Wells Fargo Technology, Media & Telecom Conference

Company Participants

- Rob Csongor, VP, IR

Other Participants

- David Wong, Analyst, Wells Fargo
- Unidentified Participant, Analyst, Unknown

Presentation

David Wong {BIO 17161335 <GO>}

Well we're delighted to have Rob Csongor, VP of IR at NVIDIA with us today. So Rob, I guess you're going to have a few slides. And then we'll ask all the difficult questions.

Rob Csongor {BIO 3210739 <GO>}

Okay, perfect. Hi, everyone. Thanks for having me, David. It's good to be here.

Please note our safe harbor.

For those of you familiar with NVIDIA, or, if you're not familiar with NVIDIA, I would summarize what we do in a nutshell and say that NVIDIA focuses on segments of markets where visual computing matters.

All right. So within just the images on this slide, I think visual computing matters in special effects like what you see in "Gravity." How many people here have seen the movie, "Gravity?"

Two people. Everyone else is working.

All right. So, if you've seen "Gravity," or if you haven't, the special effects in "Gravity" are amazing and the entire visual effects in "Gravity," are done using NVIDIA. So it's one of the areas of focus for the Company.

But the other areas are automotive, the finance world increasingly using GPUs for compute of model, options models, simulating weather. And then, of course, the PC gaming market.

So these are all examples of visual computing. We actually organize our Company to focus on large segments where visual computing matters. So gaming is one of the largest segments. Gaming is going to be over $20 billion business worldwide this year.

It's being driven primarily by PC, massively multi-player games growing at 14% CAGR. China is our largest geo for that market. But also being driven in the US by blockbuster games being released this Christmas.

And these segments, gaming, professional visualization, high-performance computing. And big data, allow us to consistently outperform the PC market. And I'll show some of the latest data on that.

We monetize ourselves. We view ourselves as a technology company. But we monetize our technology in four ways now. It used to only be two.

So when we were in the PC business, we monetized our technology in the form of chips and boards. But now that we're going into markets where people want to design their own chip, we now license our technology. And we are now delivering complete systems to segments of the market, again, where visual computing matters. So we've expanded our business model within recent history.

So what I'd like to do here -- and I'm going to target roughly 15 minutes just to cover the highlights of the business, focusing on news out of our last earnings report, which was last week. And then open up for Q&A.

Our last quarter, Q3, the highlights are our revenues were up 8% from the prior quarter. And, again, outperforming the PC market, primarily due to PC gaming, both desktop and notebook.

Quadro -- so, Quadro is our professional products. Quadro was actually a record revenue quarter for us. Tesla was also a record revenue quarter. And then Tegra -- in Q2, we had our trough quarter with Tegra. And we went into production with Tegra 4, started shipping a number of devices, automotive is a growing opportunity for us. And Q3 was also a record revenue quarter for automotive.

We had near-record-high gross margins of 55.7%, non-GAAP. Those are the second-highest gross margins in the Company's history. Most of the dip in gross margins was due to our Tegra business coming back. And I'll talk a little bit more about that.

In addition to kind of baseline businesses and GPUs that are growing, we have momentum in growth businesses that are significantly ramping. So as opposed to PC gaming, which is growing at 6%, Tegra, Tesla. And GRID are undergoing very rapid growth momentum. And I want to highlight some of the things happening there.

Then finally, last week at our Q3 earnings, we also announced our intent to return another $1 billion in capital to shareholders in fiscal 2015. So I'll talk a little bit about that.

Okay, this is a breakdown of the moving parts within our GPU business to show you how we're outperforming the PC market. Overall, PC market, according to Gartner. And this is year-to-date, is down 11% since the beginning of the year. And in that same period -- and, by the way, this PC market 11% is actually both units, as well as revenue, vendor revenue. The numbers are slightly different. But they're both roughly 11%.

For that exact same time period, year to date, our gaming GPUs within desktop and notebook were up 6%, Quadro up 12%, Tesla up 43%, while our mainstream OEM notebooks declined 8%. Now, the mainstream OEM notebooks happen to be the largest volume. But they're also the lowest gross margins.

So the net result of this is, overall, NVIDIA year to date, up 4% versus the PC market at 11.

On the PC gaming growth side, there's really two things that are driving our business. Number one, performance leadership within desktop PCs is extremely important. Our chief competitor, AMD, had a release of their product. They received good reviews right up until we announced our product within days after theirs. And the end result is that we have a very good. And according to the reviews I'll show you, a grip, a retaining grip on the performance crown.

One of the surprising segments for us is the emergence of gaming notebooks. So we quietly introduced a technology last year called Optimus, which lets us put a GPU into a notebook and use zero power -- zero, not low. But use zero power unless it's used.

So the end result is that you saw an emergence of very thin notebooks which use the integrated graphics within the notebook. And then only if you're using or playing a game, then the GPU turns on. So the end result is you can now design notebooks without any penalty in battery or weight. And this is an example. So this segment of our notebook business is actually, of course, much better gross margin and is helping to offset some of the decline in the mainstream notebook.

These are some of the reviews on the 780 Ti. I don't need to go into too many of the details on that.

I already mentioned the Quadro business and the -- some of the uses for it in these movies.

Let me talk a little bit about our Tesla business. This is a new business for us. We've been investing into this business for quite a while. But in terms of revenue, it's just

recently starting to ramp. And there's a number of key indicators to look at that give you early indicators of our future success in this business.

First of all, a high-performance computing system with a GPU is now referred to as an accelerated system. It's an HPC system with an accelerator. Okay. So just in terms of terminology.

Intersect360 Research did a census of systems and what you're looking at on that left chart is the growth in the number of systems that now have an accelerator in it. And that -- you've seen a growth from 22% to 44% within the last -- from 2010 to 2012. Within those systems, NVIDIA is the accelerator of choice.

So I think some -- you may have heard that Intel got into this space with their product last year. And, at this point, NVIDIA GPUs are in 85% of those accelerated systems.

But probably the most significant growth indicator to look at is that middle column. So none of our products, none of the products or GPUs that NVIDIA makes is worth anything unless there are apps that take advantage of the capability within the GPUs. And this is probably the single biggest driver on our ramping revenue.

Last year at this time Q3 was our previous record quarter for Tesla. And that was primarily driven by one big win, the Titan supercomputer in the Oak Ridge National Labs, a computer called Titan. This quarter was a record Tesla quarter but without any significant big supercomputer win. It was all composed of primarily application run-rate business that's accelerated by a Tesla, which for us, is very good news.

So this is the data that supports that increase in run-rate revenue that we're seeing.

There's one other business that we're very excited about. Last year we introduced a product called GRID, which takes a GPU and puts it into the data center. In fact, you guys, the financial world, are one of the target audiences. Not very far from this location there are several financial institutions that are doing trials of this product.

The financial world uses virtual desktops. I know that you guys use them. And sometimes struggle with them, in terms of the performance of those. What GRID does is accelerate Citrix and VMware. When you move your VDI across the screen and you see that stuttering, just imagine that it's now GPU accelerated. And you're just doing data.

So for other companies in the world, product lifecycle management, companies that have to have a centralized amount of data, more than just numbers, pictures, videos, other forms of assets, what we've done is develop a way to accelerate virtual desktops.

So the end result of that, if you look at the overall momentum, these are all the data points that are supporting our growing momentum there. First of all, Citrix and

VMware are using GRID. We were the Best of Show at VMware's show back in October, VMworld. Virtually every major OEM now is shipping GRID -- Cisco, HP, Dell, Hitachi, Fujitsu, IBM.

Last week we announced Amazon has now deployed GRID servers to provide services for people who are looking for faster graphics and gaming. Then, the number of apps, GRID-certified apps, has grown.

So there's -- the left chart there is probably the single biggest indicator or path to revenue. The good news is that there's a lot of desire and a lot of need for this type of service. But it takes time. You don't just walk into a large financial institution or into a large aerospace company and show them a demo and then they say, okay, we'll switch overnight.

So it takes a while and we've been in customer trials now for quite a while. And the customer trials are ramping. Part of the reason that the customer trials are ramping so significantly is that we also have a virtual sales force now within Citrix and a lot of our partners that are out driving this.

So this is a very exciting revenue opportunity for us. We are just starting to lift off. We have customer trial revenues. But we see this as a significant growth driver for the Company, going forward.

I mentioned in Q2 that our Tegra product lines had -- were basically in a trough. What we had was our previous generation Tegra 3 ramping down production and we were late to market with our Tegra 4. And we were late to market because we were -- had made a strategic decision to move in some projects, basically our next generation Tegra, which is called Logan. And then our phone product called Tegra 4i. In Q3, revenue ramped back, as Tegra 4 went into production.

So what you saw was not just a number of designs. But a number of different types of designs. If I was to summarize what Tegra is about, Tegra is about Android. And Android is about more than just phones.

So when you say the word "Android," I think many people equate that to phones. But I think, as you're seeing, Android is, right now, revolutionizing a lot more markets and a lot more types of devices than just phones. And this is just an indicator of some of them -- tablet, transformer convertible tablets, all-in-one PCs -- this quarter there was a display from ViewSonic that's an Android display -- set-top boxes and automotive, automobiles with Android coming too.

One of the interesting highlights of the quarter was a phone was announced from a company, Xiaomi. For those of you familiar with Xiaomi is one of the hottest companies in China selling phones. And it's a perfect example of -- or a proxy for what Tegra is used for.

The Mi3 phone is their new high-end smartphone. They market it as the fastest smartphone in the world. It was reviewed by the Chinese press against Apple, against Samsung. And it was confirmed as the fastest smartphone in the world. And Xiaomi launched it and made that phone NVIDIA, targeting the Android gaming market and targeting the largest Android gaming download market in the world, which is China.

So within that segment they use NVIDIA. And then for mid-range types of devices they use other solutions where visual computing isn't as critical. So that's a perfect proxy. It's a perfect example of what our strategy is in Tegra.

But in any case, the phone launched. They sold the initial 100,000 units, I think, in 86 seconds. The next 200,000, I think, shipped in a matter of minutes. So this is an exciting product.

Let's see. Overall, I think I mentioned that this quarter was a near-record-high gross margin. I don't think -- what I want to show here is that with all of the initiatives and the focus on visual computing targeting these vertical segments, we're not just outperforming the PC market, we're also managing to drive margins. In all of the areas where visual computing matters, it takes an enormous amount of technology and software. And the financial results of all of this is steadily increasing gross margins and cash generation.

And even with the dip in Q3, I think Q3 dip just reflected the fact that Tegra revenues had come back in the quarter. And Tegra revenues are below the corporate average. So we viewed it as a good thing.

Increased capital return. This earnings call we introduced, first of all, increasing the quarterly dividend from $0.075 to $0.085 per quarter. We announced the intent to return $1 billion in capital to shareholders next year, inclusive of dividends and the share repurchases. And we announced the authorization from the Board through to the end of FY '16.

So I think, in summary, summary of the growth drivers right now, GPUs continue to outperform the PC market. I already outlined a lot of those. And then Tegra revenues ramping back. I talked about Tegra 4 and about Android. I talked automotive.

The one thing I didn't talk about is Project Logan. So Tegra 4 was late to the market this year. And, as a result, we lost some critical designs. Project Logan is not late to market. That was the benefit that we received for the -- for moving Tegra 4 out. So we're looking forward to bringing Logan to market in the coming year.

Okay. That's all I had.

Questions And Answers

Q - David Wong {BIO 17161335 <GO>}

Well thanks very much, Rob. Just one clarification. So you mentioned Logan. You had -- you said the coming year. Can you help us with more specifics? Are we talking about First Quarter, Second Quarter? When does it have to be out in order to be early?

A - Rob Csongor {BIO 3210739 <GO>}

Well we haven't announced a release date. But we did show it recently at an editors' day in Montreal. And we showed a demo that had been running six months ago on our highest-end GPU, on Titan. And it's that face demo that you may be familiar with, David.

And at the editors' day we showed that demo running on Logan on a mobile chip. So it got a lot of buzz in the press. But other than that, it's obviously out at customers. And then we look forward to launching it. But we don't have a launch date yet.

Q - David Wong {BIO 17161335 <GO>}

Well does anyone have any questions? We've got lots of people and lots of interest. This is being webcast. So, let's use the mic.

Q - Unidentified Participant

Thank you. Could you just -- I don't know your story very closely. So could you just tell me approximately the -- what % of your revenues is from discretionary spending, i.e., gaming, versus non-discretionary, which I would characterize as autos and perhaps other things?

A - Rob Csongor {BIO 3210739 <GO>}

You're asking from an OpEx?

Q - Unidentified Participant

Revenues.

A - Rob Csongor {BIO 3210739 <GO>}

Oh, revenues. Revenues. So I would say that of the -- I mean, last year, last year for the $4 billion or so of revenue that we reported for the year, Tegra last year was about $750 million of that. The remainder of it was GPUs, split between our different businesses.

This year, the Tegra number is less than that. And we reported that it was less by about $300 million due to one segment of the market, in particular, Windows RT, that had not performed or didn't happen the way we thought it was going to happen.

But that's -- for last year, that was roughly the revenue. And then for the coming year we'll see. We expect Tegra to be one of the larger growth drivers for next year.

Q - David Wong {BIO 17161335 <GO>}

But just to push on that, Tesla and professional graphics are the things that go into work stations and non-consumer-type things. So can you give us a rough percentage of what that percentage is, Tesla plus professional?

A - Rob Csongor {BIO 3210739 <GO>}

Yes. We had a previous presentation. I think we had put out something in the August timeframe that basically said that market, at least for last year, was roughly $800 million.

Q - David Wong {BIO 17161335 <GO>}

So a little --

A - Rob Csongor {BIO 3210739 <GO>}

And that was last year.

Q - David Wong {BIO 17161335 <GO>}

A little less than a quarter of NVIDIA's revenue.

A - Rob Csongor {BIO 3210739 <GO>}

Yes. But it's also our highest gross margin business, as you know. That's both the Quadro and Tesla businesses are pretty much the top of our gross margins.

Q - Unidentified Participant

What are the effects of the console upgrade cycle on PC gaming?

A - Rob Csongor {BIO 3210739 <GO>}

The effects of console gaming is actually good. Historically it's been good. And we expect it to be good this time. When the consoles come out, the architecture for the console, as you know, is frozen roughly a year ago. And during that time, of course, CPUs and GPUs evolve.

So at the time that the console comes out, it's -- I would describe it as a high-performance mid-range PC. There's performance optimizations you can do because it's a console. And you can do some things to it. But, basically what it ends up doing is bumping what I would call the mid-range of our GPU products, which happen to be where a lot of our volume is.

We talk about these very high-end products. And we sell them for $1,000. But it's not the volume of our GPU business. Most of it is within the $199 to $249 price range.

And those are the segments of the market that benefit from a lot of the games that are being developed for the console.

Q - David Wong {BIO 17161335 <GO>}

Other questions?

Q - Unidentified Participant

I was just wondering, what do you see as some of the best embedded opportunities for Tegra?

A - Rob Csongor {BIO 3210739 <GO>}

The best embedded opportunities? When you say "embedded," I'm assuming that you're talking -- you're not talking about Tegra devices? Or are you --

Q - Unidentified Participant

Well I mean, like in terms of -- like, if you look at the automotive segment. Is that --?

A - Rob Csongor {BIO 3210739 <GO>}

Oh, okay.

Q - Unidentified Participant

Yes.

A - Rob Csongor {BIO 3210739 <GO>}

So it's -- we recently -- on the earnings call, Jen-Hsun was asked, what's our biggest growth driver, what does he see as the biggest growth driver for next year. And his answer was Tegra.

So on the Tegra side, we just see the momentum of Android as just something -- nothing short of phenomenal. Android is moving into devices and markets at a rate that we've never seen with any kind of operating system before.

So everything from micro-game consoles in automobiles and displays and set-top boxes. Just a whole different bunch of devices.

So within those segments, there's a lot of those devices that are going to require really good visual computing. So the problem is the visibility on some of those devices isn't as clear. I think the car one is very exciting to us. And that's visible to you, at least on cars that have been announced, cars like the Audi line and BMW and Tesla S. Those are all using NVIDIA.

But there's a lot more types of devices and a lot more uses for Tegra within those applications. So for example, within automotive the first application use was the nav

system. But now you have rendered instrument clusters. You have collision detection, pedestrian detection, a lot of computer vision applications that are coming.

Q - Unidentified Participant

Is the auto leading-edge stuff, or is that older generation technology that kind of has a --?

A - Rob Csongor {BIO 3210739 <GO>}

Oh, that's -- no, that's all completely leading edge. That's all research and development.

Just to give you an idea, there was a report released recently about autonomous cars. And when you read it at first, it looks like science fiction kind of stuff. But you can already see a lot of applications going into cars where computer vision and -- you have a -- when you park the car, there's an overhead view of the car. But there's, obviously, no camera there. There's cameras on the side. And then they're using a GPU to create a visual effect that looks like you're looking at the car from above.

So all of those are -- require a lot of visual computing. And they require very low power. So that's why the -- That's why Tegra is being used and not one of our big GPUs.

Q - David Wong {BIO 17161335 <GO>}

Other questions?

Q - Unidentified Participant

Can you talk a little bit about what's going on with Shield these days?

A - Rob Csongor {BIO 3210739 <GO>}

Yes. Shield is our gaming device for the Android market. Shield is doing well. But the modest -- but the revenues are modest. And we knew it would be like this. That's why we've tried to understate the expectations a little bit for the revenue for Shield.

If you read -- the number one focus that we had was, first, to build a product that was really good. And if you read the reviews, the reviews are fabulous.

But we knew that it would take time to get Shield into the hands of developers, get them to really become familiar with it, get them to become familiar with the hardware, develop applications that really take advantage of it. Discover the markets. Get with the right partners and get the word out.

In a lot of ways it reminds me of NVIDIA's GPU efforts in the early days. A lot of what I just said is actually very similar to what we did in the early days of getting GeForce to be a gaming platform for the PC. Shield as a gaming platform for the Android gaming market is a lot of the same types of efforts.

Q - Unidentified Participant

This one's kind of a weird, funky, or hypothetical question, I guess. But I know in our talking with Intel and stuff, they've always said we wouldn't do any sort with competitors. But they've been doing little things with other guys recently. And stuff. And they don't really compete on sort of the big performance GPU side. If they were to ever come to you, would you guys be interested in that? Would that be something of --?

A - Rob Csongor {BIO 3210739 <GO>}

You mean from a foundry?

Q - Unidentified Participant

Yes.

A - Rob Csongor {BIO 3210739 <GO>}

Oh, sure. Sure, we'd love to talk to them. You'd have to ask them.

I mean, we actually partner with Intel on a lot of stuff. I mean, these notebooks that I've been talking about, they use Intel integrated graphics when you're not playing a game. Then with our GPU using Optimus technology it's zero and then it turns on.

So it's an interesting relationship. We partner on some things and compete on others. But as far as their foundry goes, yes, I mean, we'd be -- of course we'd talk to them.

Q - David Wong {BIO 17161335 <GO>}

Final question, perhaps.

Q - Unidentified Participant

Can you talk about the size of the notebook GPU market? And also, can you talk about your China GPU market? I know that attach rates in China are much higher than the rest of the world. And what are your views on that? Thanks.

A - Rob Csongor {BIO 3210739 <GO>}

Okay. Yes, I don't know that we -- I don't know that we specifically break out to that level of granularity. But let me try to answer your question kind of at a high level.

The notebook business, for us, has been a pretty good-sized business, I would say, roughly half that of or maybe a little bit less than that on our desktop side.

But it's been predominantly, up until this point, mostly mainstream OEM notebooks, which is much more of a low-margin. So as I pointed out, kind of the commentary on that business has been it's been declining just on the mainstream side, which I think

is not a surprise to anybody. It's declining, I think, at a rate that's better than the market decline on notebooks.

But then, the margin side and the revenue side is being offset by emergence of gaming notebooks, like I just described there. And we see a lot more of the notebook OEMs jumping in on that. They're jumping in to make some money in a segment that appears to be growing.

In a way, I think the notebook OEMs may be doing exactly what NVIDIA has done. You focus on a segment where visual computing matters. And then you deliver a product to that market. And the PC gaming market is clearly growing. So I think we're seeing some of that.

Your second question was around China and the attach rate in China. The attach rate in China is, I think, the largest in the world for us. It is -- the attach rate in China, I think, last time I checked, was in the 80s. So it is a very -- it is our largest geo. It is our largest business. It's one of those things that you have to go see, whether it's iCafes in Beijing, or whether it's the IT malls or the PC gaming market in China.

Ironically, China, which used to be synonymous for making no money in software, has become the poster child for how to make money in gaming software. So in China, everything is free. It's massively multi-player games, free to play. And then they -- you get all these micro-transactions. You want a faster car, you want a better character, all this stuff. And it's only $1. So ironically that's -- again, it is our largest geo.

Q - David Wong {BIO 17161335 <GO>}

Very last quick question. Yes, no, or $3 billion.

Q - Unidentified Participant

Just more on Tegra 4i. Can you just talk about opportunity for further design wins. And opportunities, maybe, vis-a-vis Qualcomm, to -- What's the strategy there to try to get some more design wins.

A - Rob Csongor {BIO 3210739 <GO>}

Yes. That's a good question. So the one thing that we announced this quarter was that we received voice and data certification for our modem from AT&T. The best way I would articulate our strategy on Tegra 4i is to just articulate our overall strategy on Tegra.

Tegra, again, is focused on Android. And Android includes phones. But it's not just phones. So we believe that we'll have opportunities for phones. But our strategy is not to take over the modem market versus Qualcomm. Do you know I mean? If you look at our focus, our focus is always first on visual computing. And then, within the phone market, a modem helps you use your visual computing advantage versus other people.

So I think, again, within the Tegra market, as within the phone market and these other markets, we're going to look for areas where visual computing matters. And the modem helps us, in that case, within the phone space.

Then, of course, for all other devices that are not voice, the phone is the only one that requires voice modem, all other devices, we believe long term, will require a data modem. And that, we believe, is extremely critical for Tegra.

Q - David Wong {BIO 17161335 <GO>}

Thanks very much, Rob. Really appreciate it.

A - Rob Csongor {BIO 3210739 <GO>}

Hi. thank you, David. Thank you very much.