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CRUS - Q2 2020 Cirrus Logic Inc Earnings Call

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OVERVIEW:

Co. reported 2Q20 revenue of \$388.9m and GAAP EPS of \$1.27.



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PRESENTATION

Operator

Ladies and gentlemen, thank you for standing by. Welcome to the Cirrus Logic Second Quarter Fiscal Year 2020 Financial Results Q&A Session. (Operator Instructions) As a reminder, this conference call is being recorded for replay purposes.

I would now like to turn the conference all over to Mr. Thurman Case, Chief Financial Officer. Mr. Case, you may begin.

Thurman K. Case - Cirrus Logic, Inc. - VP of Finance, CFO & Principal Accounting Officer

Thank you, and good afternoon. Joining me on today's call is Jason Rhode, Cirrus Logic's President and Chief Executive Officer; and Chelsea Heffernan, our Director of Investor Relations.

Today, we announced our financial results for the second quarter of fiscal year 2020 at approximately 4:45 p.m. Eastern. The shareholder letter discussing our financial results, the earnings press release, including a reconciliation of non-GAAP financial information to the most directly comparable GAAP information along with the webcast of this Q&A session are all available at the company's Investor Relations website at investor.cirrus.com.

 $This call \ will feature \ questions \ from \ the \ analysts \ covering \ our \ company \ as \ well \ as \ questions \ submitted \ to \ us \ via \ e-mail \ at \ investor. relations @cirrus.com.$

Please note, that during this session, we may make projections and other forward-looking statements that are subject to risks and uncertainties that may cause actual results to differ materially from projections. By providing this information, the company undertakes no obligation to update or revise any projections or forward-looking statements whether as a result of new developments or otherwise.

Please refer to the press release issued today, which is available on the Cirrus Logic website, the latest Form 10-K and Form 10-Q as well as other corporate filings made with the Securities and Exchange Commission for additional discussions of risk factors that could cause actual results to differ materially from current expectations.



Now I'll turn the call over to Jason.

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Thank you, Thurman. Before we begin taking questions, I'd like to make a few comments. For a detailed account of our financial results, please read the Shareholder Letter posted on our Investor Relations website.

Cirrus Logic delivered Q2 FY '20 revenue of \$388.9 million as stronger-than-anticipated demand for certain components drove growth results significantly above the high-end of guidance.

GAAP and non-GAAP earnings per share were \$1.27 and \$1.55, respectively. During the quarter, the company ramped production of boosted amplifiers, haptic drivers and a new smart codec in a variety of recently introduced smartphones and we are now shipping product into 8 of the top 10 OEMs.

While our largest opportunities continue to be associated with mobile phones, we are pleased to be gaining momentum in other applications such as laptops, tablets and digital headsets. With an extensive portfolio of products available today and an innovative roadmap that spans audio, voice and adjacent markets, we are excited about our future.

Before we begin the Q&A, I would also like to note that while we understand there is intense interest related to our largest customer, in accordance with our policy, we do not discuss specifics about our business relationship.

Operator, we're now ready to take questions.

QUESTIONS AND ANSWERS

Operato

(Operator Instructions) Your first question come from the line of Tore Svanberg with Stifel.

Tore Egil Svanberg - Stifel, Nicolaus & Company, Incorporated, Research Division - MD

Congratulations on the strong results. Jason, maybe first question is, I know this is always very difficult, but the sort of seasonality looks a bit different now versus other years. Is this the new norm? Or do you have any other comment on how things are playing out seasonally in the second half?

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

It's -- yes, thanks for that. It's hard to call it seasonality, and I don't know that there is such a thing as a new norm in this era. Certainly, it feels like there's strong demand. We've had years where we've been surprised, and certainly, we're unable to ever rule that out. It would be nice if we could refer everybody to the risk factors for a discussion of such things in our filings. It's the kind of thing we want to give guidance that's meaningful and relevant, but there are definitely things that happen outside our control from time to time. That said, we feel good. Backlog is strong. The outlook looks good going forward. We've largely lapped the headwinds that we've had over the past couple of years, which have kind of masked some of the underlying really good things that are going on in the company. So I think we've got a strong lineup of good news that should be coming over the next year or so and is expected to get us back on more of our normal growth outlook. So again, it's hard to characterize anything as normal at this point. But we certainly feel good about the outlook going forward.



Tore Egil Svanberg - Stifel, Nicolaus & Company, Incorporated, Research Division - MD

Very good. And in your Shareholder Letter, you make reference to closed-loop controllers. I was hoping you could elaborate a little bit more on that. I mean, my understanding of that is, it's -- it sounds some sort of a sensor control, but maybe you could elaborate what it means for you guys? And should we assume products to sell primarily again in smartphones there first? Or are there any other applications that you want to highlight?

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Well, the particular device that we're talking about there is in a handset, and we expect that to ship sometime in the next 12 months. I wish we could get into a little more detail about what it's for. The phrase closed-loop controller is not really meant to be a proper noun, it's just kind of a description of a thing. It's kind of a further offshoot of some of the capabilities that we've developed in our audio amplifiers, haptic controller is a good example of where we've taken that audio amplifier technology and repurposed it for a new application. This is kind of something that's philosophically similar, it's probably a little further afield, even then the haptics stuff. It's not some we're traditionally associated with and just due to customer sensitivities, unfortunately, isn't something we can really get into a whole lot of detail about what it's about. But it is meaningfully new content for us in the handset that actually matters.

Tore Egil Svanberg - Stifel, Nicolaus & Company, Incorporated, Research Division - MD

Great. Just if you can sneak in one last one. You talked about reallocating some resources away from the MEMS business unit. Maybe you could just update us there? Are you just not seeing the progress that you want to see there? Or there's just so many opportunities elsewhere that you want those engineers to work on those first.

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Well, it is a hard field, my hats off to the folks who do MEMS well to the extent that there aren't many. It's -- they're a shockingly hard product line. Our team has made great strides and really moved the needle on our production readiness, but at the same time, it's happened a handful of times in the company's past where we've -- we like to give the product lines enough room to operate on their own. But from time to time, we're just looking at such an overwhelming array of opportunities in front of us. We have to kind of step back and look at it at the company level. And the reality is, we -- if we executed perfectly on MEMS going forward, it still would be unlikely to be as good or as big of a return on investment as some of these other opportunities that we're looking at that are a little more core to what we're known to be good at that are a little sooner in time, a little lower risk as well. So all that kind of factored into it. Certainly, we would have loved to gotten that to production long, long ago. But the fact remains, we just have to balance our investment across our best opportunities. And at this point, MEMS has largely got eclipsed by some of the other stuff.

Operator

Your next question comes from the line of Blayne Curtis with Barclays.

Blayne Peter Curtis - Barclays Bank PLC, Research Division - Director & Senior Research Analyst

Maybe just following up on Tore's question, you do a good job in your slide deck, kind of given us this key of ranges of ASPs per product. Is there any way you can dial us some of this closed-loop controller opportunity? Even you say it kind of leverages some of the stuff you worked on with haptics, that has a much lower ASP than codecs. Is there any way you can kind of dial us in. I know you don't want to reveal everything, but just the way to think about that opportunity on a ASP perspective.



Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

I mean, it's probably a little -- it's smaller than a codec, but I would say probably more valuable than an audio amp. It's really some -- it's kind of in that range. Again, it's not something we want to get into a ton of detail, given that we haven't really even given out what it's intended to do.

Blayne Peter Curtis - Barclays Bank PLC, Research Division - Director & Senior Research Analyst

That's helpful. And then maybe one for Thurman. I mean, you get this question a lot. Gross margins were up significantly in September. You mentioned cost reduction is a driver for that. Just -- obviously, volume must have a big part of that as well, given the huge speed. Just trying to understand in the guidance for December and kind of going forward here, whether some of those cost reductions that you saw the benefit from should continue?

Thurman K. Case - Cirrus Logic, Inc. - VP of Finance, CFO & Principal Accounting Officer

Well, we're always going to be trying to maximize our gross profit margins. And so we'll continue to do that. But when we talk about -- when you see a lower guide from us, it's really about there's a lot of different movements. And I think you noted one, higher volumes will allow you to absorb more costs, and so you get a better margin out of that, also a mix of different components at any given time during ramps and so forth, you have variations in the margins on that, and that can actually move the needle for us. So as we guided to 51% to 53% that we've noted that we've stated -- been at the high end, and we will continue to try to do that. But when you look at us longer term, well, we still think that the 52% range is reasonable in the shorter term and in longer term, 50% is 50% is, 50%-ish is where we should be.

Operator

Your next question comes from the line of Matt Ramsay with Cowen.

Matthew D. Ramsay - Cowen and Company, LLC, Research Division - MD & Senior Technology Analyst

Jason, I wanted to -- you had talked in an earlier question about maybe some opportunities that would be viewed by the team as maybe lower risk and higher opportunity than some stuff in MEMS. And then obviously, you've been -- you called out in the Shareholder Letter sort of a diversifying of the haptics wins that you guys have. If you could give us a little update there on -- is this vibration stuff for the normal application? Is this buttons, what is that? And then, I guess, longer term, some update on where you're at with the voice biometrics effort that I know is a pretty big investment for the company.

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Sure. Well, I mean, I would say the kinds of things that we're measuring as we run through our kind of annual strategic investment kind of portfolio balancing process. Certainly, haptics is a continuing investment for the company, broadening that out, including more of the whole system into the product to try to increase ASPs and simplify our customers' lives and make it easier to design handsets and so forth with this kind of technology. So certainly, haptic is in the mix of things that we're investing in going forward. So that's some of it. There's some kind of completely new greenfield-type of stuff that even beyond the closed-loop controller, we talked about a question or so ago. So it's really kind of across the board of what we're doing. And it's — I think it's just reflective of the time that we're in that so many of the things that we've thought about or heard about our whole lives, starting with The Jetsons and so forth, they're all turning into reality, voice activation, this and that voice assistance that are truly useful, and there that drags with it a lot of, whether it's awareness or intrigue about voice and audio or really tricky edge processing kinds of capabilities. It's really a wide array of these things that appear to be coming at us and we appear to be really well positioned to capitalize on that.

As far as voice biometric, specifically, it's still kind of early innings in the development of that market. The reception that we've gotten from customers as we promoted the capabilities we've developed has been really good. I'd say, our opportunities to deploy either the full voice biometric suite or



some of the subcomponents of that across a wide array of end devices has continued to grow, continues to be very exciting, a lot of interest, and that certainly factors into our resource planning as well vis-à-vis the comments we had about having to rebalance where we're deploying some folks. And a lot of the things that we're going forward with in voice biometric, in particular, they're bigger developments, frankly, a lot more complex. They require resources across a wide array of capabilities. And that's good because ideally, the opportunities that we're chasing are, we certainly expect them to scale commensurately with that. So anyway, the net of it is kind of a wide array of investments across -- of both the things and we continue to be really excited about voice as an interface, in particular.

Matthew D. Ramsay - Cowen and Company, LLC, Research Division - MD & Senior Technology Analyst

Got you. Thanks for all the color there. I guess, as my follow-up, it wouldn't be an earnings call in semis. If we didn't have to talk about China. I guess, maybe you could give us a little bit of update on where you guys are. I know there was a some design wins and some growth look forward at Huawei in the handset space? And maybe you could give us an update as to how that's going, given all the challenges they've had politically versus the strength in their business? And then just some of the other OEMs that are shipping outside of China, how things have been progressing with those all the way around would be helpful?

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Let's see. So as it relates to China, Huawei, and Huawei specifically, I would say we've continued to see good progress in China. We continue to add design wins at new accounts, you point out in the letter that we're shipping to 8 of the top 10 handset manufacturers in some form or another and continue to expect to be able to add to that list. With Huawei, I think it's kind of a very similar to the rest of the news that you read from every semiconductor manufacturer. Like I pointed out last quarter, we're not in 5G stuff or networking, in particular, we're to the extent that we're exposed to them at all is handsets. The silicon we sell, feel like a lot of our — much like a lot of our peers have clearly fallen to the de minimis rule category. We look forward to all of that being resolved because as things stand, we're unable to provide a lot of support or any support, really, we're able to sell silicon that was already designed in, but we're unable to pursue kind of the next level of engagement that we would like to do. So we look forward to that being resolved, but there's certainly been a rebound in that. And certainly, we've seen continuing progress in the other Android accounts that make up the rest of that 8 of the top 10 list.

Operator

Your next question comes from the line of Ruben Roy with Benchmark.

Ruben Roy - The Benchmark Company, LLC, Research Division - Semiconductor & Related Analyst

Jason, I had a follow-up on the MEMS discussion. Last quarter, you guys talked about continuing to work with the lead customer and getting a supply chain going in Taiwan. Just to be clear, is the MEMS effort completely done at this point? Or are there still customers that you will move forward with maybe at a slower pace or a slower rate, et cetera? And then just a quick follow-up on that point is, were there any pressing areas that your other customers or whatever we're asking for that you thought, "Hey, now it's a good time to go and get after that type of product given that the customers want something near term?" Just trying to gauge what you guys were thinking about the MEMS?

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Yes. Well, in this case, the redeployment is really more customer than customers. The MEMS stuff, I would say that, let's see, well, I would refer you to the -- the Shareholder Letter has got a little bit of a description in it. Additionally, I was kind of spruced up our risk factor on that front. That talks about it a little bit as well. We're kind of evaluating our options. There's a pretty major change to redeploy folks on to some of these other areas. That leaves the team a little bit out of balance. But nonetheless, we've developed a lot of capabilities that we think are extremely useful. We're evaluating our go-forward plans with that. We don't have a whole lot more to say about it at this point other than that we expect to be able to give a pretty meaningful update on the next call. But the net of it is from an investor perspective, it feels like we've pretty significantly expanded the



total SAM that we're pursuing now with some of these new opportunities and likely decreased to an extent the expense in the pursuit of them. So that hopefully should be a good thing, in particular, lowering the risk on some of the developments that we're proceeding with going forward as well. So when you're in engineering and you do a bunch of good work, you'd like to see the light of day. We've certainly done a bunch of good work on a number of areas within MEMS, we think that, that could be useful. So we're considering a variety of options to perhaps some of that stuff might still be able to see the light of day. But from a -- from an analyst perspective, I guess, I would say, just zero it out in your model from a revenue perspective. And then we'll -- at least that way, you've got the downside covered. And we'll update you on where things stand on the next call.

Ruben Roy - The Benchmark Company, LLC, Research Division - Semiconductor & Related Analyst

That's very helpful. Jason, and a quick follow-up. In boosted amps, you continue to ramp them and keep adding customers. It seems like it's going very well. I'm just wondering, are there still dollar content opportunities would you say in flagship phones? Or at this point, are you guys looking at sort of the mid-tier content accretion of boosted amps as a bigger driver as you think about calendar '20 as a growth driver?

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Sure. Yes, I think it's both. I mean, we're still -- to the extent we're shipping in these top Android guys that are out there, most of those have a wider variety of models that make up both their flagship lineup as well as their mid-tier. So there's plenty of those accounts where we're not fully penetrated in the high end. There's some of those that we have yet to make this -- the switch to stereo. We think longer term, there's more features and functions we can add to flagship amplifiers. And then to your point, there's a lot of ground to gain in the mid-tier as well as those transition from having no boosted amplifiers to 1 or in some cases, something clever, perhaps a receiver assisted stereo that some customers have deployed or full on stereo, even in the mid-tier. It is kind of a long-term thing that no matter what type of phone you're making that you would like it to be a better phone, and that includes being a loud speaker phone, a loud enough speaker phone that you can use it in a car and so forth. So we see some demand for stereo, even in a mid-tier devices, both in -- and we see that both in China and Korea as well.

Operator

Your next question comes from the line of Raji Gill with Needham & Company.

Rajvindra S. Gill - Needham & Company, LLC, Research Division - Senior Analyst

Just a follow-up on the closed-loop controller and biometric authentication. I was wondering if you could maybe elaborate on what are some of the benefits or the applications or what the performance enhancements of this technology?

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Of voice biometric, specifically?

Rajvindra S. Gill - Needham & Company, LLC, Research Division - Senior Analyst

No, the closed loop controller that you mentioned.

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Sorry, I've got to wire across there. The -- so yes, it's kind of hard. I mean, the kinds of things that you can think about Cirrus Logic really adding value to in the silicon space remain the same. It's ultra-low power, very low latency, implementation of mixed signal and signal processing. So this is kind of more of that. It's not one of our traditional wheelhouses, but the vision of the company for the last 12 years has remained to be the first



choice in signal processing components. And that's this is another manifestation of that. But it's a departure in the sense that it's not audio or voice, but it's very much through to the core of what we think we do really well.

Rajvindra S. Gill - Needham & Company, LLC, Research Division - Senior Analyst

Yes, I'm just trying to understand what it is. If it's not audio processing or voice processing? Is it video processing? Is it -- I'm just trying to get a sense of what the application would be? Or the...

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Yes, I wish I could tell you. I really do, my life would be a lot easier, if I could.

Rajvindra S. Gill - Needham & Company, LLC, Research Division - Senior Analyst

And in terms of the -- your competitive positioning in wireless earbuds and wireline earbuds, particularly around ANC, can you talk about kind of where you are in terms of ANC technology and where the market is in terms of adopting kind of moving forward from digital wireless earbuds to more ANC, more advanced noise cancellation capability?

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Yes, sure. So I think we elaborated on that pretty specifically in the Q&A on the last call and really nothing has changed from there. It is a pretty different market for wired versus wireless primarily due to the battery size and by wireless, I mean, the untethered earbuds, I don't mean the weird ear thing that sits around your neck. The untethered earbuds is clearly a really popular style, but they inherently, they're going to have just a tiny, tiny battery. And so what I kind of highlighted last quarter on this call was just that really the #1, 2 and 3 priority there is battery life. And that has certainly been a focus of our ANC efforts, but not the highest — not maybe the highest priority one, we really focused on trying to deliver an experience, in particular for unsealed designs. Sealed gives you some advantages in terms of how you can go about that perhaps in a lower power sense. So as we kind of alluded to, there was a very, very recently released set of wired — set of untethered earbuds that we now do have content in. It's not ANC content, but it is new content. We've never had that content before. So we'll try to use that as a base to build on. And hopefully, that's good news because, again, it's content we didn't have previously, we do have now. And on the ANC side, we do continue to make progress. We're now shipping in additional wired, wired ANC headphones from different manufacturers. So we continue to see some progress there. And longer term, we'll visit — we'll revisit the ANC road map for a variety of headset form factors. But additionally, we think there's — the untethered earbud form factor should have a lot of legs to it, and there's a lot of opportunities for us to add a pretty wide array of signal processing capabilities to those devices over time, whether it's ANC or otherwise, we feel good about that as a platform that we can continue to build on over time.

Operator

Your next question comes from the line of Adam Gonzalez with Bank of America Merrill Lynch.

Adam Gonzalez - BofA Merrill Lynch, Research Division - Research Analyst

Just wanted to follow-up on the voice biometrics. Just wondering what the remaining obstacles are to get that to market? Is it silicon or software? Or is it just customers figuring out how they want to leverage the technology? And if you can give us a rough sense of what the content would be? When that product does come to market in a handset?



Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Sure. I mean, I would say it's the latter of the 3. I mean, it's really the device, the initial device we've developed is a function that does what I said on the 10, it delivers a pretty remarkable and robust combination of false accept and false reject and so forth. So it is nothing from a silicon or software side that would preclude that going to production. Frankly, when you do something as new as what we've done there. It is — it's something we still expect to go to production, but it is rare that, that first product is the total home run. So customers, once who have been able to engage and gotten the FIDO certification, which we're still the only voice solution out there that's done. Then you can really have meaningful engagements with the customer, and they can really think long and hard about how they want to deploy things and what they want to give it access to and what the user experience would be. And so we would expect to continue to evolve that product line over time. And frankly, it's a little bit of a moon landing for us in the sense that there's quite a lot of sub parts of voice biometrics that are appearing to be pretty valuable.

For example, anybody, we show the overall solution to. Part of the first thing anyone thinks of as, hey, what if I record your voice with another handset and play it back. Can you detect that whatever it turns out, yes, we can, let's call it, anti-spoofing. And it turns out that customers, a lot of them where they might have aspirations of doing the voice biometric stuff on their own, the anti-spoofing thing is something that very clearly needs to be done all the way up front, largely done via an analog mic input just due to the bandwidth required and make some of the measurements and so forth that tip off then it's a recording versus a live person. And so that in and off itself could be a product that's kind of under the sub umbrella of voice biometrics. So we continue to be really excited about the overall portfolio of things that fall into that category, whether it's voice biometrics itself, we think, continues to be one of the biggest opportunities we have over the longer term. But we're increasingly excited about kind of the broader portfolio of voice processing at the edge, ultra, ultra-low power in a wide array of form factors, not just handsets.

Unidentified Analyst

Got it. And for the handsets, the content opportunity would be in the ballpark of a smart codec. And then for my follow-up, just wondering in the haptic drivers, are game consoles a potential opportunity for you guys there?

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

So let's see. So the ASP, I think for voice bio could be all over the map. Certainly, with the device that we have today, we could support something that's a couple of bucks, but we'll just see how it plays out as we get closer to production type discussions with a variety of customers there.

Haptic, that's a good question. Haptics, we're really engaged in a bunch of interesting discussions. It is a viable technology for gaming controllers, probably the more interesting discussions we've had over the last couple of quarters are other applications, automotive and so forth as the ripple through of kind of the market leaders in electric cars and stuff have kind of reimagined what the cabin of a modern car should look like. If you've driven one of these things that's got tons of glass and all sorts of features and functions that you access without physical buttons, the physical contact with that stuff is kind of missing. And there is a haptic market as it exists today in automotive, we think we can bring some interesting stuff to bear that's really similar to what we've done in handsets to enable that really cool user experience for these modern car interfaces as well.

So that's an interesting discussion, but we think there's a pretty wide array of devices out there where haptic can add meaningfully to the user experience. So some we're pursuing wherever we find it.

Operator

Your next question comes from the line of Charlie Anderson with Dougherty & Company.

Charles Lowell Anderson - Dougherty & Company LLC, Research Division - VP and Senior Research Analyst

It sounds like you're now shipping amps into the headset market. I wonder, Jason, if you could just kind of expand upon that opportunity and sort of the applicability of your technology to that market and how fast that opportunity is? And then I've got a follow-up.



Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Sure. So we actually -- we started shipping actually a kind of a bigger device codec with an integrated amp into some untethered earbuds that launched earlier this year that have been just a huge hit. And so that's something we hope to continue to build on as well. More recently, very, very recently, as you pointed out, we're now shipping amplifiers, which it was nice to see those get kind of a little bit of a public mention the fidelity and the power savings of the amplifiers themselves. Again, like I said on the previous -- on a previous comment, when you've got a battery that's that small, very -- you're really counting electrons and every micro-Amp matters. So being able to deliver a loud and immersive sound with the absolute minimum current when you're playing, minimum standby current and so forth, it's really a nice piece of work. The engineering team have pulled off in concert with the customer.

We've got a pretty wide array of devices that are applicable across headsets of all sorts, untethered earbuds, over-the-ear, Bluetooth, wired, USB, wired other digital interface. So that broader market took off much less quickly than we imagined it would over the -- a number of years ago, but there certainly are pockets of high-volume opportunities emerging that we're kind of pivot and make sure we're well positioned to support and seeing good signs that, that's the case.

Unidentified Analyst

Great. And then for my follow-up, I wonder if you guys can disclose maybe the last 12 months revenue from MEMS. So would you sort of assess what's coming out of the model? And then secondly, I wonder if you can maybe speak to the unique IP there? Is this -- it sounds like you're evaluating options. So is this something that could potentially be sold? How scarce the resource is it relative to what's out there?

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Yes, I mean, you can -- as you, hopefully, we're doing already, you can approximate the revenue to be very, very close to 0. It certainly was de minimis over the past 12 months or so. The IP we've developed and the capabilities we've developed range from production test capability that is truly remarkable and ability to test acoustic performance live in a production environment at a very high volume, very low cost. A wider array of patents. And frankly, we've moved the state of where our production readiness is significantly far forward. So again, as we say in the letter, we're evaluating all the options that could be -- it could be a big deal like able to get derive some transaction for the overall umbrella, it could be as unexciting as selling off bits and pieces of it here and there. But certainly, we're trying to maximize the benefit to the company and also with an eye towards some of the people involved that have done a really fine piece of work along the way. But at the same time, it's the case that we're -- any positions that we're unable to fill what those people are just positions are out, we're trying to hire for at this point because we've definitely got that familiar feeling that we've had in previous years, where there's no way we could staff up that fast. Or anything close to what we'd like to do out of what's in front of us.

Operator

Your next question comes from the line of Christopher Rolland with Susquehanna Internet (sic) [Susquehanna International.]

Christopher Adam Jackson Rolland - Susquehanna Financial Group, LLLP, Research Division - Senior Analyst

Close. So congrats to the team on the upside there, particularly in a tough environment. So I guess I have 2 questions. One for Jason and one for Thurman. So Jason, as we talk about in the letter, you talked about amps. And you also talked about next-gen haptics. If I'm reading that correctly, is this a follow-on part to your first 55-nanometer part? And if so, how is that amp different? And then also, is it a specific haptics part, a new haptics follow-on as well? And how is that different from the amp effects?



Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

I think what we're talking about, if I remember that section correctly is a new haptics amplifier. We have -- we did PG, a new -- we've got a number of new amps, audio amps, the ones that we've mentioned shipping in untethered earbuds, for example. We've developed a couple of developed and taped out a new amplifier for the broader market for audio. And then additionally, taped out and have gotten back an amplifier, a haptic amplifier that basically expands kind of on a theme that we, I think, talked about on last call, where we're -- if you think about a haptic system, there's a sensor you measure something, whether it's force or gesture or some other thing, you do some processing on that then you feed that back into an LRA to actuate the system and give the users some feedback.

And what we have done previously, the bulk of the business in our haptic is kind of the signal processing through the haptic driver through the LRA driver. But there's other pieces of that system for us to sweep up to make the system design simpler to make the overall bill of materials lower, but hopefully, capture a larger piece of it for ourselves. And so that's the device that we taped out within the quarter is kind of geared towards, again, sweeping up more in that system. It is a little exploratory. It's one of those things. Everybody that makes handsets got a little different idea of what kind of sensor they want to use and how much of it they want to integrate it. Is it the sensor over here and the LRA is over there that can have an impact on system architecture. So — but it's an attempt to have a broader portfolio of devices that are applicable no matter how somebody is trying to go about, implement that kind of function.

Christopher Adam Jackson Rolland - Susquehanna Financial Group, LLLP, Research Division - Senior Analyst

Great. Thanks, Jason. And then Thurman, in the letter, you said that you expected to ramp inventory into the December quarter, I guess, to continue to fill ongoing demand is what you guys said. But with my history with you guys and kind of looking backwards through the years here, you guys almost always ramp down inventory in December. And I guess, intuitively, that makes sense. The first half of the calendar year, your big customer is typically softer for them. But this seems different this year as you're ramping inventories into December. Am I looking too much into this? Why is it different than traditional years? And does this tell us something about some sort of change in seasonality or some sort of expectation for Q1?

Thurman K. Case - Cirrus Logic, Inc. - VP of Finance, CFO & Principal Accounting Officer

Well, part of this is -- remember, you got different launches at different times, and you have different ramp schedules than maybe we've had historically, if you look 3 or 4 years ago, with customers coming on and ramps happening earlier in the season, plus our largest customer is no longer ramping just once or with one product or things like that. So the inventory then is really adjusted for whatever we're seeing in terms of demand for the -- for those, but it's not a real seasonal change. It's just meeting the needs that we see from a forecast standpoint.

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Yes, I would add to that, too, you've got to incorporate the fact that we clearly kind of just beat the high end by a lot. So that puts us in a position of inventory that naturally is lower than we would want to be normally. So that kind of can have a distorting effect on the trend that you're seeing there. But also, I would not read too much into it one way or the other.

Operator

(Operator Instructions) Your next question come from the line of Rick Schafer with Oppenheimer.

Wei Mok - Oppenheimer & Co. Inc., Research Division - Associate

This is Wei Mok on the call for Rick. So you guys have done a great job diversifying away from your largest customer and expanding across Android platforms. But can you tell us -- can you provide some more color in terms of customer traction in Android devices this quarter?



Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

Well, I mean, we — thanks for that. We started shipping to new customers in the Android space. We've continued to see some strength from the recent developments we've had with audio amplifiers for Android, but also haptic, both of which are relatively new in the company's history. So it's really engagements largely across those product lines. We're certainly opportunistic with the other devices, but that's been — those devices were specifically designed to be easily integrated into the Android platform, and we've seen a lot of benefit from that as we've engaged with folks, particularly in China. We did recently launch — a relatively recently launched flagship in Korea adopted our haptics for the first time, so that's exciting. And that adds to the momentum that we've had there with the move to the stereo audio amp, which was a brand-new win for us in Korea earlier this year, and we followed that on the kind of the second half of that customer's flagship offering. I'll point out, too, that were our historical smart codec offering with the Korea customer largely went with their own AP, both the stereo amps, as well as the haptic amplifier span both their own amps processor as well as the folks from San Diego. So that kind of gives us some higher volume on that side, in addition to, hopefully, continuing to make progress on the mid-tier.

Wei Mok - Oppenheimer & Co. Inc., Research Division - Associate

Okay, great. As for my follow-up, with the release of the new wireless in-ear earphones. I was wondering if you could -- you guys have any ANC content here. And if so, how do you see the life cycle of this product?

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

I think we've answered that one pretty thoroughly. No, we have new content in those earbuds, and we're super excited about that. It's not ANC content. And it's just a different design choice from the customer, and we're excited to have content in there for the first time. So that's a big positive for us. And certainly, along with the devices, we have content in from some of our Android customers. Hopefully, that's a platform we continue to build on.

Operator

(Operator Instructions) And there are no further questions at this time. I would like now to turn the call over to Ms. Chelsea Heffernan.

Chelsea Heffernan - Cirrus Logic, Inc. - Director of IR

Thank you, operator. There are no additional questions, so I'll turn the call back to Jason.

Jason P. Rhode - Cirrus Logic, Inc. - President, CEO & Director

All right. Thank you, Chelsea. In summary, we are pleased with our results in the September quarter, as we experienced stronger-than-anticipated demand for certain components, which drove revenue, yes, meaningfully above our expectations with a strong commitment to delivering long-term growth. The company is investing in key technologies, executing on our product road map and broadening penetration of our target markets, which we believe will contribute to the company's success in the coming years. I would also like to note that we will be presenting at the NASDAQ Investor Conference in London on December 3. A live webcast of the conference will be available at investor.cirrus.com. If you have any questions that were not addressed today, you can submit them to us via the Ask the CEO section of our investor website. I'd like to thank everyone for participating today. Goodbye.

Operator

This concludes today's conference call. You may now disconnect. Thank you for your participation.



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