Canaccord Genuity Growth Conference

Company Participants

- Chris Evenden, Director of IR

Other Participants

- Bobby Burleson, Analyst, Canaccord Genuity
- Unidentified Participant, Analyst, Unknown

Presentation

Bobby Burleson {BIO 2533441 <GO>}

So welcome to Canaccord Genuity's 33rd annual global growth conference. My name is Bobby Burleson, analyst at Canaccord Genuity. We are very happy to have NVIDIA here today to join us for a fireside chat. We have Director of Investor Relations, Chris Evenden here from NVIDIA and with that we will go ahead and kick it off. Hi, Chris.

Chris Evenden {BIO 18934997 <GO>}

Thanks, Bobby.

Bobby Burleson {BIO 2533441 <GO>}

So probably just high level because there are some people that maybe haven't been following as closely the other developments of NVIDIA over the past couple of years, can you just kind of refresh us at a high level in terms of where the Company is and how you would describe the Company to someone just coming to it?

Chris Evenden {BIO 18934997 <GO>}

Sure, sure. So we think of ourselves as a visual computing Company which means that we have technology, hardware and software, to improve the visual experience for customers in a variety of technologies and form factors.

So we come from originally from the PC space so we build graphics cards for PCs so these were mostly used by gamers and then we expanded that market to build a big defensible, profitable segment in the PC space. And now we are looking to expand into mobile computing as well.

So on the PC side of things, our core was always gamers. So we have a brand there called GeForce that services gamers. So if you are playing a 3D game on a PC you are almost certainly using a graphics card and two out of three of those are ours. So you are probably using one of ours.

We use the same technology to enter the professional visualization space with a brand that we call Quadro. It is actually the same chip but significantly different software on top. So if you look at a movie with CGI, they are pretty much all ours, all the Oscar nominations this year were run on our -- special effects nominations were on our hardware.

One of the guys that runs the business likes to say that if it floats, drives or flies, it was designed on Quadro as well. CAD/CAM is actually the biggest segment for that business, drives about 80% of the revenues there.

Also as these GPUs as we call them, graphical processing units, got more and more powerful and they became more and more general purpose, we could actually use them as processing units in their own right for things other than graphics. And so we have a brand called Tesla which takes these GPUs and sells them into supercomputing applications. By supercomputing, that could be anything from the world's most powerful supercomputer which actually has over 18,000 of our GPUs in it providing all the compute power to just at department level or even a single workstation with one of these cards and to do simulation work for an engineer at his desk, as it were.

Because now we are taking a lot of the learnings from those businesses and we are moving them into mobile so we have a brand called Tegra there which is an SOC, a system-on-chip, essentially a multimedia computer on a single piece of silicon and we are building the business in Android tablets and phones. We have recently started growing our automotive business. The automotive business we will talk about more later perhaps. It is a very attractive business. So where we drive the Nav system and the DVD systems inside a car and we have just launched our own gaming device as well actually which is another way of monetizing all the R&D and the IP that we have put into our mobile graphics.

And we are also looking now to license the mobile graphics core so there are segments of the market that we can't access with the chip. For example, I am not going to try to imply that this is or will be a customer at some point but just to give an illustrative example, Apple, for example builds its own chip so they are not going to buy a chip off us. But they may well at some point one to license our GPU because we do have we believe quite a markedly superior GPU technology.

And also by licensing our GPU technology we can get into markets that we just don't have the bandwidth to address directly like smart TVs for example. There is a lot of opportunity there. People are putting more and more intelligence in TVs and I was in a hotel earlier this week and the TV was essentially almost completely lacked

interactivity. There was a delay before doing anything on the program guide. It was just unbelievable. And that sort of user experience we can fix quite inexpensively.

So that is where we are. I think as a Company right now, we have this very powerful franchise in the PC market. I mean I was thinking about this the other day is that I don't know how many component companies you can look to right now -- Bobby can perhaps answer this -- that actually have a successful profitable growing business in the PC market. I mean maybe the flash guys but apart from that, I can't think of anyone that can say that. And we are trying to replicate some of the sort of ecosystem in the mobile computing space as well.

Because mobile computing is a very competitive space as well obviously. There is a lot of -- there is one Company in particular that is extremely powerful. There is a lot of competition in that space so we have to be able to carve out a segment for ourselves that is defensible and profitable just like the gaming segment in the PC market.

Bobby Burleson {BIO 2533441 <GO>}

So that really brings me to my next question just the legacy marriage of NVIDIA to the PC market and all the things that are happening in terms of cannibalization by tablets at the low-end and just the general stagnation there. Yet NVIDIA seems to be in slices of the PC market where you have healthy gross profits and you have growth. Can you just explain where NVIDIA actually positions within PCs?

Chris Evenden {BIO 18934997 <GO>}

Yes. And I think one of the interesting ways to split up -- so people take this homogenous view of the PC market. Maybe they think of the high-end or the low-end but it rarely gets more sophisticated than that. And the way we think of the PC market is we think of specialty PCs and general-purpose PCs.

So a specialty PC is a PC that someone needs for a specific purpose. So whether it is to design a wing for the next jumbo jet or to create special effects or to play games, it is a device you buy because you have a need, a desire to do something specific. Whereas the general-purpose PC is the vast majority of the market frankly and that is the PC you buy because you need a PC to survive as an adult in the 21st century. You need it to do email, you need to surf the web, you need to update your Facebook page and so forth.

And that segment of the market for those use cases, a tablet is generally a better solution and that is I think that is what consumers are realizing right now is that they don't need a PC. They just need a device on which to do email, surf the web and so forth. And so that section of the market is under tremendous pressure right now whereas the specialty PC people need this for a specific reason. They are not going to give it up unwillingly and they are prepared to pay a premium for performance, for features and stability and all those other things that we provide, the value that we add.

I was trying to think of a good metaphor for this and this is the best one I have come up with so if you can come up with a better one, (inaudible) think of one. But it is rather like the difference if you sit down at the telly after dinner and just switch it on and just like veg out and watch whatever happens to be on. That is a general-purpose PC as opposed to 9 PM on a Sunday night Game of Thrones.

Now in the first case, anyone phones you up and says do you want to go down the pub almost anything can pull you away from that application of the TV, right, because it is just there, it is just like a background thing. Whereas if I said to you I will meet you down the pub at 9.30 on Sunday evening, no, I am watching Game of Thrones. It is because that is a specific purpose, a real need, perceived need.

And I am not trying to trivialize the need. Gamers need a PC. They desire it just like an engineer or a designer needs it for their purposes. And that is the difference in the market you see.

And we have some business in this lower end and it is lower ASP, lower margin and in common with it is largely notebook actually and in common with the rest of the notebook market that is under pressure. But the gaming GPU and the workstation GPUs and the simulation, the Tesla business in the higher end, that is actually all growing. Every single one of those three businesses is growing.

Desktop -- so the desktop consumer PCs for us is a growth market of about 10% a year. Quadro is growing at about the rate of manufacturing GDP and there has been some pretty encouraging data on that recently.

Tesla is a growth business. It is off of a much smaller base but that is growing in the tens of % sort of 40%, something like that.

Bobby Burleson {BIO 2533441 <GO>}

Great.

Chris Evenden {BIO 18934997 <GO>}

So those are all growth businesses. So it is very different from the common perception of PCs and it is a conversation I constantly have to have with people actually.

Bobby Burleson {BIO 2533441 <GO>}

So let's talk about something that is not growing this year, Tegra.

Chris Evenden {BIO 18934997 <GO>}

Yes. The --.

Bobby Burleson {BIO 2533441 <GO>}

So I mean I guess just on that topic, it looks like more of a perhaps flattish year for Tegra. And there still requires a nice uptick in the second half. Can you talk about what is driving that in terms of --

Chris Evenden {BIO 18934997 <GO>}

Well you are being very kind to call it flat. It is going to be down. And Jen-Hsun talked on the earnings call down to $200 million to $300 million off a base of like $760 million. So down very significantly (multiple speakers)

Bobby Burleson {BIO 2533441 <GO>}

(multiple speakers) $500 million this year?

Chris Evenden {BIO 18934997 <GO>}

Yes. So the reasons for that -- so Tegra last year was an Android phone and tablet business and we were also in the Windows RT devices as well in the Surface and two other devices.

We go through generations of Tegra chip, Tegra 1, Tegra 2, Tegra 3, Tegra 3, Tegra 4, Tegra 5. There was a big gap between Tegra 3 and Tegra 4. So Tegra 4 was late and we made the hard decision last year to actually take effort away from Tegra 4 despite the fact it was already late because we felt we could see that this was going to be a difficult year and we didn't want to actually risk the following year by chasing after something that was never going to happen this year. So we put some design efforts into a chip with an integrated baseband modem called Tegra 4i and into the next generation Tegra which we called Project Logan.

As a result, Tegra 4 was -- the timing was wrong for the big tablet wins, the Amazon and Google tablets. Also the market didn't evolve quite the way -- so we knew that. But the things that were unexpected was the market didn't evolve quite the way we expected. We thought that the Android tablet market would be more diverse but of course all the sales were concentrated in just those two largely. Then Windows RT was not as successful as we had expected or hoped. And we had a powerful position in the ecosystem in Windows RT. We won a lot of the important design slots both the last generation and the future generation.

So both those things lead to a fairly significant miss on our expectations for the beginning of the year.

Having said that, if you can disentangle the revenue challenges we had this year from the technical position, the strategic position we are in now, I feel pretty good about that. So whereas there was essentially a two-year gap between Tegra 3 and Tegra 4, there is going to be something like a nine or 10 month gap between Tegra 4

and Tegra 5 because we have already started sampling Project Logan. So we could see products on the market first half of next year certainly perhaps as early as Q1. Conceivably it could be that quick.

And the timing for that also is very good for Amazon and Google tablets so you can bet we are sharing those very aggressively. We think we know what those companies need and we think we have got the best chip on the market and the software support and so on around that. So we think we can go after that.

Tegra 4i is in modem qualification right now or carrier qualification right now and should be done by the end of the year. That is progressing -- it just happened. Sorry you have got a question?

Questions And Answers

Q - Unidentified Participant

(inaudible; microphone inaccessible)

A - Chris Evenden {BIO 18934997 <GO>}

Right. So --

Q - Unidentified Participant

(technical difficulty).

A - Chris Evenden {BIO 18934997 <GO>}

So the question was why are we in Amazon and Google and did you lose it and do you have to win it back? So we were in the Nexus 7 last year, then we were displaced by Qualcomm this year. The Kindle Fire has been OMAP from Texas Instruments but TI has declared they are leaving the market. So it seems unlikely that they will be in it next year. Where was I?

Q - Bobby Burleson {BIO 2533441 <GO>}

So I mean I guess part of the question is why stay involved in this market? Clearly you think that there is growth coming. Why not just kill Tegra and you are obviously not planning on doing that. So you talked about some of the tablet potential. You mentioned where you are in the development side with the modem. Tegra 4i, can you talk a little bit about the smartphone potential for that business, maybe next year and going forward?

A - Chris Evenden {BIO 18934997 <GO>}

Well I will talk about it more generally first. The general point now is that as opposed to last year where it was all Android phones and tablets with just one chip, Tegra 3, next year we are looking at Android phones and tablets, Windows RT as well that is likely to be smaller, automotive is a great business for us. It is going to be on the

order of $100 million this year. It will be $200 million next year, $400 million the year after that and $450 million. I mean the great thing about the automotive business is these long product cycles. So that is booked already. It is in there.

Then there are going to be a variety of other devices like the one that has been announced so far is the Ouya like game console sort of some opportunity game console and set-top box if you like. So there is going to be a bunch of other devices like that that will support the business.

So we have a bunch of new markets. As well as having a bunch of new markets for the supporting business broader base there, we have a product lineup now for the first time. So we have Tegra 3, we have Tegra 4. We will have Tegra 5 very early on. Tegra 4i, which is the integrated modem and i500, which is the discrete baseband modem as well. So we have got a much stronger base there.

Oh. And we have got SHIELD as well, this handheld gaming device. So all of these things will broaden out our base and also this helps us focus our strategy on building this gaming franchise in tablets and phones or mobile gaming in general in whatever form it is whether it is a box that plugs into the TV or whether it is a handheld gaming device or whether it is a phone or a tablet.

Q - Bobby Burleson {BIO 2533441 <GO>}

Great. So another thing that comes up typically when we talk about moving from traditional compute platforms to mobile computing, there's some ASP degradation that happens. First some of the CPU vendors and potentially yourselves going from a traditional discrete GPU to a Tegra (multiple speakers)

A - Chris Evenden {BIO 18934997 <GO>}

That's a good question.

Q - Bobby Burleson {BIO 2533441 <GO>}

What happens with the gross margins? It seems like those have been performing pretty well. How can you continue to keep those at healthy levels and how does -- how do we incorporate our understanding of Tegra and the GPU business since that process?

A - Chris Evenden {BIO 18934997 <GO>}

Okay, I will answer. I am going to make a general point about margins actually because I know that margins tend to be this sort of like the go-to data point for valuing semiconductor companies if you like or deciding when to buy or sell semiconductor companies. But we are less and less a chip company.

So even when we were just a GeForce business, a large part of the value we provided was the software we put around that and the effort that we put in with game developers to ensure they use the latest features in our hardware, that they

looked as good as they possibly could, that they ran as fast as they possibly could. So there was a lot of effort and a lot of value put around the chip.

It is not just -- it is not a components business a distribution business where you just sell it into distribution and Arrow or whoever just sells it on. So that is one important point.

In terms off to answer your direct question about gross margins, we have much higher gross margins now than five years ago. I mean our previous record was about 46 points. We are now at 56. And our previous record was when the competition was extremely weak and the market was extremely strong. And neither of those things is true today.

And the reason for that is we have structurally changed. We are not just a GPU business anymore. We have Quadro and Tesla both of which are very high gross margin businesses pulling it up. And also the market within GeForce is changing as well. As the notebook market declines and the desktop market continues being strong, both of those things actually lift the gross margin because notebook is our weakest business from a margin percentage standpoint.

Now, Tegra is slightly below the corporate average at the moment. So as that grows, that will quote -- air quotes -- that will hurt our gross margins. Having said that, I am okay with Tegra growing because it is going to help our operating margins and our earnings. So again, it is changing the nature of the business and what we are delivering.

I mean particularly SHIELD is going -- it is an end-user device, right. So we are not making 55 points of margin on that device you will be surprised to hear. But if we sell a lot of them, we will make an awful lot of money out of it so I think everyone will be happy with that. But it will pull down that headline gross margin.

This is a very long and rambling answer so let me just summarize. Structurally we are sort of a mid-50s margin Company right now. There is no obvious reason in terms of structural reason why margins would reduce except if Tegra grows. That is the only structural reason that would cause margins to reduce. And that is a good thing. So there will be some noise in the signal as products launch and products end of life and so on but overall structurally we are a mid-50s Company with a growth business that is slightly below mid-50s. But that will increase earnings as it grows.

Q - Bobby Burleson {BIO 2533441 <GO>}

I heard you say competition at one point in that answer and there is a lot of talk about market share in the core sort of GPU business yourselves and AMD making -- primarily AMD making some statements. Just curious what your take is on market share at these high levels obviously --

A - Chris Evenden {BIO 18934997 <GO>}

Sure.

Q - Bobby Burleson {BIO 2533441 <GO>}

That you guys reside now. What is the outlook prospects for market share?

A - Chris Evenden {BIO 18934997 <GO>}

The short answer would be -- I am going to enjoy revisiting those statements about market share gains in six months time because I think they are overly aggressive. We are at about 65 points of market share now on discrete graphics and there have been some noises from competitors about getting share. Certainly on the notebook side where you have most visibility because it is all a design win-based business, I think we are going to do as well or on better on Haswell than we have done on Ivy Bridge which depending on the volumes that implies market share flat to up.

On the desktop side, that seems pretty good as well. The market share numbers went down a little bit this quarter. But -- a note, a slight note on market share numbers. Data is good. And market share numbers are data but they are unit numbers and most of the dollars and almost all of the profit is generated at the very top of the pyramid. And so you can see some pretty significant market share shift and money can actually be going in the opposite direction. Like Q3 of last year we lost market share and we gained dollar share for example. And that continued to happen.

So you have to treat them with an note of caution. And also because they are sell-in numbers, there are also some channel artifacts where people are launching new products or are flushing the channel or whatever they are doing -- I am not implying that anyone is managing it. I am just saying that is the nature of the business.

So look at it over a year and I think you'll see that it is pretty stable at like 65% and we feel good at that level. Desktop, very, very competitive. It is interesting because if you take a very fine-grained view, everyone we are fighting tooth and nail for every single design win and it is a very aggressive head-to-head battle.

But if you step back to a certain distance then it is suddenly quite peaceful and the market share is actually very stable. So it is a dynamic -- it appears to be a very dynamic equilibrium right now if you like.

Q - Bobby Burleson {BIO 2533441 <GO>}

Great. And we have five more minutes -- figure maybe would open it up more generally to questions.

Q - Unidentified Participant

Why would you do better on Haswell than Ivy Bridge?

A - Chris Evenden {BIO 18934997 <GO>}

Why would we do -- it is just the statement from the GM of the business is that he believes he has more design wins because you know all the slots, right. So you know

how many opportunities you have. And we believe that we have at least as many as we had in the last generation.

Why would we do better? We have had a very tight focus on performance per watt right now. As Jen-Hsun, the CEO, likes to say performance per watt is performance because pretty much every environment that we operate in from a cellphone to a supercomputer is power constrained. And so we have extremely good performance per watt and that is extremely important in notebooks obviously.

Q - Unidentified Participant

Can you talk about the dynamic of NVIDIA versus (inaudible)

A - Chris Evenden {BIO 18934997 <GO>}

Again?

Q - Unidentified Participant

I mean not (inaudible).

A - Chris Evenden {BIO 18934997 <GO>}

So again I think -- all right I will try and be nice. So the question was about attach rates. So the percentage of PCs that ship with discrete graphics and I have been in discrete graphics for 10 years and for that entire time, every time Intel has come out with new integrated graphics, this year it is different, this year is when your entry-level graphics business dies because Intel has got really good graphics whether it was G35, which was supposedly DX10 but then wasn't. G45, which actually was DX10 or whether it was like 945G, 965G or whether it is Sandy Bridge or Ivy Bridge or now Haswell, every single generation.

And I do feel at some point the burden of proof on this statement should transfer to the accuser away from us because every single time for the last 10 years that this has happened, this has always been the statement and it has always been wrong.

Now why is that? What is that. And if you go back to my description of the market, the specialty PC versus general purpose PC, the specialty PC, those guys need discrete graphics. Intel integrated graphics is perfectly fine for playing last year's games at low resolutions with all the settings turned to minimum. And it was last year, it was five years ago and it will be next year. That is where they sit in the market because as their graphics get better, games get heavier, our graphics get better. So no gamer will ever use Intel integrated graphics.

That other part of the market in the general-purpose PC where we are in notebooks, the reason people buy graphics there is slightly different. We offer OEMs a way to differentiate their notebooks. So an OEM obviously doesn't want to just sell an entry-level notebook. He wants to sell people up and part of the upsell and -- he has to justify that extra price, right? And so part of the upsell is Core i3, Core i5, Core i7

ladder that you can have people climb. Part of it is discrete graphics versus no discrete graphics. With is always better than without, right?

Cars with turbocharged engine, cars with normally aspirated engine. Now that is not to say that the benefits don't accrue from having discrete graphics. The benefits are very real but the point I am trying to make is that that decision by the consumer is not based on graphics performance. They wouldn't know a 3D Mark number if it came up and hit them in the eye. They don't even know what 3D Mark is. That is the standard benchmark for graphics. So it is not a graphics thing.

So Intel's argument that oh, our graphics are getting better therefore we will take this business away is specious because that is not what the buying decision is based on.

Now there are pressures on the attach rate at this level but they are different. Things like the bond cost pressure, the introduction of touch --

Q - Bobby Burleson {BIO 2533441 <GO>}

What is the impact of higher DRAM prices for example? Are you seeing (multiple speakers) --

A - Chris Evenden {BIO 18934997 <GO>}

And that is the sort of thing that could pressure attach rate. And I am sure if attach rate goes down this year, Intel will point to the improved graphic performance of Haswell. But if it does go down, I don't know whether it will or not, it will be bond pressure that pushes it down not graphics performance because that is the dynamic in the marketplace.

At the moment discrete graphics defines premium notebook. Now if at some point in the future touch defines premium notebook, then that might put pressure on attach rates you see. But graphics performance does not put pressure on attach rates. Did I answer your question?

Q - Unidentified Participant

Sure.

A - Chris Evenden {BIO 18934997 <GO>}

How long have we got?

Q - Bobby Burleson {BIO 2533441 <GO>}

I think we are done. Maybe take the rest off line.

A - Chris Evenden {BIO 18934997 <GO>}

Sure, thanks Bobby.

Q - Bobby Burleson {BIO 2533441 <GO>}

Thank you.