couple of years is we've significantly increased the skills and hiring around power and battery related areas of engineering. So a lot of what you do in audio engineering, it's advanced mixed-signal, it's very, very transferable to other similar mixed-signal areas. But we have continued to grow our R&D capability in the power and battery space.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Right. So I think last quarter, I think you were 38% of revenues within that advanced mixed-signal side of things. And you've talked about in your shareholder letter, getting to 50/50. Can you just talk about what might be a reasonable timeframe and what are the challenges or accelerants to basically get you there faster or slower?

John Forsyth

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

A

Yeah. I'll make two points about it. I guess the first one, the obvious one, somebody did ask me this, this morning. So, well, there are two ways of getting to 50/50. Yeah, clearly, I would not be making this statement about getting to 50/50 as a positive statement if we thought that audio was going to shrink. We believe we can grow audio. But we believe we can grow HPMS faster. So we're very, very excited about the whole range of things we have going on in there.

I haven't put a timeframe on it. I'm sure you kind of expect that to be my answer. But at the same time, I made that comment – so we made that comment in our shareholder letter, just having come out of our strategic planning process, and like everybody else, we look at a five-year plan and you can see that crossover point coming on that kind of time horizon, so.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Yeah. And within that, if we – are you [ph] looking all the (16:14) just kind of proportion, how do you think that 50% ultimately splits out between some of these other new initiatives that you've been building?

John Forsyth

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

A

We haven't – I mean, we haven't broken that out externally. We've got a good sense of it internally. There's stuff in there which nobody in the outside world knows about yet. So, there are parts of the picture which will become clearer over time. But I would say that the single biggest driver there is, is the power and battery stuff. So, the power conversion chip that we saw come to market in the back half of calendar 2021 has already had a very significant impact on our revenues. That was, [ph] a dollar and change (16:58) per chip. But then we also have – we made this Lion acquisition that also brings a whole bunch of additional opportunities around charging technologies and so on. So the biggest – if you were looking at the subcategories, the power and charging is the biggest single subcategory and array of opportunities that we see in HPMS.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Right. So can you maybe just draw on that little bit more in terms of just the road map for power and charging and how you think that evolves here over time?

John Forsyth

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

A

Yeah. I sometimes get asked the question about whether, I mean, PMICs – so whether we're going into PMICs. We're not really that interested in standard kind of vanilla power management ICs. There's plenty of those around. And if we are doing something that leverages our advantages, it's got to be with a really compelling reason. So it could be because for size reasons or because there is a lot more digital control, there's a big advantage to being on 55 or something. There's always things like that that we'll look at. But more generally, we're looking at the areas where we can really bring new innovation. So this power conversion and control chip, as I mentioned, is really focused on battery health and it didn't replace something that was out there. It's very much bringing

something new to the system management of power in the mobile device. And that's a much more attractive kind of territory for us to go after rather than kind of traditional PMICs, if you like.

So that would inform what the road map looks like generally. We think building more value around the battery is really the key. So with this – with this milestone of that, the power conversion and control chip, we got a new product, new technology in the discharge path of the battery. Highly complementary to that from our perspective we acquired Lion, which is in the charging path of the battery. And that gives us really compelling set of cutting edge IP on either side of the battery. And from our perspective that means more intelligent charging and discharging of the battery is going to promote battery longevity, higher efficiency of the battery use over time. And that's the area where we kind of concentrate our road map. There's a whole bunch – as you would expect, we got a whole laundry list of features and technologies that we are evaluating and developing around that area but that's really the kind of hot spot for us.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Right. And obviously different technologies and whatnot, but should we think about that playbook is similar to what you've done for decades in audio, where it's capturing more and more of the value in the signal chain over time?

John Forsyth

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

A

That's a great way of looking at it. Yeah. I mean, our – at the deep level, part of our MO is we like our engineers to work closely with customer engineers to really deeply understand what their system level problems are, not just the feature list request, it's really understand what problems they're trying to solve at a system level and then take a systems approach, which may mean incorporating other technologies that sit around this on the board to lower system cost or save board space and so on. And that's exactly the kind of playbook we'll bring to our new growth areas.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Right. And should we think about that over time as you – that you'll capture more value, and therefore, does that show up in the way of higher ASPs within power and the broader kind of battery? Or is it going to be more functionality for the same type of ASPs within those systems?

John Forsyth

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

A

I'm hoping that it's – that it is ASP growth. That could be because of higher value devices. It could be because of additional devices. But generally speaking, yeah, I mean – you can't avoid the law of nature, I guess, like in general a certain amount of feature enhancement, performance enhancement has to be there just to offset the kind of the traditional price erosion. But I will say that one of the reasons why we're so excited about these new areas and these new vectors for growth within Cirrus and why our engineering teams are so motivated is there's a long list of ideas and areas for us to work on. And as soon as we got done with that power conversion and control chip, there's literally – as soon as we put that to bed, we had a team working on the next generation of that set of technologies and working with the customer on their laundry list and which things we were going to get [ph] test or looking going on (21:47).

It's always very, very exciting to be working on something which feels like it's early in that kind of S-curve where there's still like a ton of ideas and ways to improve. So I would expect over time we can deliver – we can regard what we've just done as version one and deliver increases to the value of that set of technologies over time.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Yeah. Makes sense to me. Now, thinking about it from a financial model perspective, you guys have had a nice sort of steady increase in your gross margins over time as you capture more value, probably helped a little bit by the supply/demand balances as well in the industry, but I think it's probably more just the value capture that you guys are getting, and then you're leveraging that quite a bit. I know you had record operating margins here this last quarter. So, as you expand your footprint, as you capture more value into these different applications, what's your sort of expectations where that takes margins over a multiyear period of time?

John Forsyth

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

A

On the gross margin side, we've had – I mean, there have been both opportunities and challenges through this supply chain period. We have a high customer concentration. So, there's some challenges that come with that. And I think that probably – until we cultivate greater diversity in product technology, ultimately customer and market, there's probably – probably put some boundaries around our gross margin. At the same time, we do know that our biggest customers greatly value the kind of R&D we do and the kind of innovation that we bring to them. So, yeah, we're – if we can continue to leverage that and capture more value, we'll hopefully see benefits of that.

On the operating margin side, I made a couple of comments about this that I think as we grow, we believe we can drive more leverage out of SG&A, we think we're well set up for that. Ultimately, we'll see more leverage out of the R&D investment as well. But, we will be very mindful not to sacrifice growth opportunities for that. Right now, when we have more opportunities in front of us than we can staff, we're really doing everything we can to get as much mixed-signal talent in the doors and working on those programs as we can.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Right. And M&A can be a good way to do that. So historically, Cirrus has not been particularly M&A focused. You obviously were a product of that once upon a time.

John Forsyth

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

A

Right.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

And then it seems like you've got a different point of view. Doing Lion makes a perfect strategic sense to me. When you think about just the company going forward, what's your perspective of how you think M&A fits into that?

John Forsyth

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

A

Yeah. I mean, we'd love to do more M&A if it can accelerate this growth strategy. As I said, we've got a multiyear growth strategy mostly driven by HPMS. That holds even if we don't do any M&A. But if we can accelerate that through M&A, absolutely we will try to do that. I would say, if you're reading a kind of somewhat of a shift in our position here, I think one way of thinking about it is when we were very focused on audio, very concentrated in audio, the logic for audio M&A was not that compelling because really any audio socket that we wanted that we could get paid well for, we could probably go and win.

Right now we're in a period of significant expansion of our technology portfolio and that brings both opportunity to bring in other technologies, teams with expertise in these new high-performance mixed-signal areas and potentially exposure to other markets and other customers. All of that would be very attractive. So, for sure, that's something we put – our significant investment in the organic R&D, we'll look very closely at M&A if we can find opportunities we'll be doing that.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Great. Let me just see if there's any questions at all in the audience. [ph] Sanjay (25:51). Yeah.

Q

About HPMS and kind of – that's a new diversification strategy away from audio. But from an end market perspective, how do you think about diversification? Because it sounds like HPMS is kind of doubling down on the mobile side – or am I incorrect? I was just curious how do you think about end market diversification?

John Forsyth

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

A

From me the HPMS diversification is part of a long-term strategy to apply the mixed-signal expertise we have to a greater area – a greater number of products, customers and ultimately markets. But we have a huge opportunity right on our doorstep with the adjacencies within the phone and within our customer base that are in these high-performance mixed-signal segments. Cultivating greater market diversity within audio is very unlikely to happen for the reasons I've described, it's not worth making that major focus.

I think building a broader set of technologies and products with initially focus on the immediate adjacencies, the sockets which are next to us in the phone that we can go, win, get very, very strong revenues from. But ultimately, looking to leverage those technologies to take into other markets is really how we think about it. So from a long-term perspective, I think it sets us up extremely well to go and address other outlets for HPMS.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Other questions? Maybe just talk about the supply chain a little bit. So you guys made an investment into – or at least struck a deal with GlobalFoundries last year. That's been a bit of a wave in the industry.

John Forsyth

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

A

Right.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Is that just the new normal you think going forward, and how do you guys think about it in the future for Cirrus?

John Forsyth

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

A

I mean, I don't want to be doing those every year, but it's been tremendously beneficial to our customer base to see the degree of supply certainty that that has – that is put in place around our products. And it's also – for us, it's been very important because it has ensured real investment in actual expansion of capacity. It's not – we're not just kind of securing a share of a finite wafer supply, we're collaborating with Global to ensure that they expand the capacity, which we need because we need more wafers.

So, is that continuing to be the case as we go forward? My sense is that we're going through a pretty unique period, and it will probably level out. But a lot of the advantages that we have that we bring to bear on these new segments really derive from very close collaboration around the process technology, and that always puts us in a position where we can do things that other people can't. And our long-term collaboration with Global has certainly yielded that – that's been a very positive step for us.

Mark L. Edelstone

Managing Director, Morgan Stanley

Q

Let me see if there's any last question out there in the audience? Yes.

Q

Just following up on the HPMS opportunity in other end markets, can you just talk a little bit more about the road map to some of those opportunities, and anything you can share on time line or investments that you're making today for some of those other areas?

John Forsyth

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

A

Those are really exploratory right now. So we do think that – if you look at what we've done with the power conversion and control chip, that's really focused on greater battery health. And then if you look at the fast charging technology again, that's battery centric. It's about improving the overall battery experience. And that's kind of – that would be the theme when we go looking at other markets, it's very much about which markets would benefit most from meaningful improvement in the battery experience.

Mark L. Edelstone

Managing Director, Morgan Stanley

Wonderful. Well, thank you all very much for being with us. John, thank you so much for...

John Forsyth

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

Thank you.

Mark L. Edelstone

Managing Director, Morgan Stanley

...talking about Cirrus. Appreciate it, mate.

John Forsyth

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

Thanks.

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