Deutsche Bank dbAccess Technology Conference

Company Participants

- Chris Evenden, Director IR

Other Participants

- Ross Seymore, Analyst, Deutsche Bank Research
- Unidentified Participant, Analyst, Unknown

Presentation

Ross Seymore {BIO 20902787 <GO>}

All right. Thanks to the more than a few in the crowd that are making it to the very end of the day. And we appreciate Chris from NVIDIA coming in from the IR side to talk us through their story. No presentation today. We're just going to go straight into Q&A. And to the extent you do have questions, as I've said 17 times today, please wait for the mike coming so that those on the webcast can hear you.

So one way I've been starting off. And it's a little more specific for you guys than some of the broad-based analog guys, et cetera. But we've been starting off asking questions about current business conditions. And generally, what you're seeing. And the compare and contrast that might help frame it, because I know you can't really change any guidances, in the last couple of years, the back half of the year has been generally disappointing for most companies, as business has gotten a bit choppy, or you could talk about it from a seasonal perspective. But either way, how are you seeing current business conditions versus what we've seen in years past in the second half?

Chris Evenden {BIO 18934997 <GO>}

So we're in a number of businesses. So I'll try and take that by segment. So if you look at our GeForce business, our consumer graphics business, there are two very different dynamics that operate here in that market. On the desktop side of the business, that's chiefly a gaming business. And that seems to be -- I was going to use the word immune. But that's probably a strong word. But right now, it seems to be, it's still growing very strongly. It's immune from the PC malaise, is what I was going to say. And because it continues to grow strongly, ASPs are growing. And that market is continuing to do very well. PC gamers still want to play games.

The other side of that business is the OEM business, which is largely notebook graphics. And that's weak, like the rest of the PC notebook market is weak. And of course, it's all consumer. So we're very exposed to the consumer side. And if you

look at the numbers on the PC market, no surprises there. The consumer is doing worse than commercial. And obviously, we're feeling that, just like anybody else is. And so that is netting out. Year on year, revenue-wise, it's approximately flat. But of course, the profits are going up because the gaming business is much more profitable than the netbook OEM business.

Moving on to Quadro, which is our workstation business, that is currently looking pretty strong. We've had two consecutive quarters of strong growth. 80% of the revenues in that business are driven by manufacturing. CAD is the biggest application area for Quadro. And the manufacturing data looks pretty good. The PMI data looks good. It just took an uptick last month. And everyone knows that the car manufacturing data has been fantastically good recently. So there are reasons for continued optimism on that. The reason I focus on the market there is because we have over 90% of the dollar share of that market. So while we have a bunch of promising initiatives to try and grow the market, the dominant term in that equation, if you like, is the market itself. So it's doing pretty well.

Then our other businesses, they're small growth businesses in bigger markets. So I can't give you any extra market insight from our results there, because it's really a share gain story, like Tesla. Tesla's doing extremely well. And we can talk about that more later. But it's a small part of a massive high-performance computing market. So it's not necessarily relevant from that perspective. And ditto Tegra as well. Tegra is a relatively small part of the mobile computing market.

Ross Seymore {BIO 20902787 <GO>}

Well why don't we start diving into the main segments, then? And the GPU side is obviously the bread and butter of the Company. And we'll stick with the consumer side first and leave what you used to call the professional services business, or the PSB, before.

So in the GPU side of things, talk a little bit about the strategy there. You guys have done an incredibly good job in an otherwise challenging PC environment of not only making the margins rise. But the revenue side of the equation has been relatively strong as well. Talk a little bit about how you've been able to deliver that.

Chris Evenden {BIO 18934997 <GO>}

So part of it is share gain. So we've had very competitive products. I mean, Kepler, the architecture, the current generation of GPU architecture, is genuinely a very good architecture. So it's a better chip. And I think we fixed some of the problems we had before. And so now we're back on track. And we're at this 65% market share, which feels like a good level to be at.

Part of it is the innate strength of the gaming market I referred to earlier. It's genuinely strong and genuinely independent of -- apparently independent of the afflictions that are affecting the rest of the PC market. The notebook market, like I said, is where it is.

So the PC market, the PC gaming market, is a difficult one to measure. It's difficult to find good data from that. But we believe it's growing about 10% annually, based on software sales. Software sales themselves are actually difficult to measure, because something like 80% of PC gaming revenue now goes online, is through online. Only 20% is packaged software sales. So you can't take yourself down to Best Buy and gauge the health of the PC gaming market, because that will give you a very misleading picture of the health of the gaming market.

Some of that 80% online revenue is downloads of games, an online version of just buying the software. But an increasingly large part of it is subscriptions in game purchases, micro-transactions, that sort of thing. It's a new model of generating life from software. Frankly, the Chinese software situation forced game developers to find new ways of generating revenue, because people weren't buying software in China. And that innovation has caught on.

And you see it. I mean, frankly, you see it on the phone platforms as well. People are now used to paying $0.99 for a game, or getting a game for free. I mean, I can get Grand Theft Auto on my Shield Android gaming device for $4.99, the full version of Grand Theft Auto. So it's a very different model. And that's driving a lot of success in PC gaming. But it's very difficult to count. But at the end of the day, 10% a year seems to be about the right number.

Ross Seymore {BIO 20902787 <GO>}

When you talk about the notebook side, the ultimate consumer side going down because of the market and not because of anything specific to NVIDIA, then you have the core PC gaming side, how close are we to the level where you've started stabilizing on the notebook side. And the core gaming is all that's left in the revenue that you guys have?

Chris Evenden {BIO 18934997 <GO>}

That's a good question. It's hard to say. I think a lot of the weakness on the notebook side is driven by the fact that tablet is a better solution for most consumers than a PC. And if you're just using your PC for general computing tasks, like surfing the Web, updating Facebook, reading and writing emails, then the tablet's a much better solution for the vast majority of people. It's much more convenient, it's instant on, it's always connected, it's more portable. PC, my last laptop took over 10 minutes to boot. So that's why those general-purpose PC users are just migrating to tablets.

However, like I said before, the gamers, they have a PC for a specific purpose. It's a specialized purpose. Just like designers have a workstation for a specific purpose, researchers have a Tesla workstation for a specific purpose. It's like a destination they have in mind, rather than something they need to do. Because frankly, people have to do email and surf the Web and be on Facebook is just a function of adults in the 21st Century. I think it's just one of those background things that has to be done.

Ross Seymore {BIO 20902787 <GO>}

Kind of scary, isn't it?

Chris Evenden {BIO 18934997 <GO>}

Well apparently only adults. I've learned from my children that only old people are on Facebook. And Instagram is actually the way to go.

Ross Seymore {BIO 20902787 <GO>}

So tablets are already not cool anymore.

Chris Evenden {BIO 18934997 <GO>}

Yes.

Ross Seymore {BIO 20902787 <GO>}

So if we get the gaming side of the equation. And we'll stick with even the desktop side of things, what impact do you think the new console refresh has on that whole process? Then we can get into some of the console questions and why you're not playing in there as much, this generation.

Chris Evenden {BIO 18934997 <GO>}

It's funny. There's very little data. I went back to look at data, because we have people in the Company who adhere strongly to completely opposite points of view on how the console refresh will affect the Company. So I went back and looked at the data. And there isn't really any data on how it affects (inaudible). It's very difficult to tell, to pass from the data how it will affect it. The downside, obviously, is the PC gamers typically own 1.X consoles. They're gamers. And that money to buy a new console presumably comes out of the same wallet that is used to buy PC games and PC gaming hardware.

However, PC gamers spend $1,000 to $5,000 on a PC. They're fairly well off compared to your typical gamer. So that might mitigate that. Then there's the argument that actually, since these new consoles are very close to being PCs, actually; they're like entry-level gaming systems. So they're now within the band of gaming PCs, whereas before, they were so far below, it was very difficult to port software across because you had to do so much work. You had to generate assets specifically for the PC gamers. It's a much higher quality gaming experience.

Now you've got a sort of entry-level PC gaming experience on a console. So the argument goes that developers who before would have just developed console games will now find it so much easier to port the games across to PCs that they're more likely to see a greater amount of high-quality content on the PCs. And that would drive PC gaming sales.

So you can argue, then, both ways. Honestly, I don't know how it's going to turn out. And this console generation is going to be an interesting one, because the market has changed. I alluded to this earlier. People have spent the last seven years learning to buy software for free or in $0.99 increments. And the idea now of spending $560 on an Xbox One and then another $60 on a copy of Halo before you even start playing is anathema to a large proportion of modern gamers.

So we'll see. I mean, the pre-orders, from what I've read, the pre-orders look satisfactory. I'd be interested to see if that's just early adopters and whether it will stop or whether it will continue to evolve beyond that.

Ross Seymore {BIO 20902787 <GO>}

Yes. It's hard to figure out how much is complementary and how much can be substitution effect, because even the bulls and the bears in your Company and your prospects could argue that $0.99 games shouldn't be a good thing for a company that sells very high-end graphics -- in general. If you just talked about the predominant portfolio.

Chris Evenden {BIO 18934997 <GO>}

Yes and no, because $0.99 is typically not the only source of income for those games. Like one of my colleagues recently bought a game, a car-racing game. I think he paid $2.99 for it on the Android Marketplace. And he subsequently spent over $40 on buying cars.

Ross Seymore {BIO 20902787 <GO>}

I bought the sucker that does that.

Chris Evenden {BIO 18934997 <GO>}

Yes, I bought the same game. And I'm still racing a Prius and he's got a Porsche. So I won't take him on. But the point being that they have ways and means of extracting value from the customers. Some people will pay $2.99 for the game and decide it's rubbish and just never come back. Other people will pay $2.99 for the game, decide they actually quite like it. But they would really like that next car up. So then they'll spend $5 on that. Then they'll say, oh, now, I really want that car. Oh. But that car's part of this bundle. So if I spend $15, instead of getting just the car I want, I can get all these other cars that I sort of would like as well. And before you know it, you're $40 lighter. That's the trouble with high-bandwidth connections is that you can spent a lot of money very quickly without even feeling it.

But the point being is there is funding for high-end games, even at a $0.99 entry level.

Ross Seymore {BIO 20902787 <GO>}

Right. Yes. And I'm not arguing about the funding side. I was more taking the opposite side, that many people would have said -- leave Tegra out for now -- but that devices like this, where you can play games, like you said, on your Shield device, for $0.99, you can play Grand Theft Auto --

Chris Evenden {BIO 18934997 <GO>}

Oh, I see what you're saying. It would compete with our PC games.

Ross Seymore {BIO 20902787 <GO>}

This should have killed the PC games. And clearly, your PC game market has actually done quite well. So a similar analogy, I think (inaudible).

Chris Evenden {BIO 18934997 <GO>}

There are two different types of gamer, right? So most of those $0.99 games are casual games. Now, we are starting to get some decent high-end games now for that sort of entry-level price. But it's a different sort of experience. It's a lean-back as opposed to a lean-forward experience. People used to talk about that. And PC gamers are fiercely loyal to PC gaming, the mouse-keyboard interface. You'll hear they'll rather die before conceding that that's not the best interface ever developed for playing games. And they're very loyal to that.

But as I mentioned earlier, they'll buy other gaming platforms as well, because PC gamers are gamers. And PC can be their favorite platform, probably the one that they invest the most in. But they will, they'll have iPads. They'll have the latest Android phone as well. So I'm not sure how much cannibalization you get from that. You'll see people doing both.

Ross Seymore {BIO 20902787 <GO>}

So moving back to the original part of the topic, get back to the game console side, you guys played some roles at the IP side of things, more so than actual silicon, in prior generations. This time it's gone to the AMD side of the equation. Why did that happen? Why did you not focus on it as much?

Chris Evenden {BIO 18934997 <GO>}

I think that's really a good question to ask the console manufacturers. There's reasons to be in the console game industry. The danger of participating in the console industry is it causes you to lose focus on your core markets. So there are a lot of reasons about why you would want to participate; there are a lot of reasons why those companies would choose us or AMD. And I wouldn't want to speculate on that.

Ross Seymore {BIO 20902787 <GO>}

Was the architectural change to looking more like a PC and integrating how AMD calls it as an APU, putting the CPU together with the GPU into a single die, something that you guys have the GPU side. But you don't have an X86.

Chris Evenden {BIO 18934997 <GO>}

That is true. We don't have X86. We have our own. So we have Tegra. And so again, it's really a question for Microsoft and Sony. Did they want specifically X86? Is that part of their story?

Ross Seymore {BIO 20902787 <GO>}

What if we switch over to -- you talked about gaining share was part of the drivers that you had, going back to about the 65% level with Kepler involved. How do you view that dynamic, going forward? Is this a steady state and now you're kind of more limited to what the market itself grows, or do you think that maybe with your competition focusing more on the game console side, there's some more share you could find?

Chris Evenden {BIO 18934997 <GO>}

I think, if you take a step back and look at where the market is, it feels pretty stable at about this level. If you zoom in close, obviously, we're fighting tooth and nail for every single design win. We're fighting aggressively at every OEM. We're fighting aggressively in the channel. And we're working very hard. And so you'll see, they'll win some wins, we'll win some wins. And there's an awful lot of backwards and forwards.

It's an equilibrium. But it's a very dynamic equilibrium when you zoom in. And I think sometimes people try to zoom in too much. And they try to have conversations with me about one OEM or this OEM or that or the other. And I think, when I have those conversations, I try very hard to make sure that we're not mistaking the wood for the trees and try to stay focused on the big picture. So step back, I think 65/35 seems like a good level.

You know, AMD has worked very hard on their, aggressively with their software bundling promotions. It's hard to imagine that didn't have any effect on share. But we certainly didn't ever feel we're in a position to ever have to adjust prices, despite the fact they were giving away $240 of software with some of their graphics cards, which is an extremely expensive promotion for them to run, even though they're not paying $60. They're probably paying a significant amount, given the cost of the GPU in their systems.

And they've got some new products coming out in a couple of months. We feel that we've got a pretty good bead on where they are and how we would counter that. And of course, at some point, we'll have new products. And again, it's backs and forths, backs and forths, fight, fight, fight. But at the end of the day, probably stable.

There will be some ups and downs. But at a 20,000-foot view, I think it's probably a fairly stable share.

Ross Seymore {BIO 20902787 <GO>}

From that same 20,000-foot view, without asking you to preannounce anything, of course. But when do you think their response to Kepler comes out. And when does your subsequent architecture after Kepler come out, just roughly speaking? Middle of next year, early next year?

Chris Evenden {BIO 18934997 <GO>}

Well I think their response comes out in the next few weeks, is my understanding. So we'll see where that puts them and just whether that's a significant advance in their current architecture and what that does to the proprietary lineup. And I won't talk about our product.

Ross Seymore {BIO 20902787 <GO>}

I had to try.

Chris Evenden {BIO 18934997 <GO>}

We're not going to announce them until we announce them, yes.

Ross Seymore {BIO 20902787 <GO>}

Right, right. What about the -- just a bit ancillary to this discussion. But it was pertinent not too long ago. The shrinking side of the equation. These are not small die. And the challenge in getting access at a reasonable price. And some of the arguments about partnership versus customer relationships with some of the foundries, et cetera. How important is chasing Moore's Law for you. And how do you fight against what appears to be an ever-increasing cost of chasing Moore's Law?

Chris Evenden {BIO 18934997 <GO>}

So I think it's important to realize that architecture trumps process every time. So obviously, a smaller process node is generally better than a larger process node. But the architecture has a much more significant impact on the performance. In fact, the software you put on that architecture has a much more significant impact on the performance. And I can point to numerous examples in the past where Art or ATI were ahead in process node but behind on performance. And you can see that throughout the history of the companies' competition with each other.

Having said that, moving to new process nodes is valuable because we can add transistors and we can find new ways to differentiate and add value to consumers. As long as we can find ways to make the consumer experience noticeably better, that moving to a smaller node is a good thing. So we'll keep doing that. But meanwhile,

we innovate on the same process node as well. And so you can improve your architecture, you can come up with completely new architecture, or you can carry on tuning your existing architecture to make it more and more efficient -- either more compact, more power-efficient, more performance -- and work on all those dimensions at once.

So the good thing about not moving so fast from one process node to the next is it means we don't have to re-spin our chips so often. We would want to move nodes at some point, because at some point you want to move to a new node to introduce a new step function in graphics functionality and features. So slowing down the movement from node to node could actually be a good thing for us, because it enables us to reduce those node transition costs.

Ross Seymore {BIO 20902787 <GO>}

And I would imagine not being the guinea pig for the node any longer is another benefit as well. Let some of the other Ashcrofts and guys do that.

Chris Evenden {BIO 18934997 <GO>}

I would think we'd almost certainly have some products at the most advanced node available. It's just a question of how quickly you transition. There's not quite the same pressure. When the advantage in terms of cost and performance is not as stark as it has been in the past, then there's not the same pressure to move rapidly. And so you make a choice about which products you move and when.

Ross Seymore {BIO 20902787 <GO>}

The last question on the traditional graphics side of things is the integration. You guys used to play on the chipset side. Then that got pulled into the CPU or APU, as AMD calls it. That integration of graphics capability out of the chipset into the actual CPU was always a big concern. And yet again, over the last couple of years, you guys have grown rather nicely, whether through market share gains or pricing or what-not. How do you see that dynamic, that threat of integration at the low end, impacting your business?

Chris Evenden {BIO 18934997 <GO>}

The interesting thing is. So going back to the way I described our GeForce market before we had this gaming PC market, which equates approximately to desktops. And this OEM market, which equates approximately to notebooks, it's not quite a perfect correlation, because there are OEM desktops and there are gaming notebooks. But as a first order of approximation, it's pretty good.

Now, these gamers, they buy gaming PCs because they're playing games. It's something they do; it's part of who they are. It's part of their self-actualization. The OEMs buy graphics, not on graphics performance. But because they want discrete

graphics to differentiate their laptops. Exactly. No OEM can survive just selling an entry-level laptop. They want to sell a $500 laptop, a $600 laptop. And so on.

And so how do they justify that increase in cost? Part of it is the Intel brand, the i3, i5, i7. And part of it is integrated discrete. And so those consumers buying those laptops, the general-purpose consumers that I talked about before, looking for a utilitarian notebook. And they're buying -- they're using price as a proxy for quality. And so they're getting graphics, not by accident. That's too strong a term. But almost incidentally, as part of buying a better-quality PC. And they get some real benefits from that, of course. But they're not buying it on graphics performance. Those guys are not looking at the 3DMark Vantage scores of their $600 notebook.

It's just like if you or I were to walk into a liquor store to buy a bottle of wine. There are people out there, of course, that have a benchmarking guide, Parkers. This is a benchmarking guide for wine. But how many people do you know that walk down the shelf, going, "Well that's a $40 bottle of wine and it scores 80 in Parker's. That one's a $45 bottle of wine and it scores 92 in Parker's. So in terms of points per dollar, that's a much better bottle of wine. I think I'll buy that one." There are people like that. And those are analogous to PC gamers. PC gamers buy on benchmarks, absolutely.

But most of us buy wine based on price as a proxy to quality. So if I'm drinking alone, I might buy a $15 bottle of wine. If I'm trying to impress my girlfriend's parents, meeting them for the first time, I might buy a $40 bottle of wine.

I once gave this metaphor to Jensen, by the way. And he laughed, because I don't think he'd cook with a $40 bottle of wine. But that's an important point as well, because the reason you spend a certain amount on a PC is how important is technology to you and how much money do you have? And so some of us might buy a $700 laptop because we love technology. Others of us might realize that actually $400 is going to meet our needs just as well. And it's fine, just like people buy expensive cars and cheap cars. A Toyota Camry -- at the basic function of car, a Toyota Camry is just as good as a BMW car. But there are still those of us who like the idea of owning a BMW, even at twice the price.

So this is a very long, rambling story at the end of the day, just to say that these people buying these laptops are not buying them on performance. So Intel getting better graphics performance does not displace discrete graphics. There are things that could displace discrete graphics, like the bomb cost pressure from touch screens is perhaps one thing that might displace discrete graphics. But graphics performance is not one of those things.

And we've been having this debate for over 10 years. I can remember when I first started in the graphics industry, which was well over 10 years ago, having this debate with a journalist way back when about Intel was just launching, I think, 945G chipset. And that had much better graphics. And this was different this time. And that was it

for entry-level discrete graphics. And it's a recurring debate. And the reason it never happens is because they're not buying on graphics performance.

Ross Seymore {BIO 20902787 <GO>}

Right. Well let's switch gears over to the Tegra side, smaller as part of your business. But probably larger in the frequency of questions you get on that. In the recent quarter, it's a July quarter end for you guys, that was a tough quarter. We know some of the reasons why. You've guided up significantly in this next quarter. Some things are ramping nicely. But you're still down between the two quarters, 50% to 70%, roughly, year over year. Talk a little bit about this transition away from Tegra 3 into Tegra 4. And I guess the biggest-picture question that really comes out of this to me is how do you win in this game when even the pseudo-incumbents, from a merchant perspective, don't seem to be getting the best of margins coming out the other side?

Chris Evenden {BIO 18934997 <GO>}

So there's a bunch of questions there. So let's do the post-mortem and then how do we win?

So the post-mortem on this year is Tegra 4 was too late. And that, obviously, meant that we were disadvantaged in competing for the big tablets, the important tablets, because we were competing with Tegra 3. Now, the reasons for the lateness, some of it was just sometimes products are late. And some of it was deliberate in the sense that we decided that we wanted to double down on Tegra 4 and Tegra 5. So we made sure that if we were going to miss the deadline for Amazon and Google with Tegra 4, at least Tegra 5 would be on schedule. And at least Tegra 4i, we can bring in and accelerate that to market, Tegra 4i being the integrated product, the mainstream smartphone product.

And so what you've seen now is we've been sampling Tegra 4i since February. We've started sampling the Project Logan, which will presumably become Tegra 5 in the fullness of time. And we actually demo'd that as early as July. And we've been sampling it since August. So we're on a very good schedule now. So we're in the right place now to compete for the Amazon and Google tablets. And the Company's very, very focused now on bringing Tegra 4i to market and bringing Tegra 5 to revenue as quickly as possible. You know, the software team's very focused on that, the hardware team's very focused on it, the sales team's very focused on that.

So yes, it means certainly the first half of this year is very difficult from a revenue standpoint. But it was a difficult choice. But it was the right thing to do, because it puts us in the right place for future years. I mean, we could have doubled down on Tegra 4 and probably still been too late to win those things. Then perhaps Tegra 5 would have pushed out and been too late to win the next year. Then you're really in trouble. Then you're behind and playing catch-up forever. This way, we actually have really good products available at the right time to compete for those wins.

Ross Seymore {BIO 20902787 <GO>}

So I guess the second part of that question is, let's assume Tegra 5 hits the market in time for the Google and the Amazon refresh, et cetera. Is the market for standalone apps processors big enough to warrant all this investment?

Chris Evenden {BIO 18934997 <GO>}

Oh, yes, yes. So if you look at Android, Android is all about being ubiquitous. Android is everywhere. We're going to see it everywhere, in all manner of devices, not just phones and tablets. We're going to see it in cars, we're going to see it in TVs, we're going to see it in set-top boxes, probably a whole bunch of categories that I haven't thought of yet.

In many of those applications, visual computing will be important. And we are, at heart, a visual computing company. And that is the value we bring to our customers' products. And the differentiation that our consumers can see. So wherever Android intersects with visual computing, that's where Tegra can succeed. And so that's phones, that's tablets, that's all the devices I mentioned. That's a very large market -- so large, in fact, that if we were not to succeed in phones, Tegra can still be a success. I should emphasize that we're wholly committed to succeeding in phones. And we've got a great chip with Tegra 4i.

How can we succeed? Well if you look at -- you talked about the state of the merchants and if there's a market for application processes. You said it's not a very attractive market. The PC market doesn't look like a very attractive market, either, yet our PC business, our PC gaming business, is extremely attractive -- 10% a year growth, mid-50s gross margins, highly profitable, highly defensible as well. Because we put a lot of software around that, actually, in terms of drivers and also a lot of work we've done with the ecosystem. We have hundreds of engineers that just function to work with developers to get the latest features -- our features -- into their games. So we have this very defensible market there.

Now, let's see if we can replicate that in the mobile computing market as well, because then we can win in a very specific segment, a segment that we have unique skills and experience in. And one that would likely be defensible and grow for the long term as well.

Going head-to-head with some of the competitors across the whole phone and tablet market would seem to be suicide, right? So we have to find a defensible segment where we have unique advantages. And this intersection of visual computing and Android is specifically where we can make gaming matter. I think that's a good place for us to be. And to your point, it's certainly big enough to profitably fund the development of Tegra.

Ross Seymore {BIO 20902787 <GO>}

You've been going a long way. But let's open it up for questions from the audience.

Unidentified Participant

Hi. Just one thing I'm curious about is the difficulties the market has had in general in integrating communications, LTE in particular, into the processor in the mobile space. It's something that you've managed to do now. And certainly Qualcomm have done. But it seems to be something that has been a lot harder than I think a lot of people had a feeling would be. So I want to understand, really, why that was so hard and whether that gives you a sustainable advantage, given there's really only one other competitor now that has that.

Chris Evenden {BIO 18934997 <GO>}

So I think we are in a pretty good position right now. We have a 3G voice and data modem that's been shipping for a couple of years. We have a 4G data modem that's been shipping for over a year. We have a 4G voice and data modem that's currently well on its way through qualification. We have a 4G data modem that's likely to be out of qualification in the next month or so. So I think we're probably in pretty good position. There's a lot of claims and counterclaims from other companies. So it's difficult to know exactly where everyone is. But it feels like we're right at the front of the pack, at least.

I think, five years from now, none of this will matter. And 4G will be about as important a part of your buying decision as the WiFi manufacturer is today, its connectivity. It's so important today because there's one company that does it. And so it's focusing everyone's minds. So I think it will be an advantage for us.

In fact, even more importantly than it being an advantage for us, it will cease to be such a headwind. If you think about it, we operate just in the high end of the market, solely in the high end of the mobile computing market. And to operate in that market without access to an LTE modem is a tough proposition, because LTE becomes essential to high-end phones. And so the fact that we've had any success at all, I think, has been good progress for us.

Unidentified Participant

(Inaudible-audience question).

Chris Evenden {BIO 18934997 <GO>}

So the question was, can we talk about the integration into the chip? I don't know if I want to go into any great detail about the technical challenges. I think the issue is not so much the integration. But the LTE, it's more complex than a lot of people would happen to believe. And we saw that recently. Broadcom bought Beceem. Beceem's a WiMAX company. WiMAX has a lot of features in common with LTE. But it's not LTE. And it's a bigger step from WiMAX to LTE than I think they were anticipating, hence last week's acquisition of Renesas.

But the integration itself, I don't think there are any particular hurdles there. I think it's actually just building an LTE modem. And it's computationally a very intensive task. And it's very complex in terms of, particularly, handling the voice calls in the handheld. So there's a lot of work there that needs to be done.

If you look at the integration, it took us, between us acquiring Icera and actually sampling a chip with an integrated LTE modem was 20 months. So we feel pretty good about that. So I think that's testament to the skill of the engineers that were involved. But like I said, I think the big -- there's obviously technical challenges in integrating products like that. But I think the big technical challenge is the LTE modem itself.

Ross Seymore {BIO 20902787 <GO>}

Any other questions from the audience? We only have about 2 minutes left. So a little bit different question. But strategic question in nature. With Shield getting into the hardware side a bit and some chatter earlier this week about potentially having your own tablets, NVIDIA-branded tablets, talk a little bit about the thought process behind getting into hardware on one side, confirmed. And maybe even one way or the other.

Chris Evenden {BIO 18934997 <GO>}

So rumors, I can never comment on rumors. I'll try and be quick since I've been so rambling so far. On the Shield side, there's a couple of things about Shield. We want to sell a lot of them. We want to make money by selling them. But also, the other way Shield succeeds for us is by helping us build this fortress of gaming inside the mobile computing space, because it's a bridge, if you like, between our strength in PC gaming to our soon-to-be strength, I hope, in mobile gaming. So it's a great device.

Now, why do we build it ourselves? Generally, I'm pretty conservative about the Company's capabilities. But I genuinely think there's no other company out there that knows as much about gaming hardware and software as we do. We've got experience in mobile, in PC, in console markets. We have hundreds of people who spend their entire lives working directly with game developers. We've got 20 years -- 20 years experience in this market.

And we have a huge brand with gamers. Over 70 million GeForce users today know who we are. Brand awareness, brand preference, particularly in countries like China, are huge. We have over 90% market share in i-cafes in China, for example. So there's a big, big brand equity that we can leverage as we launch our own product.

So if it can succeed, I don't think anyone's more likely to make this product succeed than we are. And it's a niche product. We're not going to sell tens of millions of units this year. So I don't think it's going to offend our existing customer base. They see it as a very specific niche. And they understand, or we've communicated to them

carefully before the launch to explain how it works. So yes, I think we're the right people to build this product.

Ross Seymore {BIO 20902787 <GO>}

Great. We are -- you can ask a question afterwards, because we are on time at the end of the day. So thank you all for making it to the end of the day. And Chris, thank you for bringing us home in a strong fashion.

Chris Evenden {BIO 18934997 <GO>}

Thank you.

Questions And Answers

Operator

There are no questions.