Oppenheimer Technology, Internet & Communications Conference

Company Participants

- Chris Evenden, Senior Director, IR

Other Participants

- Rick Schafer, Analyst, Oppenheimer & Company
- Unidentified Participant, Analyst, Unknown

Presentation

Rick Schafer {BIO 4188965 <GO>}

I guess, we'll go and get started. And I'll just tee it up with a few questions, get things started. Maybe start talking about the core GPU business first, I guess, NVIDIA took tremendous share gains, especially in notebook over the past couple of years. But now your shares, at historic highs, in a flattish PC vertical -- basically, I guess, in a flattish PC vertical, how do you grow that business without additional share gains, or has share gains particularly kind of stabilized?

Chris Evenden {BIO 18934997 <GO>}

So I'd certainly go with the idea that we're at fairly high level historically and the business has still got plenty of growth potential there actually. For a start, ASPs are increasing. We're growing ASPs quite successfully. And secondly, the business itself is growing. So -- sorry, the market itself is growing as well. So the figures that we have suggest that the PC software market is growing about 10% a year. And we obviously grow along with that. PC gaming, PC gaming is one of those funny markets that's quite difficult to analyze because intuitively you're going to gain stock for one of those organizations.

And you see the very little PC software on the shelf. But something like 80% of PC gaming software revenue now is online, whether it's software that's bought online through marketplaces like Steam or whether it's downloads, online subscription such as WarCraft or increasingly you're seeing these premium models, free to play models where people will actually pay in-game purchases or downloadable content. And so a lot of the revenue happens almost invisibly and it's actually quite difficult to track. But organizations that do tell us it is growing about 10% a year and that maps to the growth of PC gaming hardware as near as we can estimate it from figures we have and figures from the industry.

So overall, the whole market is growing, ASPs are growing. Then, the other interesting thing about GPUs if we do generalize the question to GPU growth, of course, we've got Quadro and Tesla and GRID in there as well. And these are three further ways of monetizing our IP and specifically our GPU IP. And Quadro is a good business, growing at probably the rate in the market. We have about -- well, according to ITC, we have 82% unit share. But we have we estimate over 90% dollar share. And so anyway, we can grow that by growing the market and we have a bunch of ministers in place to grow the market. And if the market grows and recent data -- the PMI data seem to be fairly positive on that and very encouraging in fact.

So we're encouraged by the trajectory of Quadro from here on out. And Tesla as well is proving to be a really interesting business; you're probably familiar with Tesla, our high-performance computing business. And that's -- it's being -- we've been working on that for, I don't know, probably five years now actually. But it really feels that we're right about in place now where we're going to get some sort of an inflection point. The gap has always been supporting enough code in our software applications out there for it to be sort of generally interesting to developers.

So we've had big -- despite installations like, for example, the Oak Ridge National Lab's installation was some tens of millions of dollars of revenue. But the background level of smaller applications has been quite small. But Q2, what you saw in Q2 was, we were hairsbreadth away from a new revenue record and the notable thing about that was that there were no -- none of these large deals. And it was actually through this background level of application-driven purchases. And that's encouraging for a number of reasons. Firstly, because it's sustainable, yes, sounds like it's fair more on a steady (inaudible). Secondly, it's a much lowered hutch business than those big supercomputer installations. So it goes primarily through the OEMs, it's basically a researcher or a scientist who is sitting there thinking, well, I want to do some molecular dynamic modeling. I know that NVIDIA accelerates all the codes that are used. So I wanted to be accelerated with Tesla, rather than they go to IBM and says, are those tests accelerated machine. And --

Rick Schafer {BIO 4188965 <GO>}

So (inaudible) less about supercompute, does that --?

Chris Evenden {BIO 18934997 <GO>}

No. It's still supercomputing. But it's not necessarily -- so there's like massive installations like Oak Ridge National Lab and then there's a guy with a department-level clustered university or there is a pharmaceutical company that has a small -- there are small supercomputers as well, which probably come up with a new name for them mini supercomputers or something. But -- and so it's -- that side of the business is huge, potentially huge. And I think if it's driving itself as it appears to be doing right now, we can scale much better that way. It's great getting business like Oak Ridge National Labs there, marquee wins, they generate a lot of other wins as well, because a lot of other people when they're developing quota tight on the supercomputer, Oak Ridge National Labs, they'll want to develop it and test it on their own systems.

So we generate a lot of business and in that sense to be worth doing. But they're difficult to scale. We just -- you don't have a staff to service 10 TITAN Card wins simultaneously whereas 100 of these small wins, absolutely, because IBM and HP and Supermicro and those guys will service that themselves. So that's been the biggest gating factor on the supercompute ramp on that side of the business, just that the software availability actually is the gating factor because it's not support, it's not -- yes, okay, because that is -- having the broad software support means that this broad base of engineers and scientists can actually just go out. It's no longer a debate about -- you no longer have to introduce GPU acceleration to these people.

Rick Schafer {BIO 4188965 <GO>}

Have you ever considered GPU acceleration?

Chris Evenden {BIO 18934997 <GO>}

That's not a conversation we have to have. Two years ago, that's certainly a conversation you have to have and it will probably be follow-on with, let me help you port your code, right, whereas now the code is ported, right. So a molecular dynamicist has that the real job title, someone doing molecular dynamics, NOVA, VMD, NAMD, AMBER, these are all codes that they use in their applications and these are all run and are all accelerated by GPUs.

Rick Schafer {BIO 4188965 <GO>}

Okay. So if you looked out three years to five years for something new, I'm just trying to get a sense of how big Tesla could be now that you've got the (inaudible) and sort of some of the stumbling blocks or hurdles or whatever you want to call them sort of out of the way? I mean is this a $1 billion kind of business (multiple speakers) or --?

Chris Evenden {BIO 18934997 <GO>}

It's really difficult to value it, because what we're doing is a different way of something that's already done. So there are I think something like 10 million servers a year purchased and not all of those would go to parallel computing. So I think we came up with a $2 billion TAM will be the ones that we could attack and so we'll get some sense to that. But yes, how big the business will be, I think it's on a good growth trajectory now. I mean I'm very encouraged it was -- they had a good quarter in Q2 and I think it was kind of ongoing for this year. So the order of $200 million last year and it will be in the high end of that this year probably.

Rick Schafer {BIO 4188965 <GO>}

Okay. Then, back on GPU for a second, I mean I know your biggest competitor in the discrete graphics space has been making noise recently about potentially taking some share this year and next in desktop and notebook, I think. How credible is that claim that they would -- and where would that come from if you think it is credible, is it mostly kind of low-end desktop and kind of competing with some of the integrated graphics stuff or --?

Chris Evenden {BIO 18934997 <GO>}

So share is interesting because you can't get market share data. Right now (inaudible) publishes market share data and data is good. But you have to bear in mind that it's unit share and the dollar share is very, very different because it's a very flat triangle if you like. If you look at the market, there's a lot of low value. So a lot of -- it can look like there are significant share changes and I think Q3 last year, we actually lost unit share while gaining dollar share. You could see the opposite. The other thing to remember about that data is that it's sell-in data as well. So it fluctuates a lot quarter-to-quarter as inventory getting out of the channel.

So having said that, it's still data and something to look at. I wouldn't look at it on a Q-by-Q basis, I would look at it on an annualized basis. Actually, we pay unfortunately for some market research data on sell-out data, proprietary data and that actually is very flat (inaudible) the annual cycle cadence of the sell-in data. But share gain. So I think AMD has done reasonably well on the CPU side of things recently and that certainly helps the GPU attach. But otherwise and I think, for all these reasons I just mentioned, I think our share was probably surprisingly high in Q1 if you like at 68% and 65% on notebook is probably what the risk share really is to be honest with you in terms of this in and out of the channel fluctuation that we're seeing.

And there doesn't seem to be any major reason why share should change hands, particularly through the balance of this year, I think. And so we have visibility into notebook design wins, for example. And we feel pretty good about that. I don't think there is -- I don't think share is going to change hands, particularly -- yes, there will be some SKUs that change hands and some people like to engage in debates there, oh, you've got this SKU or you've lost that SKU. But I think when you get -- when you start getting down to that level of granularity, you lose the big picture.

And there is no reason why I'd expect shares change hands, particularly. Nobody has been particularly. I mean, I think it's been notable in the last few years the lack of pricing pressure in that space and historically we've seen pricing pressure in GPU, I mean, it seems like -- may be it's been more skewed to lower end. So you haven't seen as much of it. But I mean, I guess, it sounds like you've kind of predicted a continuation of that of a pretty benign pricing environment I mean as anybody and it's been surprisingly robust. AMD came into the market with this very aggressive bundling strategy they've been promoting. And we actually didn't have to react with pricing on that. We anticipated we would. But we didn't have to react. But I had actually very little effect on share despite by the reason we act. So it's been a pretty benign pricing environment. I mean, we'll see how that goes forward. But it's been much more rational for a few years, yes, actually it's been good. Good.

Rick Schafer {BIO 4188965 <GO>}

That leads me to the gross margin question. I mean, you guys have done a great job expanding gross margins, I think 400 basis points, 500 basis points, just in the last four quarters, five quarters. But my math is right, maybe five quarters or six quarters.

Chris Evenden {BIO 18934997 <GO>}

Yes.

Rick Schafer {BIO 4188965 <GO>}

(multiple speakers). Now, I'm just curious, I mean, is this a sustainable level now we're up here. And is it -- what do you think drove that, I know mix probably had something to do with that.

Chris Evenden {BIO 18934997 <GO>}

Yes. There are a lot of factors in there. I mean, it's a good question because there are a lot of factors in there. I mean, the previous peak in our gross margins was I think 46.3% and that was some years ago before the recent climb. And that actually goes back longer than five quarters, it goes back probably two years, we've been climbing that. And that was at a time when AMD has very weak products and the market was very strong. And these products are okay now, I think the products are better. And the PC market is well known to be fairly weak and yet, we're 10 whole points higher than our previous record. And you're right, some of it's mix, Quadro has grown a lot, particularly since then. (inaudible) is very profitable business for us. Some of it is mix within GeForce itself actually. So the dynamics of that market have changed, notebook is weak, the whole notebook market is weak. And so that notebook business is smaller relative to the desktop gaming.

And PC gaming is again as I said is a strong business. We've got a very, very profitable, healthy, growing business within the PC market. I don't know how many companies can claim that. And whether you're a semiconductor company or a hard drive company or whoever, right, the reality of the gaming is, it's a very resilient business that's continuing to grow and is very successful. So those are probably the two (main hours of that is) growing that. Then, of course, there's a lot of we've done in terms of running the business more efficiently under the hood, reducing waste. Doing things like, simple things, when you build a chip, the further into the process that you catch this faulty, then more it's (costlier) by that point. So doing as much as you can to catch as many as you can early on, things like that.

All these things are structural things that have improved gross margins significantly over time. So an ASP is a business loss we said. So I didn't know that there is any obvious reason why that's not sustainable. Absent obvious things like price wars or things that we hope would never happen. But there's no structural reason why that wouldn't continue. The Quadro continues to grow, Tesla is growing quite strongly now and that's a huge lift on margins. GRID will be a lift on margins as that starts to contribute meaningfully. And on the flip side, I don't think netbook growing anytime soon, it'll probably be flat at best. And that's our worst gross margin business. So what we're seeing structurally point to margins that will be maintained. Now, if Tegra grows, is that what you --?

Rick Schafer {BIO 4188965 <GO>}

That was my next question, right.

Chris Evenden {BIO 18934997 <GO>}

Right. So the Tegra chip business is a little bit below copra average, not massively. But a little bit and --

Rick Schafer {BIO 4188965 <GO>}

(inaudible) the handle on the gross margin for that.

Chris Evenden {BIO 18934997 <GO>}

It's a little bit lower than the corporate average. But not much lower. So that's a drag obviously. And SHIELD, which is a small contributor of prices, that's obviously lower as well. But those things grow, that's still okay.

Rick Schafer {BIO 4188965 <GO>}

Yes.

Chris Evenden {BIO 18934997 <GO>}

One of the other things to note about NVIDIA as a company is I know that GM (inaudible) GM is a traditional way to value semiconductor companies, right. You look at the gross margin trajectory and that's when you buy and that's when you sell. Large part of our business development is semiconductor, pure semiconductor. So Shield is one them, right, GRID is another, Tesla is another as well. They -- even Quadra while we're selling boards, there is a huge software component to that as well. So it's not a chip business in the traditional sense. So as those other business -- as these businesses grow, the traditional way of tracking GM and using that as a buy or sell indicator is probably less useful, because -- if I sell, which is not a forecast -- if I sell 1 million shares this year, that will pull my gross margins down in an extremely good way, right, because I've made an awful lot of money out of selling shares. And so you have to (take more nuance) of the business I think now.

Rick Schafer {BIO 4188965 <GO>}

Right. And since we are talking about Tegra now, I mean, I guess, just starting at a high level, it's had a great growth trajectory since you guys introduced it. But it always seems to kind of fall a little short of the expectation. I mean, it just any given year -- and I know this year has been a particular struggle through the first half. I guess, I'm curious, what do you -- like is there a piece of the puzzle that's missed, I mean, it's like gaining more a full suite of like connectivity or some more pieces of that puzzle will help sell it or is it that you're relatively new to that channel, historically you were a big player?

Chris Evenden {BIO 18934997 <GO>}

(multiple speakers) actually. So I think the one you miss as we tend to -- we've done a (inaudible) expectations, I think we set expectations too highly, because if you look at that last year if we did -- if you mentioned just the chip business or the new GP -- the new Tegra FSC like reporting segment, we did $540 million or $760 million. So let's just take that first on the $540 million, that's $0.5 billion business and that's a good business, that's an extremely good business. Now, we'll continue to ramp it. This year is a more difficult year with certainly revenue change this year to put it in a politically correct way. And that's a result of a couple of difficult decisions we made last year.

We made the conscious decision to take resources away from Tegra 4 and put them in Tegra -- Project Logan and Tegra 4i. Knowing that Tegra 4 was not going to be in the right place to win key tablet wins this year, it's just not going to there. So we knew that we hit hot revenue this year. But we felt it was the right thing to do from a long-term perspective.

And now, we've got Project Logan which we demoed at SIGGRAPH. So you know that's up and running on a much more aggressive time scale than Tegra 4 was. So that chip is in the right place to win key -- the key tablet wins. And you should see -- you could see revenues from that certainly as early as the first half of next year. So that put in the great place for that. Tegra 4i is our mainstream smartphone chip, if you like. And with the integrated modem and that will be -- that's going through qualification now, it's all progressing fine. They are going through the process. And that will be ready for products first half of next year as well.

Rick Schafer {BIO 4188965 <GO>}

Really for sampling and trial?

Chris Evenden {BIO 18934997 <GO>}

But it's sampling already.

Rick Schafer {BIO 4188965 <GO>}

Okay.

Chris Evenden {BIO 18934997 <GO>}

It's been something since February. It's -- but it happened through the call. And the way the process worked, the phone manufacturers actually build a phone with your chip before deciding whether they want to actually buy it. And while that's happening, in parallel, you're getting the chip qualified at carriers effectively at the chip level and then the phone or handset OEM takes the phone and builds and if they decided they want to take it to market, they will then start qualifying that as a device-level qualification as well and then they can bring it to market. So it's a lengthy process, right. And the chip starts sampling (mid of) February. So it's at least

a year before products get to market, because of all these aspects. And so at least sometime that's up next year hopefully.

Rick Schafer {BIO 4188965 <GO>}

Okay. For production risk (multiple speakers).

Chris Evenden {BIO 18934997 <GO>}

And so in the back half of this year, I mean Tegra 4 is finally available and then devices. So we're starting to ship now in HP, Toshiba, a couple of others. In fact, the Tegra 3 devices just started shipping 149 7-inch tablet at Wal-Mart from Hisense. So that could be a good volume runner as well. So the number of products they have, there'll be more through the back half of this year that you will see as well.

Rick Schafer {BIO 4188965 <GO>}

Yes.

Chris Evenden {BIO 18934997 <GO>}

We just saw a company yesterday (primarily) most of their sales is China based and they made a claim I believe that over half of the tablet units anyway next year could be produced sort of in that white box market and I don't know A, if you kind of bless that or basically the white box market for tablet could be bigger than Samsung and Apple combined.

Rick Schafer {BIO 4188965 <GO>}

Yes, (in fact, the) number is going to that big, it's certainly a large number and as an analyst, at least in units, I think you're speaking units? (multiple speakers).

Chris Evenden {BIO 18934997 <GO>}

Yes. And you have to find a way -- and we have to find ways and we have found ways of hitting some very competitive price points for Tegra 4 as well. So we can certainly service that market and yes, it's difficult (audible). It's certainly many tens of millions of units and we have a bunch of sales strategies to address that in a scalable way, because obviously, it's spread through something like a 100 to 200 different manufacturers actually. And so you have to find -- clearly, again, we (can't) have a sales and engineering team.

Rick Schafer {BIO 4188965 <GO>}

(inaudible).

Chris Evenden {BIO 18934997 <GO>}

(inaudible), okay. So the number I most recently read was the 100, 200. But yes, the thousand is not impossible. I was under the impression it was consolidating somewhat. I was going in the other direction. But whatever, hundreds of OEMs. But you have to find a scalable way to address and so we have various strategies in place to do that.

Rick Schafer {BIO 4188965 <GO>}

Historically, you've been strong. (Obviously, you cited) white-box, I didn't know what you thought share -- your share would be in that kind of a market. I know (that's been) a tougher question (multiple speakers). Yes, I share it, we need to grow the business before share becomes a useful metric for us, I think. I mean at the moment, design wins is the metric that we look at and with that business, I know we talked about Tegra being a little below or slightly below the corporate average. But I mean would that kind of business let's say didn't take off, would that create a bigger drag or would there be ways to cost offset that?

Chris Evenden {BIO 18934997 <GO>}

If that business took off, it would be a drag. (multiple speakers). So as we address that, we'll have to find a way of addressing it profitably. Three's no point going into that business if our chip margins are only going to be 30% or something. So we wouldn't take it on if it wasn't really profitable.

I mean we -- if a company cannot compete on price but on features and performance. However, price is always part of the equation. And so you have to find ways of adding features in a way that do not increase the cost or you can -- so for example, the DirectStylus feature that we announced a few -- well, a couple of months ago now, that actually allows you to add a stylus for a very, very small BOM cost as opposed to that. We estimate on the Galaxy note, the Stylus technology, that cost about $20 and we can do it for a fraction of that.

And so things like that where we can share the savings, if you like with the manufacturer, means that we can still command a premium for Tegra because we've got that extra value and they can still hit a good BOM cost for that device.

Rick Schafer {BIO 4188965 <GO>}

Would there be a way or (we have ever) discussed internally potentially couple of biggest tablet, smartphone guys, smartphone or -- the Apple and Samsung doing their own (AT), the two guys obviously sort of your -- I feel like this is kind of core to what you guys do some of the stuff and I think you've done a lot of innovation and you just mentioned one thing right there with stylus. But would you ever be able to go in and license to an Apple or you know what I mean or get some revenue that way.

Chris Evenden {BIO 18934997 <GO>}

We'd love to. Yes. Absolutely. I mean. So we have this licensing business now. But we've formalized the technology. We've kept our designs in such a way that makes it a licensable call. And (future course) Maxwell and so on will be similarly licensable. So clearly, we love to have one of the bigger manufacturers like Apple or Samsung to license our technology. And we'll (fairly) be talking to them to try and raise that, because I think we have -- again, we command a premium in terms of the technology we've put in the GPU and that comes from the investment we've put into R&D.

So if you look at our competitor, Imagination Technologies clearly makes $200 million a year. And if they devoted half of that to R&D, that will be $100 million in GPU R&D a year, right. We spend north of $1 billion a year in R&D. So we have a pretty good GPU as a result. And what that means in reality is that we have more features, more performance, more performance per watt. And more performance per millimeter square. And the last one is particularly interesting in this debate, that licensing technology, because again we can command premium for licensing our core, because we save our customer money at the foundry, because for the same level of performance, it's a smaller piece of silicon. And so again, then, we can share the savings with our customer and that gives us a premium for the core, right. So it's -- that business is in early days and there's still a lot we'll have to do. But that could be quite interesting, yes.

Rick Schafer {BIO 4188965 <GO>}

Well you mentioned R&D, I'm just curious, I mean, if we talk about Tegra print, I mean, I would assume you're spending an outsized proportion R&D in development on that particular vertical versus -- outsized meaning bigger than (any) as a % of revs.

Chris Evenden {BIO 18934997 <GO>}

So yes, it's interesting how you look at this, this ways of allocating cost and we've come up with a way that we report that our auditors are happy with and one of the things we talked at our Analyst Day is if you took out Tegra all together, how much would you save in R&D? And the number is actually smaller than the amount (we get covered and we allocate), because there is actually a lot of synergy between the businesses. So the Kepler cost is originally a GeForce call. And there is a -- and GeForce you have to work on low power, I mean, low power is extremely important even for GeForce; in fact, I would say everywhere we're power constrained, (gentle way) to say performance per watt is performance and that's because in every single one of our businesses, we're power constrained.

Even in the supercomputing business, there is a limit to how much power you can put in a server, in a server box and server rack. There is a limit to it. Most of these data centers are actually constrained by the amount of power you actually get into them, the big cable that goes inside, if you like, that's the constraint. And so how much performance can you get out of the megawatt (we're just throwing into the side of the placement). So everything we do is power constrained. And so that means the power consumption is important, whether we're developing a Tegra chip or whether we're developing a GeForce chip. And so all these synergies mean a GPU

architecture, process technologies, all those stuff means the incremental cost of Tegra is actually lower than you report that way. So we can make Tegra. So yes, it all works together, I think it's in a way -- it's another way of monetizing IP we already have, we have two chips, we have GPU and we have an SoC and we monetize them in a bunch of ways across a bunch of different markets.

Rick Schafer {BIO 4188965 <GO>}

Okay. And I guess my last question is, since you mentioned server, I know in the past, you said that like going into the micro-server space, yes, might not be your first area of focus. But I think that has changed at all or --?

Chris Evenden {BIO 18934997 <GO>}

So never say never is the first answer. But secondly, the offering we have for data centers is high-performance compute, that's the differentiation that we have. So right now, we're not looking at general performance, general computing servers like Hadoop servers or something like that, that's not where we would add the most value. So you see us in these high-performance computing applications where computer is everything. You see us in big data applications like (Shavan) as well. But that again it's really at the back end, it's a computer application. So it makes a lot of sense there as well. But that general purpose like dense server, I'll leave that to AMCC and AMD and Calxeda and Cavium and -- but now Intel as well. I mean that's going to be -- that's really quite a competitive market for a while, I think. So let's stick to where we have a really strong differentiator which is the market that way.

Questions And Answers

Q - Rick Schafer {BIO 4188965 <GO>}

Okay. I think we've got five minutes for questions if anybody has got anything out there.

Q - Unidentified Participant

I'm sorry if you had talked about already. But just the plain-old desk computer.

A - Chris Evenden {BIO 18934997 <GO>}

GeForce business, yes.

Q - Unidentified Participant

Market, what's been going on there and what kind of attach rates, market share and with the PC unit growth doing what it's doing, in general, what do you think the outlook is for that?

A - Chris Evenden {BIO 18934997 <GO>}

Yes. So I did address that right at the beginning actually.

Q - Unidentified Participant

Sorry, you don't have to do it again.

A - Chris Evenden {BIO 18934997 <GO>}

So really briefly, the PC market is a difficult market, PC gaming is a great market. And the franchise we've built for ourselves in PC gaming, the market -- PC gaming as a whole probably grows at about 10% a year. And we've built a very strong franchise in PC gaming that allows us to build -- continue to grow our profitable business there. And in fact, we can actually extend that strategy into mobile as well, that's one point I didn't make earlier. And with things like -- and you could -- so we have to build a similarly defensible, profitable, I mean, calling it a niche sounds funny, because it's such a big niche. But that's effectively what it is, right. The gaming niche inside the PC market has base completely differently to the rest of the PC market and it's something that we have a very strong profitable position in. Now, we can do that as well in the mobile market, that will be very successful for us. And devices like SHIELD and initiatives like GRID and our traditional product base like GeForce, they all work together. I took (that) from the earnings call briefly, there's a lot of synergy between them. So that we can build out profitable franchises in both.

Q - Unidentified Participant

(inaudible) So the attach rate of discrete GPUs holding constant, rising or going down? Then, if you see units are dropping about 10% I think this year?

A - Chris Evenden {BIO 18934997 <GO>}

Yes.

Q - Unidentified Participant

So with respect to that and then what's the trends in ASPs. So separate from mobile and all that.

A - Chris Evenden {BIO 18934997 <GO>}

Okay. I will answer really quickly then. So attach rate is approximately flat. Again, PC gaming is growing, right. So notebook is shrinking. But PC gaming -- but desktop gaming is growing 10% a year. I know there's a third question I forgotten.

Q - Unidentified Participant

Share and ASP.

A - Chris Evenden {BIO 18934997 <GO>}

Share and ASP. So share at the moment is probably pretty stable; ASPs are growing.

Q - Unidentified Participant

Okay. So net-net, that business grows for you?

A - Chris Evenden {BIO 18934997 <GO>}

So I think it will grow, the GPU business -- the desktop will grow quite nicely, notebook will probably be down because the whole market is down. And that's not gaming as well, right, the thing that drives purchasing notebook GPUs is more driven by the OEM's desire to differentiate their laptops. So it's a different mechanic in that market.

Q - Unidentified Participant

Thanks. Talk about the decision to license your IP for graphics instead of the chip.

A - Chris Evenden {BIO 18934997 <GO>}

It's not instead of, it's as well as.

Q - Unidentified Participant

As well as, yes, in addition to, sorry, just, why do you decide to do that? What's the revenue opportunity there, because it's getting less dollars obviously higher gross profit. Was it that, maybe you can't have Tegras in everything. But you still want to proliferate your graphics?

A - Chris Evenden {BIO 18934997 <GO>}

Yes. The last point is the key one. There are places that can't -- that won't take Tegra. But that we can still bring value through IP. So some companies have chosen for strong reasons or for ideological reasons that they want to build their own chips, we have an extremely strong graphics IP portfolio as I mentioned earlier on thousands of pounds and extremely good cause as well. So we can address that market that way. So that's vertically integrated OEM one obvious market. Then there is -- there are new markets set-top boxes or smart TVs that we just don't have the resources to go after. But other companies could really benefit from stronger --

Q - Unidentified Participant

Do you have any marquee clients that you started this with or it's test on the comp?

A - Chris Evenden {BIO 18934997 <GO>}

Yes. It's -- no is the short answer. And don't expect us to announce any necessarily soon, because it depends on what the customers would want to do. So if we get a client today, would they want to say, oh, we're going to be a client on NVIDIA, I think the answer is probably no. I probably want to keep that to themselves and so we're ready to launch, because I would like to think that they would see that as a competitive advantage for the devices that we're producing the GPU, with the weight is on the GPU. So you might not see it. So if you -- if we have a customer tomorrow that license the chip, the code, they would then build a chip with that code, they would then take that chip, put it into device and bring that device to market. So it could be two years before even if I will ask someone tomorrow it could be raising (inaudible) it could be two years before you hear about that.

Q - Unidentified Participant

Is it likely to be similar model to imagination like $0.30 -- I forgot what they're at like $0.30 a chip or something and also are there upfront license fees, similar to like ARM?

A - Chris Evenden {BIO 18934997 <GO>}

I wouldn't want to talk about the model. I mean, I did allude to that there in a previous conversation with Rick when I mentioned, I think we can command a premium because we can save you money at the foundry. So there's a way to (mint) more money as a result of that.

Q - Rick Schafer {BIO 4188965 <GO>}

(For a) royalty kind of thing, license royalty kind of thing?

A - Chris Evenden {BIO 18934997 <GO>}

Yes, most likely, I mean. Again, it depends on the business and financial license, that customer wants and what we think over the price.

Q - Unidentified Participant

(inaudible; microphone inaccessible).

A - Chris Evenden {BIO 18934997 <GO>}

So the workstation business is -- the question was, what's the workstation business growing at? The workstation business is showing some strong growth in the last couple of quarters. We have -- I guess I mentioned this earlier, we have 82% market share according to IDC. But we estimate that we have over 90% dollar share. So it's difficult to grow that business without growing the whole market and we have a number of initiatives in place like Maximus to grow the market GRID actually, grow the market both where if you have VCA and VGX. And outside of that, the market data is fairly promising. 80% of our revenues are driven by manufacturing. PMI data is good, auto manufacturing data is good. So we'll see how that goes.

So on the GRID point, we announced this year that we're supported natively in XenDesktop 7. So that means anyone who is considering a Citrix implementation today can also look at the effect of that in GPUs to their hardware and see if that benefits them. So it's now much easier. Again, it becomes a self-supporting initiative now because the software supported automatically, we've been working with a bunch of the Citrix (stars) and so we have 150 trials in place and there are I think 12 dozen VARs working on active engagements. Again, it's a longer-term thing because a typical IT project implementation is a 12-month to 24-month proposition. But again, early indicators are pretty good. The VMware Show is later this month I think actually and so we're working very closely with them as well to get it and supported it natively the way it supported natively in Citrix. So that's another growth initiative for the Quadro there.

Q - Rick Schafer {BIO 4188965 <GO>}
Great. That's perfect time right there. So thanks a lot Chris for coming.

A - Chris Evenden {BIO 18934997 <GO>}
Okay. Thanks.

Q - Rick Schafer {BIO 4188965 <GO>}
Thanks for giving us the time. Appreciate it.

A - Chris Evenden {BIO 18934997 <GO>}
Thanks, Rick.