

**Cirrus Logic Goldman Sachs Conference Fireside Chat  
November 14, 2013  
2:00 PM ET**

Jim Schneider: It's my pleasure to introduce Cirrus, which is a provider of audio analog solutions, mainly to the consumer electronics, and to a lesser extent, the industrial space. With us from the company is CFO Thurman Case. Welcome, Thurman.

Thurman Case: Thanks, glad to be here.

Jim Schneider: Great. Maybe, just to start off on some of the near term before we move up the strategic level for a second, guidance for the December quarter was up, I believe, 5% to 15% sequentially. Can you give us a sense of how that compares to the normal seasonality in past December quarters you've been in?

Thurman Case: Well, actually, these days we don't have a normal seasonality, and so it's hard to say. I think, really, from a seasonal standpoint, the September and December quarters are our largest quarters. And based on product cycles, which really drives a lot of that so-called seasonality that we see now, those two quarters are going to be greater, and there can be a different mix between those.

The March quarter is normally down seasonally, to some extent. Again, we would love to be able to say it's down 5%, 10%, 20% every quarter and to help our people model. But in these cases today, it changes from year to year, and it can vary differently between product ramps and different launches, as well as different mix. And it's affected by the timing of certain shipments towards the end of maybe the December quarter and into the March quarter. And it also is heavily affected by the timing of the Chinese New Year and what's happening in the inventory channel.

So that's a long answer that didn't say much, but we really don't have a really good method of saying our normal seasonality is this.

Jim Schneider: Sure. But maybe you can talk about the confidence level or confidence interval you get when you guide a quarter ahead. You clearly have a lot of customer concentration, so what kind of visibility do you have in any given quarter when you're guiding for it? Is it a situation where you have pretty much all your business for the quarter booked before you give guidance?

Thurman Case: Yes, I think we have a significant amount of our business is booked before we go in and give guidance, but as a company our size and what we do in revenue on a quarter-to-quarter basis can be heavily affected by what ships at the end. And again, we're comfortable with our guidance when we give it, and that's why we give it, but you can see movement in the last two or three weeks of a quarter and into the first two or three weeks of the following quarter that can significantly change your results in both of those. And so we try to take that into account the best that we can based on historical data and trends that we've seen when we give the guidance. But over time, we've had some quarters where we've beaten and some quarters where we've just come in pretty much where we expected. So it really depends, and it can be heavily affected by that profile and the mix in that profile at the end of the quarter.

Jim Schneider: Yes. And could you maybe just talk relative to that about your inventory management scheme, or clearly, you've got a big customer with a lot of pull, and so clearly, the onus is on you to have some upside in terms of inventory should they come through in a stronger way. At the same time, you don't want to overbuild at any point. So talk about maybe some of the dynamics between taking customer forecasts and either haircutting that to some extent or actually building some surge capacity in place and how you manage that.

Thurman Case: And we normally, as most companies do, I think we take a look at what we expect the demand to be, and we know what our cycle times are, and we try to build inventory to that level. On products that we feel are high-running products or that we expect to continue to move very robustly through that quarter and the next quarters, or quarters and beyond, we'll oftentimes build some kind of side buffer in terms of we know that we can manage that further out and not get into a situation where we have to reserve the inventory.

We try to be careful about that and not build in indiscriminately, but there is, we do want to make sure that you don't leave the shelves empty because you don't have enough inventory. You just have to manage that and evaluate that based on the type of products. Some products you're more comfortable in taking that risk, and other products, maybe not so much. It really depends on each situation.

Jim Schneider: Sure, makes sense. So now I want to move up to the 50,000-foot level for a second and maybe just talk about core competencies of the company. When I think about Cirrus, I think you've got a lot of core, really interesting IP in audio processing and analog. And you also have a lot of expertise working with specific customers on very customized solutions, and you've been doing that for quite a long time.

How does that fit how you, as management, see the company? Tell me how often that, or what you might add or subtract to that view.

Thurman Case: Our business model really is that we are, first and foremost, an engineering company. We're fabless; we don't have our own manufacturing. So as an engineering company, we pride ourselves on our ability to be very innovative, our ability to not only develop and design innovative products that really help differentiate our customers' portfolio themselves, but also we're able to manufacture that. And as a fabless semiconductor, manufacturing is a key point of that, because if the design is great but if you can't build it and you can't sustain it, then it can create issues.

Our business model is surrounded by we really believe that whether we use a standardized part or we do some development in advance of some products that we think are very exciting and can differentiate in a particular market with particular customers, it's to engage with those customers on a very close engineering basis and then move into customized type parts. That is a niche that is very solid for us, and it provides us opportunities where we really think we're strong, which is on our engineering talent and our engineering ability.

We certainly have a portfolio of catalogue parts, but we think that where we really help our customers is our ability to understand what they're trying to accomplish with their particular product lines and being able to develop and innovate in a way that we help augment that, and also, at the same time, find ways to help them save costs and even come up with our own vision of how certain things can work and improve that differentiation.

And that niche is in an area where we think we're very strong and where we've done very well, and that's supported, then, by certain areas of catalogue-type parts, but we also

utilize those types of standard parts to win, possibly, some kind of design or win a SKU and then be able to go in and actually engage at an engineering level, where we think we can prove that we can differentiate.

Jim Schneider:

Fair enough. If I think about audio and audio in smartphones in particular, we've gone from this regime--at least the way I see it--from really, a focus among the top-tier guys on audio output quality to how does it sound--speakers, headphones in my ear or speakers on a table or something like that--to now, a much greater focus on audio input quality, where things like spoken commands and things like microphones and pickups from ambient places around the room matter a lot more in the new applications.

So can you maybe talk about, a little bit about the importance of that audio input technology, how your technology is differentiated there, and maybe some sense about what's the difference between--you know, we hear noise cancellation and noise suppression, and what that means to that picture.

Thurman Case:

Yes, we think that as providers of high-end mixed-signal processing audio codecs, that high-end audio quality is very important. And it has been focused, and particularly when you look at multimedia players and things that we've done historically, was really focused on the output and what you could actually hear coming out.

Now, with things like voice activation, voice recognition and those types of technologies becoming more and more prevalent, and with the advances that we're seeing in that, the input is a very big piece of this. The types of technology we do, one of the things that we do with our hardware, and we have utilized in our audio codec, is noise cancellation. Noise cancellation is a hardware solution and helps cancel out noise around and filter that out so that you can hear the output better. And also it can then, the inputs that may be coming into that, like voice, can be much clearer and crisper and allows that type of functionality to perform better.

I think over time, things like--you mentioned noise suppression and some of those things. Historically, we have not actually done that ourselves, although we did do an acquisition of a company called Acoustic over the last few months. They do bring some of that technology into our portfolio--in particular, noise suppression, echo cancellation. It definitely provides us some opportunities for expansion of our capabilities and portfolios with our high-end audio quality codecs and mixed-signal processing.

So one of the things I can differentiate for you is that something like noise suppression. Noise suppression is really a firmware or software solution. And if I'm standing in a very noisy room, noise suppression really allows you on the other end to hear me better. In other words, it suppresses noise around it, and my voice comes through much clearer.

Noise cancellation, which we have that technology and it's more of a hardware solution, if I'm standing in that same noisy room, it helps eliminate noises so that what I hear when I'm holding that phone up to my ear is much clearer and I can hear that better.

We think that this type of technology, where voice is very important, moves into areas such as voice recognition, where giving voice commands. You get into things like how does, whatever that device handles security, maybe recognizing the voice. How does it handle dialects, how does it handle accents--all of the things that are very complex with voice recognition. But that type of technology is certainly being addressed by a lot of companies out there, and you see a lot of startups heading in that direction.

We believe that the fact that our audio, our types of audio products can really improve the quality of the audio, then it again enables that to be far more effective. And that's an area

in voice that we think we're just scratching the surface. I mean, we've talked about it in terms of science fiction, in Star Trek and The Jetsons and heading in that direction. We think that that is really rapidly going to become a reality. Our types of products fit very well in helping enable that technology and handle the complexities that are going to be needed in the future to make that something that the consumers are going to be able to utilize in an effective manner.

Jim Schneider: That leads to my next question, which is going to be can you help maybe illustrate for us some of the use cases that might drive the next set of features in audio technology in smartphones? Is it simply, "I can understand more sophisticated voice commands from more different dialects," or is there something that just goes beyond the higher order of functionality of that same thing?

Thurman Case: I think both. I think you can understand different types of commands, more complex commands, and be able to process those. Also, you talked about it being in the smartphone area. But whether it be a smartphone or some other portable device, I think when you look out further in the future, you're talking about functionality that may be able to network and do different things with your entire home or your car and bring these things together with a single device that you can actually utilize and manipulate with voice commands. That goes on top of things like 24-hour, always-awake type of functionality, where you don't have to reach over and touch a device and put in a security code. Instead, you can speak and it's on and you can utilize that particular device to do different things.

All of those are technologies that are moving us towards becoming less hands-on with that type of functionality and becoming more voice-related.

Jim Schneider: Got it. And then obviously, you don't want to talk too much about the details of your relationship with your largest customer, but maybe you can just give us some sense of what it is that's enabled you to be so successful there over time. Is it just the core pieces of technology that differentiate you that makes them want to work with you? Or is it the process of customizing the parts over time and just working with the engineering teams that's a bigger contributor there?

Thurman Case: Well, I think the engineering relationship there has been strong over the period, and I think it's a two-way street. We work with them, we're able to--some of the keys is that we're able to meet deadlines, we're able to manage very difficult technology, put our products out and really meet their expectations and then be able to manufacture those types of products in order for us to be a solid supplier from beginning to end.

In addition to that, though, our engineering teams do add value in the sense that it's not a spec-driven type of situation. And I think there really is give and take, and ideas are exchanged, and we give input, and a lot of our input and ideas that come from our side are things that can help save money or improve functionality or do things that overall not only improve the product itself, but the profitability of the product. And I think that give and take and our ability to have it delivered on a very consistent basis really has helped us maintain a solid relationship with them.

Jim Schneider: Relative to the latest iPad Air that came out, I figure there's some evidence to suggest that maybe on looking for teardowns, you may not have had all the, for example, the Class D amplifier content you might have had in previous generations. Without talking too much about the relationships of any particular customer, can you maybe just talk generically about where you think your highest margin or most differentiated parts in the signal chain are, and then may if there's areas where parts of the signal chain get to be too low of margin yield, and you'll just move away from them.

Thurman Case: We don't really talk about what our margins are for different pieces of the chain. I think we could say that for highly customized, highly proprietary parts where there's a significant amount of research and development, margins, at least on new product launches, are probably slightly higher in general. That doesn't work for everything, but in general those margins are higher, where standardized parts, our margins are probably a little bit more modest in terms of they're plug-and-play or there's not a whole lot of work involved in that.

In terms of when you're asking about amplifiers and things like that, I think in your discussion about the Air teardowns that just occurred, we have said for some time now, and I think Jason talked about this at the Barclays conference four or five months ago when we talked about resetting our business model in terms of margins to a mid-40s type of range, that this was an area that was very, very--there's a lot of competition, and there are certainly other companies in that space that can do that pretty well.

So we will continue to look at opportunities where we can differentiate our amplifiers with mixed-signal processing, and we think that there are other opportunities, both with our--you know, there's opportunities with our largest customer and there are also opportunities with other applications outside of that. And we'll continue to pursue those, but in terms of, again, from a competitive standpoint, it's much different when you're talking about a standardized part that is associated with something that's been customized and been developed jointly with the end customer.

Jim Schneider: Sure. I guess on the flip side, you recently announced you have a new top-tier design win in the smartphone space as well. I believe that's more of a standard type product, or maybe a standard product that you can sell to multiple customers with--I don't know if there's some level of customization at all in there or not. But can you maybe talk about your customer diversification strategy, whether that's purely with standard, semi-custom, and then how big do you think the other customer set can be in that space over time?

Thurman Case: Well, it goes back to our business model. Yes, we've announced that we have a standard part. It's a converter that we're utilizing in a Tier 1 type of phone maker, and we're happy, obviously, to sell a standard part to them and generate the revenue that's associated with that, and we are shipping to them.

But in addition to just that design win or that socket that we win, we think it's very important that that opens the door for us to establish that engineering relationship that we talked about, where we can understand where their vision is for their products, where our types of technology and our types of expertise can help them, not only in expanding their functionality, but in saving costs on the board and being able to do different things that will help them innovate. So that's a case where we look at that as not only a good win for us, but we also look at it as an opportunity for us to possibly establish that ongoing relationship to do more things.

That's not the case with all customers that we sell standard parts to, but I think it's always in the back of our mind, and particularly with large Tier 1's that we think our type of innovation and the technology that we provide is well-suited to help them.

We've also noted that we have some design wins with some Chinese companies, with basically standardized parts. But what you are seeing is that it's a good sign for us when some of the Chinese OEMs are now starting to sell what we would call mid-range type of phones and they're also showing some attention to higher-end audio. We have a couple of design wins and are shipping also in those areas. So again, it provides us some expansion in terms of opportunities with other OEMs.

I think we have to be honest about the diversification, though. Until--you know, it will take a significant amount of wins and different types of designs and expansion for us to really see a huge difference in our diversification, and particularly over the short term.

Jim Schneider: Can you maybe talk about, just more broadly within your audio portfolio, everything else outside the smartphone space, whether that's automotive or home entertainment or others. How big is that part of the audio business for you today, and where do you think are going to be the biggest opportunities, or are any of them big enough to be material for you relative to the smartphone business?

Thurman Case: We don't really break that out specifically, but you can do the math. We do break out our energy and audio business, and then we do disclose the percentage of our revenue that's associated with our largest customer, so it's easy to get there without actually giving you the number.

Probably our largest business in audio after the portable business is our home entertainment. It's really associated with things like high-end home theater, sound bars, and other things like that. One of the things we've seen in that particular market area is that there's not a huge amount of innovation, and there are very high price points. What that means, then, is growth in that area is not as--certainly, the potential for growth is not as great as it is in areas where you have a lot of changeover in the product lines.

In that particular market, higher price points, if you buy something at a high price point and there's no real change, then you're not going to go buy another one the next year. But we do think it's a solid business, and we've been there in that area for a long time. We have solid customer relationships, and it is a significant portion of revenue for us.

In addition to that is automotive. Automotive is buried in--we don't talk about how big it is, but that is one of our segments in audio outside of portable that is growing. We have seen, over the past several years, that as we expected, that most of the automakers have really expanded their audio capabilities and high-end audio into numerous types, a much wider range of models and makes at different price levels.

We can have anywhere up to \$10 or \$12 in a particular car at any time and at different ranges, depending on the application. So we think audio is a good, solid business. We've seen it growing, and we'll certainly continue to invest in that portion of the business and work towards that.

Jim Schneider: Great. Maybe switching gears a little bit to the LED lighting market, and you have a dimmable LED lighting controller, I believe. Can you help us maybe just, I think there's been a lot of confusion out there about, first of all, how big is this LED market, really, in terms of the bulbs? How big is dimmable as a part of that? And then, maybe, as you look over to the next two years, where do you think your opportunity is to capture share, and how much share do you think you can get?

Thurman Case: We'll see how the market--it still seems to be in transition. I think one of the things that characterizes the LED market, at least at this point in time, is there is a lot of products on the shelves, and I think consumers are still trying to understand what that means, dimmable versus non-dimmable, and really, what it is they're getting. It's somewhat confusing, and it's an emerging market, and so that's expected, I think, at this time.

Really, we're focused on the dimmable portion, which is what we do do, and that's our market, I think. We see dimmable as being somewhere around 25% of the total. But also, we'll have to see how the market plays out in terms of if consumers really are

looking for a replacement for the incandescent bulb. Then at some point, they may not want to determine whether or not it's dimmable or non-dimmable when they're pulling it off the shelf. And all of those things are things that we'll have to see how it happens and how the lighting companies handle it.

We think that Cree has come out with something that really has driven the lower price level, and they're trying to make some inroads into helping ease some of the confusion that you see. And I think the other lighting companies are certainly going to try to follow suit. How well that takes on and how well consumers adopt that technology will really tell us where we're going to go with these types of products. And we have to wait and see. In the interim, we just continue to look at opportunities to improve our cost structure and look for other opportunities where we can engage with some of what we think are large OEMs in that area.

Jim Schneider: Can you maybe talk about the kind of, your competition within that LED landscape, whether it's Maxim or SPI or whoever it is, maybe talk about what your differentiation is, how important is dimmable to that part of the differentiation?

Thurman Case: Our solution is a digital solution, and I think it provides far more flexibility than what is the standard analog solution that you see. Primarily, that enables dimming at this point in time in the lighting. So from a competition standpoint, there's a lot of people that are in the--Powe and people like that are on the analog side. If you look at the digital solution, iWatt is somebody who has, at least a solution that's similar to ours. I think Marvell has something that's in that range.

I think the key for us is whether we'll be able to produce a product that is highly functional and is also supportive of the overall goals and cost structure that the OEMs out there will have. And I think we're driving towards that and trying to find ways to get there. But I think that's the--the digital solution, by the way, is something that is far more flexible, and so with an analog solution, you can be limited on the number of dimming types of infrastructures that the light actually works with. And with our solution, it's a much wider range, and so it's far more applicable in terms of a general purpose. You can plug it into almost any infrastructure, and you can feel very confident that it's going to perform in the way that it should.

Jim Schneider: And to come to another market area which I think you've talked about as an opportunity is the smart metering space, but I'm thinking that's another area where it's had fits and starts. Can you maybe talk about what that opportunity looks like for you, whether you think it's going to really take off for you over the next couple of years as an opportunity?

Thurman Case: Well, taking off, you know, in smart meters, is probably not an expectation at any time, I think. I think that is a market that is really characterized by utilities and rate commissions and different types of governments. One of the things that we've seen is that it's very much a step process. It looks a lot like an industrial type of market. We have spent some money in that area on R&D, and we have come out with newer products, and we're certainly engaged with other smart meter OEMs. We have done some customized parts for Itron, and we have a close relationship with them.

It is a market that, over time, as energy conservation and pressure on the grid and so forth becomes more and more prevalent, you may see that type of technology to be more and more required. But it is very capital-intensive, and so there's some opposition when you talk about lowering rates and keeping rates low for the consumers and requiring high amounts of retrofit for the infrastructure. But we think it is a market that still has opportunity out there, and we're still certainly very--it's a very important piece of business for us, so we'll continue to innovate as much as we can and go after it.

Jim Schneider: I want to circle back on the financial side. First, again, to the gross margins. You brought that up earlier in terms of the mid-40% target that you have. Can you maybe talk about your level of confidence that this is a sustainable target that you can keep hold of over the next couple of years or so? And then going off of that, does it make sense that any of these further sophistication opportunities play out, whether that's new customers on the smartphone side or the new markets? Is that an upward bias for you or not necessarily?

Thurman Case: Well, I think essentially, just in the most basic sense, we believe that, at least for the foreseeable future--I wouldn't put a timeframe on it--but from what we believe is that we'll be able to maintain margins in that mid-40s range. We can--as you look forward, any of the other business that we are doing in the phone markets or anywhere else is certainly, we would expect to be supportive of that type of margin profile.

But it was a reset for us. We did see increased competition in the smartphone market. You saw more OEMs coming in. Even though it's really characterized by two very large suppliers out there, we're seeing more competition and there's more pressure on our customers to manage their costs and so forth. And we're part of that. So that's where the reset came from, and right now, we expect to be able to support that level in the near future. But if that changes, we'll certainly come out and, whether it gets better or worse, we'll certainly come out and say that at the appropriate time.

Jim Schneider: And then just relative to, again, margins for a second. If you look at R&D, are you able to hire engineers as fast as you'd like? And to the extent--if you could just wave a magic wand and hire as many as you like, how would you think about the growth opportunities you might be able to drive with a higher level of R&D?

Thurman Case: We have, certainly, R&D in mixed-signal engineering resources is not an infinite resource available to you. So we continue to hire good, solid engineers, as many as we can. We continue to recruit both at the college level and at the experienced levels, and we expect to continue to add headcount and bring people in.

I think part of--we don't expect to continue to significantly grow our SG&A. We think that that's a much more flatter trajectory. And you say in a magic wand or perfect world. I think if you asked us where we would really like to be if everything was as good as it could be, then we would probably say that R&D should be around 20% of our total revenue. But that's a tall order, particularly with some of the growth that we've seen. But we'll continue to hire in that area, we'll continue to try to bring in engineers. We don't hire engineers just for body counts, and we certainly are focused on hiring good engineers, and we have to bring in the right level of talent.

What it does to the more talent that we can bring in and the more resources we can add, it does provide us, then the opportunity to go after certain projects that maybe we could not, don't have the resources for at this point in time. And it just expands your ability to do more things. But we'll continue to pursue that.

Jim Schneider: Great. And then I'll just maybe ask one more question relative to M&A. You've talked about doing opportunistic M&A or small tuck-ins. You did one with Acoustic, but I think that may have been the only one--correct me if I'm wrong--in the last several years, maybe going back five or six years. Can you help us understand whether your appetite for doing more of those smallish kind of deals is actually greater now, and how do you think about M&A as part of the overall R&D strategy that we just touched on?



Thurman Case: Yes, I wouldn't necessarily characterize it as suddenly gotten greater now. I think we've always had the view that we would like to look at any type of smaller companies or small acquisitions that we really think fits our product roadmap and really is something that complements what we do now, and we see that there's some kind of expansion that's available and opportunities that are available by acquiring that type of technology. We'll continue to do that. And I think that with this latest acquisition and with the emergence of voice, we'll continue to look at that as different things that we can consider in terms of M&A activity.

Larger M&A activity--I think we've said over a long period of time that we spent a lot of time and effort on creating a culture that we think is very effective in terms of delivering products on time and being able to manufacture those products. So a larger acquisition would have to be something that we felt culturally was a good fit with us and also was something that we could maintain momentum.

But in particular, we're not going to do acquisitions strictly for scale. That isn't really something that we consider. It has to be something that we understand that the products and the technology that we would be getting fits a roadmap that we think are market areas that show growth potential with new development. And so, again, we're not going to buy two or three companies just for a short-term boost.

But we're very picky about that because we're very protective over what we think is a lot of the culture that's driven some of the success--a lot of the success--that we've had over the last few years.

Jim Schneider: Great. I think with that, we're out of time. But Thurman, thanks very much for being with us. Appreciate it.

Thurman Case: Thank you very much. Appreciate it.