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<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Okay. Hi. Thanks everybody for joining our discussion today. I'm Rick Schafer, Oppenheimer's lead semiconductor analyst, and I'm joined today by Thurman Case, CFO of Cirrus Logic; and David Biven, Cirrus' Director of Corporate Development.

David, I apologize. I don't know how long you've been in Cirrus. I know Thurman has been there, I think, more than 20 years now, I believe. And I had a fact check because time flies, 15 years as CFO. So anyway, thanks great to see you guys.

<<David Biven, Director, Corporate Development>>

Well crazy. I'm also a lifer, so I've been here, I got my 20th year anniversary plaque just earlier this year, late last year, something like that. Yes, I've spent almost my entire career at Cirrus as well.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

All right. Well, it's good living you're in Austin, Texas. It has a lot of good places to be. Well, hey, listen, let's go ahead and get started if that's okay. You guys, I know we're a couple minutes late on the start, but maybe I'd get rid of some of the more boring stuff that we just have to cover with everybody right now with supply being what it is or lack thereof, I guess, lack of supply. It's just been such a key topic for everybody. You guys are no exception and to supply challenges. I mean, maybe you could talk for a second about what you're seeing on the supply front? What areas and where are you seeing sort of some of the worst constraints, whether it's frontend, backend? Are you probably going to say across the Board? But I am just curious what kind of color you could give us?

<<Thurman K. Case, Chief Financial Officer and Vice President, Finance>>

Well, you can guess on some of those answers, cause you're probably hearing them a lot. We are capacity constrained and those constraints – we just don't see them really changing much as we go through fiscal year 2022 and even into 2023. And it is, I mean our major areas of constraints are there foundries just simply because there's so many wafers that are needed in the volume of wafers, although we – it is across the Board, as you noted. And with all these constraints, what we're seeing which I think is not only us also is the increased costs.

When we talk about increased costs, I mean, that includes, higher wafer pricing that we see beginning in Q4, FY2022. And that's really because that's when the normal price adjustments, happen with our foundry partners. So based on that, while our long-term model for margins is still 50%, it's based on the current visibility that we have, and then the information that we have that we expect our margins to be slightly below that 50% in FY2023. And really, I guess, that's where we stand at this point.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Maybe just as off the wall question, but you have a pretty big customer you're sort of lead customer probably carries a lot of weight more than most customers, most tech companies out there. So, are you able to leverage that at all when it comes to talking to your founders and trying to make sure your, or back again, that applies both ways, I mean, are you able to leverage any of that kind of to help get supply or help with supply?

<<Thurman K. Case, Chief Financial Officer and Vice President, Finance>>

Yes, certainly, having a customer of that size may have influence. And so, we wouldn't sit and say that isn't helpful, but we have other large customers also who have influenced. So even though that is helpful for us, I mean, all you have to do is look around, there are other suppliers to our largest customer and other large customers that are also applying constraints. So, it's more about how much capacity there is, and yes, that doesn't hurt our case at all to secure capacity. But it has not put us in a position where we could fill all the demand that we could fill this year if we had additional.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Got it. Thanks. And yes, I'll probably be just topic to definite, you guys did announce a new wafter supply agreement with Globalfoundries. And I didn't know if you could share anything about the sort of volumes or capacity that you're going to expect to see from that arrangement. I know it probably doesn't just turn on like a light switch, but just over time kind of how much, any information you could give on how much incremental capacity, I think people would be curious how much incremental capacity that that would afford to you?

<<David Biven, Director, Corporate Development>>

Yes, Rick. I think just first off at a high level, I mean, it's really good for us to get that in place too, as Thurman pointed out to alleviate some of the capacity constraints that we've been seeing. So, as you know, we've been doing business with Global for a very long time, right. since 2009 and before that it was started. And we see them as a very strategic partner for us moving forward. So at least for that piece of the business, it's been great to really get some capacity commitments, but not only the capacity commitments, but also some commitments on continuing to develop a unique IP around the process nodes that we develop them today. So that's something that we've had a ton of success with historically is just working with them, engineering team, to optimize technology in those process nodes and allow us to further differentiate. And so, getting commitments as part of this this agreement on the technology front has really kind of set us up well for the future,

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

And maybe on that point, David, or Thurman, gross margin, obviously get everybody to understand input costs have gone up and maybe the ability in some cases, right to pass all that through isn't there. So, you have a near term, and again, it's not a matter of if you want to talk about that Thurman, but like, it's not huge drag on gross margin, but it is a little bit of a negative. I'm curious what gets gross margin sort of back up above 50, kind of where you've been running for actually a long time now? Is it to your point, David, is it that move to that next technology node process node, sorry, or is it going to be a mixed thing as new products roll out and they are adopted, or I just didn't know how much color you could give us on maybe where that – how we get back up there, I guess?

<<David Biven, Director, Corporate Development>>

Well, I mean, it's a little early for us to talk about. We made a comment on FY2023 being slightly below 50%. I mean, there are a lot of levers there always has been with gross margins. I mean, there is product cycles and manufacturing efficiencies and certain product mix, which might fall into some of what you're talking about with higher margins. And we wouldn't stop now and we continue to maximize our margins the best that we can. But the best we can say about that is that we would expect margins to be slightly low in [indiscernible], we're not to step out any further that, or give you kind of give a timeframe or anything specific on where we may end up besides that commentary. It's probably too early.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

And I'll try one other way. And again, just is there any sort of normal – is there any kind of normal plan or target for you guys internally in terms of moving to those next process nodes? I mean, do you want to see yourselves every two- or three-years kind of jumping one or two nodes forward, or is there, is there any kind of rule of thumb that we could use?

<<David Biven, Director, Corporate Development>>

Yes, I guess I should touch on that. So, what I was talking about specifically, was not necessarily jumping process nodes, but IP within 55 nanometers specifically, right. So, developing unique IP for Cirrus Logic use only within that process node. But to touch on kind of future looking process nodes, yeah, I mean, 55 is a great home for us today and many of the product categories that we're shipping in. But we've been investing in 28 and 22 as a potential product technology or potential technology for our products longer term.

Historically, I think we've done a really good job of doing that advanced investment in new technologies so that we can be ready to kind of intersect that with real products when it's appropriate. And that could be footprint, power consumption, higher performance, I mean, analog doesn't scale, as well as digital going from 55 to 22, but for a digital heavy product, like for instance, like a codec we certainly foresee that making a shift to 2022 sometime over the next few years.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Great. Thanks for that color. Appreciate it. And so, speaking of product mix and sort of how things are changing and where you guys have been adding content of the last few years, again, you guys have done a great job there, especially with your biggest customer. I'm curious on this, I look at the smartphone market is pretty mature not a lot of growth there in units but, certainly a lot of growth in terms of sharing content for you guys, I think, you've proved that out. Historically, you've led with auto but again, a lot of the big content games recently been power, and control and things like that.

So, I don't know how much you can talk about some of the opportunities you guys see out there. I know certainly you guys do a great job talking about haptics and things like that. But just in terms of future things that maybe you can integrate into a smart codec or other areas that I'm not thinking of I don't know other areas you can expand to?

<<David Biven, Director, Corporate Development>>

Yes, no, that's right. And I think we see the same thing that you are, right. Smartphone volumes are going to continue to go up. So, it's a really what our goal is to increase our content within those devices, as well as broadening out our reach in to new devices and new markets. But yes, historically we've built a fantastic business around the audio front. And we think that there's still some meaningful growth ahead of us in audio, but really the last several quarters, I mean, we've seen a tremendous uptake in our potential stand with a broader kind of high-performance mixed signal opportunity.

And as you said, we talked about that with haptics initially, and then we started talking to the camera controller and now this new IC that that's ramping this year with the power control or conversion of control device, it's just really another statement about how we can leverage IP that we've developed for another kind of application and utilize that to service, to grow our footprint within these devices.

So, within the high-performance mixed signal bit, power seems like there's, an enormous opportunity in front of us to continue to leverage mixed signal IP that we've been developing in-house and bringing that forward to support more kind of power-related content expansions. And couple that with the acquisition that we just made with Lion Semiconductor also very complimentary skillset, and instead of IP also in a power domain, I think, that really gives us some good opportunities for growth in the future as well.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

No, I know I want to jump to line just one second. I was just curious, is there puts and takes, or how that shakes out in terms of you guys increasingly I know you have a lot of high-performance, big signal, IP, but obviously power is a big market, but there's obviously, I feel like you kind of – I don't want to say you own audio, but you kind of do, or you you've got a huge presence there. So, you're kind of getting out into maybe deeper waters, but there's also some bigger sharks out there, so to speak. So, what are the puts and takes, like, how do you go out and win against, I'm just going to throw a TI [indiscernible] out there, but like how do you compete against the TI? Is it because you can do all this with integration? Is it because you've got all this digital stuff that you guys have developed? I'm curious, and maybe as part of that, I'm always curious about margin impact.

So, what the puts and takes are there, do you see more pricing pressure, do you see less, just any color there would be super?

<<David Biven, Director, Corporate Development>>

So, I guess I'll add that specifically on the Lion front, we've known the Lion team for four plus years or so. And we've been kind of tracking them closely. And really over the last 12, 18 months, they have made some tremendous progress in selling their trips into the Android market and competing with the likes of TI and winning sockets over TI.

So, for sure competition will still be there. TI is there, you've got some Chinese suppliers as well, that are also in the mix. But they have developed some really unique IP and capabilities around maximizing efficiency for these devices. And for fast charging, which is what they're servicing today efficiency maybe the most important feature in these devices, the less efficient it is, the more thermal impact you have which caps how fast you can charge the battery at a very high level.

And so standalone, I think, they have an enormous opportunity in front of them. And we're hoping to just accelerate that, right. So, our plan with Lion is to integrate them, but – just to accelerate and augment what they're already doing really well.

Now, longer term, as an interesting compliment to what we're doing today with the power control – conversion and control device, right? So that device is kind of downstream from the battery, like from the battery into the device, or the Lion device is more upstream, in the battery charging front. So longer term, fast forward, we think there could be some interesting value that we could provide across our customer base, being able to own both sides of the battery and just do some interesting – create value by just you know, having more control of more pieces of that overall puzzle.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

When you say on both sides of the battery you are not talking about as far out as like the wall charger, so no need to add?

<<David Biven, Director, Corporate Development>>

That’s a great point. Right now, we have – no need to look into the AC to DC front [indiscernible] we're not looking at that yet.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Got it, got it. No, that’s super helpful.

<<David Biven, Director, Corporate Development>>

I mean longer term – that's something we're interested in, but right now that is not a focus at all.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Yes. I mean, it seems like everybody, especially in the mobile world is talking about fast charge, but maybe even it EVs everywhere, right. Fast charge GaNs is kind of a hot topic. So, I guess I'm curious, I mean, it seems like it's actually lots of stuff I'd love to ask but the outline but like one of them, it just seems like given the relative size and balance sheet, it's just seems like they – I'm curious if there was customer pull, whether it's from the iOS side or from the Android side, but it just seems like a natural for a customer pull they've obviously got neat tech to get your guys' interest.

So, is there sort of like this what would you say, this sort of balance sheet risk maybe, or perceived balance sheet risk that was there, that since it's no longer there, and now that they're part of Cirrus Logic, that there's almost this pent-up demand that's going to – that's sort of ready to go, because I know Thurman has talked about what the revenue run rate is there, but that sort of pretty Cirrus. So, I'm looking for to see if it accelerates – excuse me.

<<David Biven, Director, Corporate Development>>

From our side, I think, the timing couldn't have been better, right. I mean, like I said, they made tremendous progress within an incredibly small and efficient team. Right. But they were starting to need some scale. I mean, they were looking to really staff up still a very lean team. And in addition to that, they were having very meaningful conversations with OEMs, specifically in the PC space, which we've started talking about more recently.

Where the technology was great as a perfect fit, but like it's still a startup. So, it was hard to right commit to those products. And couple that with our like investment in power and our general just trend be more interested in power the combination of and the complimentary natures of our two skill sets and capabilities the timing was perfect, right. And so, we were able to bring them in, we're able to help them scale, put like a best-in-class supply chain operation around a very nimble and very talented team.

And so yes, our hope is that we're not going to slow down, we're actually going to accelerate some of that activity, both in the Android space initially and also in the PC side as well.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Yes, so one of my questions there actually is, because you guys are so strong in mobile, but it's typically handsets, right and tablets. But it's things like that versus PC. So, how long does it take – I know things move quicker in consumer and PC, but how long does it take to develop that channel? Like the depth of channel and the strength of channel you have in mobile, meaning mobile devices versus – so I'm just curious, how do you look at that?

<<David Biven, Director, Corporate Development>>

Well, I mean, one thing that's really nice about, I mean, their top customer Xiaomi, right. I mean, that's one of the customers that we've built a fantastic relationship with over the last couple of years. And so, during due diligence, we're talking to the team that we're already talking to that know them quite well, right. And so, helps accelerate all of that integration, just getting them into the fold by having – by knowing their customers, knowing what their customers value and just kind of plugging them right into to our organization.

So, I think from that standpoint that piece of it should be pretty clean, right. And so, don't see many hurdles there in terms of getting them up to speed very quickly, which is great for us too, because I mean those Android customers are very important to us. And this is a meaningful uptick in terms of overall dollar content for Cirrus. The devices that they are shipping, they are simplest devices are kind of in the $0.50 range. But as these phones start raising the overall power to the battery or the charging speeds, that could go up to over a $1 in content per device and $2 per device, so $2.50 of content, for every phone in some models is a pretty significant uptick and opportunity for us. And it's with customers we're already servicing today with some of our audio and haptics products already.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

And I know you are limited in what you guys can say on this next question, but your biggest customer is in the news a lot, has been talking a lot about fast charge, but again, everybody in handset is like, as we already kind of covered that, I mean, may be fast charge is the future. So, do you have a sense of – because again, they sort of pick and choose where they are going to partner or use an outside merchant supplier versus doing it themselves. And I tend to think my own opinion is power and things like that tend to go outside and go-to-merchant for them. And they seem to differentiate elsewhere maybe on the processor side, areas like that typically, right.

So, I didn't know how much color you can give or if there's even anything you could say about what their approach might be to fast charge and – because it's clearly something, I think, they're interested in and are probably going to be adopting.

<<David Biven, Director, Corporate Development>>

Yes, I mean there's not much color I can offer for any specific customer. But I will say, I agree with you, it's something that from a consumer facing standpoint, why would you not want that? Right. So, figuring out a way to, I mean, then if you look at the Android space, I mean it is one of the key selling features for a lot of phone models coming out right now. So, I think that will continue across many of our customers.

But specifically on the line, I think, I said this earlier, but we've got a lot of opportunity in Android and we really need to try to maximize that first. But then we do believe that their IP is applicable to all of our customers in the mobile space and as well as in PC and other applications as well. But kind of initially still a small team don't want to break what's going right. We really have to maximize kind of in the short term, our opportunity in Android and PC.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

And is there any reason to think that there'll be – that you'd have to sort of staff up or add support, like I'm thinking of like FAEs or something as you try to kind of go on both sides actually, but kind of going back to that channel question earlier as you kind of get deeper on the PC side of things, Note Book side of things, but even within the handset customers, I mean, I don't know you do your existing FAEs, are they comfortable, I'm guessing they are we the answer, but I mean, are they comfortable with kind of shouldering this added, you know what I mean, this added components and supporting it guess?

<<David Biven, Director, Corporate Development>>

I think there will be some scaling of specifically on the Lion effort, but it is very nice that we're already servicing this companies already, the customers. And so, we are able to leverage a lot of the sales and application, field application support that we've already got. But yes, there will be some scale there. And just a broader statement outside of Lion and just generally accelerating our more organic power effort, we have really been able to bring in some stellar resources over the last quarter.

And I think Thurman and John talked about it on the call, it's really tough to find good engineers with this skillset. And we were able to bring in some really good resources to help augment the organic activities around power. And so that should help us accelerate these efforts substantially moving forward.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

That's great. So may be pivoting just a little bit but just in terms of thinking about broader growth drivers, you look across your business and into the future. I didn't know if you could call out sort of what you kind of see as your lead dogs. I guess, I mean, I think everyone knows you're adding incremental, net content to share with the power conversion ICE. I mean there are obviously other moving parts always. I mean, I think, everybody gets that.

But how much of your growth this year is tied to content versus, unit growth, because obviously your biggest customer is obviously forecasted to have some pretty decent unit growth this year coming off of a pretty relatively easy comp than last year, but still relatively good unit growth. So, I don't know if you could parse that out?

<<David Biven, Director, Corporate Development>>

Probably not in any specific way. But yes, there's a meaningful content growth story this year. And we were very bullish about our growth coming into the year before we added Lion to the mix, right. So, layer that on top and yes, we're excited about the opportunities ahead and even beyond this year, I mean I think I'm not sure if this is broadly known, but I mean, most of the products that we're developing for our customers, I mean our multi-year efforts, right. And so, we've got pretty healthy outlook of some exciting products that are coming that are in development today, but won't be launching for a year or two.

And so, yes, we're very excited about the roadmap and then continued content expansion. But yes, no, I think, it's fair to say that we're pretty happy with the content expansion opportunity for this year.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Okay. And I know we talked about process nodes kind of to depth, but I just was looking at my notes and I thought maybe I'd try to ask a similar question, maybe a little different way. Obviously, you don't go back and redesign, existing products that are on 55, you wouldn't go back and redesign those necessarily. But like what would we watch for – like when would you start to pivot design and engineering on to say 28 or 22? I mean, would we be starting to see that now, and those products would be for sale in a couple years, or I guess just if you could enlighten us on how that works?

<<David Biven, Director, Corporate Development>>

Yes, well, so IP blocks and test chips are being done today, right in 28 and 22. And so we feel like if you take, for instance, the codec that we're shipping today, most of the core building blocks of that codec had been imported to 22. And just to have us ready to be able to support a product like that in the future.

And so, we haven't put any time frame on it exactly when that will happen, but I think we're well positioned to make that transition when it's appropriate and we wouldn't just do it to do it right. I mean, it's got to be – it's got to create some value for the customer in terms of the smaller footprint, lower power consumption, higher performance, more signal processing content, something like that that would justify a switch from 55 to 22. Obviously, the wafer prices are going to go up. So, we have to figure out a way to provide additional value in some form or fashion to justify that transition.

And honestly, some of the products in our portfolio probably won't switch, right. I mean, you could see amplifiers, haptics and some of the power conversion control like devices staying in 55 for some time. And so, I think codec is probably the safest bet in terms of when that switch is over. And I think it's probably sometime over the next few years but we haven't forecasted any specifics before that.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

And a question I haven't asked in a long time, and hopefully it's not off the mark, but I mean, what would the move to 2022, would that kind of push you into pretty firmly on to 12-inch wafer? Or do you even really care, I guess at the end of the day what wafer your products are coming off of?

<<David Biven, Director, Corporate Development>>

Probably falls into category of that. And I'm not even sure exactly with our foundry partners, what the answer is, but yes, I'm not sure that we care too much. It's going to be with the founder partners that we're working with today. So, I don't think that's a big problem either way.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Okay. And a question I should've asked earlier, and I didn't if we're thinking of any customer if they were an established customer for you excuse me, established customer for you, but maybe a new customer to, let's say Lion, and for the Seminis Power chip, for thinking about the – if things, the sun, moon and stars line up for you you've got the relationships, so they've got the trust in you, they understand your stuff, doesn't fail. I mean you're going to deliver a hundred widgets if you promise a hundred widgets, all that stuff.

What would be the sun, moon and stars timeline from when you engage with them to when you would start to see a design when it starts to see revenue? I mean, is it a multi-year process because let's say you've got that relationship existing or is it going to be because it's Lion because it's new, we need to vet that out, like as if they weren't part of Cirrus Logic?

<<David Biven, Director, Corporate Development>>

Yes, I think so I would say, historically Lion has moved incredibly fast in terms of new product development, I would say moving forward, we'd like to keep them as efficient as possible while also kind of putting some of the Cirrus processes around it that works very well for sure on the supply chain side. So, I would say moving forward from a customer engagement standpoint, again, the customer traction that they already have is pretty impressive. And I think we only accelerate that in some cases, if, and when there's been any hesitancy to work with a startup, now that's out. And they already have a relationship with them, they've had a relationship with us for quite some time. So, I think there should be a very little delay in terms of any of the customers that they're already engaged with.

Moving forward on a product development cycle, I think, it's probably similar. I mean, they are in different process nodes. They are kind of in more mature process nodes than some of what we're working in today. But I think the cadence of new product introductions will probably be very similar to what we're doing today. They've got a very healthy roadmap. We should accelerate that a little bit. So, we're excited to see some new products come out later this year, and early next and we'll continue to build that product line as we move forward.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Okay. Thank you. So maybe the next question I'm curious there's sort of that debate, that's always kind of bubbles up from time to time, custom silicon versus sort of merchant or off the shelf standard silicon. I think you guys have talked about your camera controller being a little kind of skewing a little more toward custom. I think sometimes people forget that a lot of those ASSPs those stuff that's a little more standard a lot of times can carry some of the best margins in semis.

And so, I didn't know, kind of what your philosophy was, maybe this was the right way to ask the question, but like overtime are you trying to steer your customers to more standard kind of off-the-shelf type parts that theoretically might carry a higher margin? Or are you kind of more focused the other way, just trying to add value where you can and if it needs to be customed to make anybody happy? You go that direction. Just really kind of a philosophical question.

<<David Biven, Director, Corporate Development>>

No, it's a good question. I'd say we're focused on growth, right? And we're not afraid of customization. And so, I think for some customers it's very easy to justify the return on investment, given the volumes that they're shipping to do a single custom ASIC just for them. For a lot of other customers, it is a mix, right? I mean, you want to be able to develop something. And what I would say, even in the open market products they kind of have a custom field to that. We never built products without a significant involvement from a lead customer, even if we're going to sell that product to somebody else, maybe one lead customer, maybe a handful of lead customers, but the product definition is never just a marketing guy, splitting out apart and let's go see who we can sell it to, right.

I mean, so this is even in the scenario where we're going to sell this in a broad market, there's a heavy level of engagement and feedback from the customer to help drive that final product definition. So, I would say, I don't think we prefer one direction or the other open market versus, full custom. But we absolutely are religious about having a lead customer regardless of how we sell that product long-term.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Got it makes sense. I mean, I'm just always curious about that. I had that debate with lots of companies, so some you could be with and some. And I should have asked the haptics question earlier. I'm sorry if I'm bouncing around a little bit, but guys have done really well there. I'm curious again, kind of high level where you see future opportunity for added haptic content. I mean, is it – it could be in notebook. I mean, it could be – I don't know where else you could take it or either other functions and features within where you already own with your haptics.

<<David Biven, Director, Corporate Development>>

Yes, no, I mean, it was really exciting to talk about haptics initially as one of our first kind of non-audio big wins. And certainly, the smartphone space is the big winner for that technology today. We think there's additional growth opportunity in the Android space for that product. But you're right, I think, PCs is a great example. I mean, that's making a higher performance track pad and a thinner type form factor is an example of where our haptics could play. AR/VR wearables, certainly offer additional opportunity for the haptic side.

So, I think we've been very successful with that product, but I think, certainly have between Android, PC wearables and AR/VR, I think, there's, meaningful opportunity to grow that business moving forward.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Thank you. Since you brought up Notebook, I mean, we've got – we've teased it a couple of times during the conversation, but I mean, you guys have for the top five Notebook OEMs, I believe in the fold. Given that business, I mean, it's come up enough in this conversation that people should to get the sense as this is a growth factor for you guys looking forward. I didn't know if you could talk about – I mean, and look, I mean, we all know, I should remind everybody on the call, I mean, the two big verticals for semis, or handsets and PCs, so these are massive over half all semis right in the world.

So, I didn't know if there's any way that you – or any work you guys have done or how you think about how you size that notebook opportunity? And I mean, I would assume your model is dominated by handsets for the foreseeable, but I didn't know if maybe I'm wrong. I mean, maybe notebooks is going to come on that strong. I know you talked to – you hinted a little bit at the content that you could see inside of a notebook, and maybe you could compare that versus what you could see in a handset, or I don't know some color around that?

<<David Biven, Director, Corporate Development>>

Well, yes, I think we've been pleasantly surprised at the success we've had in the notebook space. And as you mentioned, we're in four of the top five OEMs and really, we believe that’s because I may have mentioned this earlier it's because the challenges that they're dealing with look like smartphones, right? And so higher performance, audio, higher performance haptics, we've had some reasonable codec wins in some of these devices. Which all of that together is pretty interesting for the company, by itself.

But once you layer in the power management opportunity that Lion brings to the table, it's a pretty interesting portfolio of products for a decent size market, right. so yes, I don't think we've broken out exactly what that business is today. And I don't think we plan to kind of moving forward, but it's becoming meaningful enough that as it's an exciting area for us, and it'll be a focus moving forward, especially as we start rolling in the line of technology in the next quarter or two.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Okay, thanks. And I just glanced at the clock. So, we've got about a minute or two left. Maybe I'll ask the capital allocation question that Thurman loves. Obviously just close up the Lion deal obviously accretive, strategic, it sort of checks all the boxes, right. So, I guess, your balance sheet still looks great, right post deal. So, I didn't know how we should think or how you were thinking about cap allocation, priorities, kind of looking forward. And yes, I guess that's really it [indiscernible].

<<Thurman K. Case, Chief Financial Officer and Vice President, Finance>>

Well, even with the acquisition of Lion, and even the investment in Globalfoundries and capacity discussion we had already, we still have a strong balance sheet. And our strongest cash generation quarters are ahead of us they are in December and March because of the timing of our sales and where our revenue seasonality looks like. So, with that that then doesn't keep us from looking at anything that we possibly could. And we have the ability to access the debt market if we wanted to get something larger.

As far as share repurchases, we would say, we think that we're a good value. And we would be still looking at that on an opportunity basis, on a quarter as a way to continue to return things to shareholders. And then I mentioned acquisition M&A, so I'll kind of hand it back to Dave and says what he does and he can kind of talk about a little bit and give a little color on that piece of it. But certainly, those are all in play for us.

<<David Biven, Director, Corporate Development>> 0:00:37

Yes. And it looks like we're running out of time, but for sure, as Thurman mentioned, I mean the Lion acquisition is fantastic for us. I'm really excited about that, but we still have a very healthy funnel of companies that we're talking to, we would love to find another one just like them to do in the future. So, that's still our first priority. But outside of that, as Thurman mentioned, share buybacks are certainly an opportunity as well.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Right. Well, listen, it's been a lot of fun. It's always great seeing you guys. Thanks Thurman, thanks David for taking sometime today. I know you got a pretty busy calendar, at least today. I know about it. Just seeing your sign-up stuff. So, I like to get back to it. But again, great seeing you. And thanks a lot for carving out some

<<David Biven, Director, Corporate Development>>

Yes, thanks. Really appreciate it.

<<Rick Schafer, Analyst, Oppenheimer & Co., Inc.>>

Have a good day. Take care. Good luck.