BMO 2021 Technology Summit

Company Participants

- Colette Kress, Executive Vice President & Chief Financial Officer

Other Participants

- Ambrish Srivastava, Analyst, BMO Capital Markets

Presentation

Ambrish Srivastava {BIO 4109276 <GO>}

All right. Welcome back, everybody. Colette, pleasure to have you join us. As always, thank you for making time for us.

Just a quick housekeeping note. My moderator Q&A thing is finally working. So please feel free to pop in and as always, you could just keep shooting emails as well.

So a great pleasure to have NVIDIA join us, and Colette Kress needs no introduction, CFO of the company. So before we get started, Colette, you reported earnings last week. Maybe just would be helpful to get a quick recap of how you highlighted the business conditions near term and then we'll take it from there into Q&A.

Colette Kress {BIO 18297352 <GO>}

Great. Thanks so much for hosting us here at your conference.

I'm going to have to start with just a reminder that our discussion and presentation contains forward-looking statements, and investors are advised to read our reports filed with the SEC for information related to risks and uncertainties facing our business.

So let me first start with some of the key highlights and takeaways from our earnings that we just had in terms of last week and our thoughts in terms of where we think moving into Q3 will go. First, our data center demand for NVIDIA compute continues to accelerate. We saw exceptional growth in this last quarter, particularly in AI inferencing more than doubled year-over-year. This is an area where customers are taking deep learning AI workloads to production, they're shifting away from CPUs to GPU for inferencing and our A30 ramping quite well and it includes about 4x the performance improvement T4 our prior inferencing specific card.

Additionally, we're seeing a leadership in our AI training to continue. We have both swept the ML performance benchmarks that were out there, but also strong growth with natural language processing, deep recommendators, which are very important new workloads that are occurring. This is likely going to be a phase of industrial AI high performance computing revolution. It is underway as we see more and more large supercomputers supercomputing out there taking advantage of this opportunity to introduce acceleration to a good part of the industry, and we'll talk about that more.

Moving to our overall NVIDIA RTX. NVIDIA RTX is available as a great opportunity to advance overall graphics for both our consumer gaming, but also for our enterprise graphics. Entering into the holiday season in the next couple of months, we are entering with the strongest ever product cycle expanding both the start of RTX titles, RTX titles for gaming and also lean channel inventories. We also have the biggest wave of NVIDIA laptops for both back to school, studio, as well as that holiday season as well.

Now when we move to further talk about the opportunities of high end graphics, we can't start that without talking about Omniverse, the power and the future of an immersive overall entertainment and industrial collaboration approach as we move forward, and we'll talk about that in addition. We have been highlighting our NVIDIA AI software and subscriptions as a key opportunity for us as we move forward, probably a multi-billion dollar opportunity as we go forward.

But though we talk about our guidance, some what we provided at our guidance, we expect another strong quarter. We expect sequential growth, driven largely by the accelerating demand in data center. In addition, we also expect sequential growth in each of our other three market platforms that means our gaming business, that means pro visualization, as well as our automotive. We expect that the contribution for CMP, our Crypto Mining Processors, to be minimal as we think about the outlook going forward. So our revenue guidance for next quarter is $6.8 billion and a large portion of that growth is related to our data center business.

Questions And Answers

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Great. Just in terms of visibility and especially given how tight things are, it is actually quite remarkable given lead times stretched out, you guys have delivered the kind of growth you have. But in terms of visibility, can you please comment on your visibility, given the stressed lead times? I think earlier in the year, you have characterized that your visibility to the data center business is very strong because a lot of the more project-based projects that you're working on. So how does the visibility looks like versus what it would look like normally at this time of the year?

A - Colette Kress {BIO 18297352 <GO>}

So when we think about our data center business, understand we have a wide set of different types of customers. Yes, we have conversations, both with our hyperscales,

hyperscales for internal use of our infrastructure, while also providing it for cloud instances. We also have a very meaningful amount of vertical industries that make up a portion of probably close to 50% of our data center business that can be achieved from purchasing from our certified OEMs, as they create many different server offerings for this industry, but they can also be very specific sales such as SuperPODs and/or our DGXs.

Our work in terms of visibility stems all the way from helping many of the companies' hyperscales and vertical industries look for infrastructure solutions to solidify what they're trying to do for AI, what they're trying to do for high performance computing, inferencing and lots of that is in engineering engagement from the overall architectural level. Our overall visibility as we move into Q3 is quite solid. This has been an area of continued growth on our part of helping companies end to end on their platform and system choices as they built up.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Okay. I have a few more questions on the what seems to be an endless supply-demand imbalance. I certainly haven't seen anything extend out over such long time. In that context, could you talk about lead times and especially in the gaming business, it sounds like we should just throw our seasonality out the window, A, because the business is different because of how big laptops are, but then also how constrained supply has been?

A - Colette Kress {BIO 18297352 <GO>}

Sure. Let's talk about our overall gaming business and what may be referred to as lead times. There's multiple parts of our overall gaming business. Our gaming business is structured to support desktops, to support notebooks, to support overall cloud gaming. So each of those require a different level of supply and overall working towards that. We have articulated now for a couple of quarters that we are supply constrained on our gaming business. But the way to think about that is, demand is quite high. Demand is very strong, and we continue to produce strong results in terms of revenue growth year-over-year, but we continue to work with all of our different partners on supply. So it's not just looking at the supply that we have, but it's also understanding our OEMs, our AICs and helping them create the systems, the boards that need to go to market.

So our lead times as we think about this have already been determined because that's something that you are usually procuring for the long term when you think about your long-term growth. Those procurement of things have been made. But now it is for us to work with our partners to make sure that they can get the boards and systems to market, but they also how all of the systems, parts and components that are necessary to put these into market. We feel very good about our guidance that we provided for Q3. We believe that we have enough supply to serve what we refer to as the company's growth aspirations for both the second half, as well as moving into next year.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Okay. And many of the chip companies larger run especially have -- I don't want to use the word resorted to, but they have resorted to non-cancellable orders, signing up many different ways to really to ensure their own planning and help them planned capacity. So Colette, what is NVIDIA done to ensure that your planning, your capacity better in order to meet the demand given all the challenges on the supply side?

A - Colette Kress {BIO 18297352 <GO>}

We can break down your question regarding planning into different types of areas. What we're doing for overall consumer planning, consumer gaming planning and then what we are doing for the overall enterprises, particularly as we deal with data center and data center compute. From a planning perspective of gaming, we do take the role of making sure we have a good understanding of the growth that could happen in terms of consumer gaming and we will plan from a both a consolidated level how to think about that levels of supply that would need to be available in the channel at any point in time.

As we leave the end of Q2 and go into Q3, our overall supply levels at the channel are still quite lean. So we have a goal to continue to improve those levels to allow GeForce cards to be available to our gamers as we move forward. Now that is working with each of our channel partners to understand what is available in the channel, how we can continue to serve those different markets, those different regions in terms of the types of parts that they want. That is where our long-term planning comes into mind. It shows how do we restore those channel levels.

Now when we look at overall data center, purchasing overall data center compute is a long process, both planning in terms of what the customer would like also planning on our side, because many of our products that we ship for the data center take quite a bit of time to produce from end to end. So you could think that most of our supply planning has been over a long period of time for us to serve this market. And now, we are trying to find those solutions for our customers. There will continue to be areas where we have to focus with our OEMs, with our partners to assure that everything that is needed for the data center is available both of the OEMs, as well as through NVIDIA just several overall customers.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Okay, that's very helpful. Let me switch gears to a longer term and this was a question that Jensen did address to a certain extent during the earnings call, your software strategy. It seems, as he mentioned, it's a multi-billion opportunity and the way I think about it obviously has very positive implications for the operating on. So the question here is just recap for us please what are the three pillars for the software strategy as you have laid out? And then I had a couple of follow-ups on that.

A - Colette Kress {BIO 18297352 <GO>}

Absolutely, great question. We're not new to software. We're not new to software, a very large portion of our systems that we provide throughout all of our market platforms incorporate software, and we have three different ways to deliver software value to our customers. First, software and hardware could be offered separately.

This is a case where we're talking now that we may enable a software offering to the enterprise channel that they purchase through our OEM partners. Number two, software and hardware could be delivered together as a platform. This is very common, what we do with our CSPs and/or hyperscales.

And number three, for the community as a whole, whether you think of research, education, start-ups, our software is free. This is the underpinnings for example of Kuder over the last decade in terms of how we provided, providing them the capability to learn the overall development platform and think of new opportunities and how to use it. The functionality and support level with each of these three is different for each of that. Enterprises, for example, may prefer to pay for what they have in mission-critical software and related support.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

And then what are the milestones that we should be -- Investors should be looking at to see the if they purchased is being adopted and recognized revenues are not that immediate, but how will you inform the community to be aware of the practices on this front?

A - Colette Kress {BIO 18297352 <GO>}

Yeah. We're happy to share in the next couple of years in terms of how we're doing in our specific software approach, if it is a separate purchase from the overall hardware. We're just entering in the space of an important era of industrial growth. Industrial growth that will use AI and use our software, so you will likely see first something in terms of the overall bookings of what we're seeing in software and then in the future what we'll see in terms of on the income statement in terms of revenue. As we go from time to time, we'll be happy to share what we're seeing in that area.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Can you share with us some examples of some early wins that you've had since you officially rolled it out, the texture was before you told us about it?

A - Colette Kress {BIO 18297352 <GO>}

So we have been working on many different types of subscriptions with key providers out there. Many of our OEMs are now fully trained to sell our overall software applications, whether that be base command, fleet command, enterprise AI software. So we'll in the future talk about those key lighthouse wins and maybe the size of what we're seeing in terms of the number of pickup from that.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Got it, got it. Okay. Let's switch to the demand drivers for each of the segments, and we will start with gaming first. And you're four quarters into the Ampere launch. And I think you mentioned about 20% of the installed basis upgraded. So just help us understand typically how long does it take and to what extent does the asset brought out in terms of the upgrade cycle?

A - Colette Kress {BIO 18297352 <GO>}

It's an important area of focus on regarding our Ampere architecture and the performance that has been delivered with our Ampere architecture for gaming, but also on the surge of gaming and the use of overall real time ray tracing. When we think about the Ampere architecture, it's in its fairly early part of the architecture as a whole. We've probably been in market for about a year, and we are continuing to provide new cards into the market at this time.

Now, when we talk about that 20%. The 20% relates to the percentage of folks that have upgraded in our installed base to either Ampere or are able to take part in terms of ray tracing. So that will incorporate some of our prior architecture then incorporated ray tracing. This is now looking at 80% of our installed base that's still has the opportunity to upgrade with the Ampere architecture.

Now, just looking at our prior architecture, which you can even look at our Pascal architecture and understand the great performance enhancement, now that you have available to you with Ampere going forward. We still have lean supply out in the market, and we do believe we'll continue to serve the gaming market with more cards in the quarters to come. So as we move into this back-to-school season, as well as the holiday, we will look to upgrade the installed base, but also add new gamers who are interested in the Ampere architecture and the availability of our supply.

When we move from architecture to architecture. It's not uncommon that we will reach a portion of our installed based on the most current architecture, but it may not be the majority of the installed base on that specific architecture, we may take that opportunity to move to a new architecture to entice even more excitement of the performance and the games that were coming out. But right now, getting ready for the overall holiday season, will be ready with Ampere architecture in the market.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

And Colette, what is the right way to think about the installed base? A few years ago, it was relatively simple. I say relatively simple, you could look at desktop sold now it's laptops, it's cloud gaming, it's e-gaming, how do you, when you think about the installed base, what's the right way investors should be thinking about it?

A - Colette Kress {BIO 18297352 <GO>}

The way to think about the installed base is there are hundreds of millions of overall gamers that are out there. And you're correct, there's many different ways that you can now achieve overall gaming. You can have multiple devices. You can be leveraging the cloud for your experience because now we're enabling not just on a standard desktop or notebook, but supporting many different Ethernet structures to support the overall cloud as well. So this is a ability for us to look at many of the on mine gaming sites to really see how well NVIDIA GPUs are serving in there. We continue to be one of the fastest growing GPUs on the list of many of these sites, such as staying in. So this is an area where we focus on, but we have continued to provide more and more opportunities and options for our gamers to take advantage of high end gaming.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

On the mix of laptop industrial, could you remind us what have you said publicly about how big is the laptop business now as a percent of overall or as a percent versus desktops?

A - Colette Kress {BIO 18297352 <GO>}

So far year-to-date, we've talked quite a bit about new laptops, high-end laptops that leverage our Max-Q technology available for overall gaming, both the thin and light has been an important area where gamers would like to see, and there has been very, very successful. Our notebooks are growing quite well over the last couple of years, not just this year to date and now represents probably 30% of our overall gaming business with our notebooks.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Okay, thank you. Question on crypto, I'd say you guys did a great job, not only in addressing it with the CMP product line, but also in communicating with us much earlier than the prior time. So just remind us regarding your confidence on the comments you made, which I thought was pretty meaningful that you said that you expect CMP to be pretty almost I think that may not have been the word you used immaterial to the business going forward?

A - Colette Kress {BIO 18297352 <GO>}

Sure. So let me remind everybody in terms of how we addressed the two important areas of both gaming, but as well as our overall crypto mining. We are focused, first, on getting our GeForce gaming cards into the hands of gamers. And this last quarter, the Ampere GPU cards have been one of our fastest ramping. We believe we've been successful with our strategy. I just want to remind everybody, though, that it is difficult for us to estimate the impact of crypto currency mining on our sales as we just don't have visibility into the end use of our GPUs.

However, our strategy involves providing CMP, Crypto Mining Processor, cards to professional miners and low hash rate cards GeForce cards for our gamers. This allows us to steer about supply to our gamers, low hash rate cards shipped in Q2 were over 80% of our Q2 Ampere desktop GPU shipments, and we are early in the process for both the Ampere architecture and RTX. Now we're starting to see those GeForce retail prices directionally starting to move lower, but we'll have to see some additional work on getting to retail prices down.

When you think about what we provided in terms of crypto currencies moving into Q3, our choice was we expect CMPs, CMP that we will ship to be minimal going forward. We look at this as an area, a lot of different drivers out there, influencing that even in this last quarter, we saw profitability from mining quite volatile and changing in terms of lower, as well as the overall regulatory areas in certain regions to be difficult for the overall crypto. So right now, our outlook for Q3 is minimal CMP for the quarter and we'll focus again on low hash rate cards for our gamers.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Great. Let me switch over to the data center side. You provided a very robust guidance for the data center business and sounds like it's a combination of both the verticals and the hyperscaler driving that growth. And I was a little bit surprised that HPC and I should have been, but it's become such a smaller piece of the business that move verticals and hyperscalers are roughly half and half. Can you just, I think, with the exception of the one year, two, three years ago when we have the deep pull down and data center spend which did impact your business. It seems to you're relatively immune from the server cycle. But on the flip side, with the new server refreshes coming both from Intel and from AMT, does that add a booster to the business? Or we should still think that on the enterprise side it's still or all of the hyperscale side is really immune to that refresh?

A - Colette Kress {BIO 18297352 <GO>}

So when we look at our outlook for data center going into Q3 and the accelerated growth that we're seeing, we've also accelerated growth in Q2 and Q3, in line with what our commentary have been that the second half of the fiscal year was a great opportunity, as the economy improved, as we started to see enterprises start to open up that they would focus in terms of AI, high performance computing types of solutions at this time. That's what we're seeing both with the hyperscales as they build both for internal, you've seen some very important drivers of that, whether that be conversational AI, whether that be recommendators which are very important, as well as infrastructure needed for the metaverse as we move forward.

Those cloud instances are also an area of growth. And those are, where our industries have focused as well as in terms of crack cloud instances for their compute. But moving to our vertical industries, our vertical industries, this is a time for them to focus on acceleration, focus in terms of inferencing in all of the work that they do. And as you discussed, we see about an equal break out between what we sell to the hyperscales as well as we sell individually to the vertical industries. Our supercomputing is a relatively small portion. But our high performance computing parts of that along with AI are included in our vertical industries pieces of that.

Now when we think about those demand drivers for the enterprise inference, inferencing doubled in Q2. We expect that growth of inferencing and more to growth to occur in the second half of the year. So we're aligned with whatever choice a customer may need. As you know, we're agnostic to the overall CPU that they would like to provide, whether that comes from some of our peers or whether nothing even want an ARM overall servers going forward as well. So we'll continue to support them in each of those markets.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Great. And thanks for the correction I misspoke. I should have said supercomputing in my head I always still think of HPC is supercomputing interchangeably. Can we talk about inferencing? You had an interesting comment during the earnings call and you highlighted that as well in the growth that you're seeing versus T4. What is the landscape looking like? Are you -- is that similar to a big chunk of it should be similar

to a greenfield opportunity opening up? But it sounds like you should be also taking share in this side. So just help us understand how much of this is brand new opportunities opening up as a result of training on NVIDIA systems that there is now translating into inferencing versus share shifts?

A - Colette Kress {BIO 18297352 <GO>}

When we entered into inferencing or when we communicated that our strategy of moving into the inferencing market several years ago, we entered into the market understanding that our market share was going to start with zero that this was an area that historically had been HCP market. However, the overall inferencing demand and the type of inferencing that customers are doing is quite different than the past. The inferencing of today is strong (Technical Difficulty) high and performance necessary for very (Technical Difficulty) inferencing specific performance cards. This has been our prior architecture T4, but as we discussed, we've also come out with A30. A30 is based on the Ampere architecture and delivers a significant performance improvement to what we had T4. We saw that in this last quarter more than double, but our A100 as well serves both as a training overall system solution and an overall inferencing solution is not required (Technical Difficulty)

Q - Ambrish Srivastava {BIO 4109276 <GO>}

(Technical Difficulty) driven by the verticals or by the hyperscale companies?

A - Colette Kress {BIO 18297352 <GO>}

It is both. Your hyperscales will provide in terms of cloud instances that many of your vertical industries will use those cloud instances. This is a case where end customers made by an EGX server and OEM certified server as well (Technical Difficulty) to do their inferencing. This can be inferencing on the edge inferencing of consolidate (Technical Difficulty)

Q - Ambrish Srivastava {BIO 4109276 <GO>}

(Technical Difficulty) power through (Technical Difficulty) it had a very, very meaningful step up. Is that something you typically see with a new architecture is adopted and then and seems like this is a very different architecture that the community is not getting the hands on. So how should we expect the trajectory of this business from here on?

A - Colette Kress {BIO 18297352 <GO>}

Professional visualization did have a very strong quarter in Q2, growing more than 150% year-over-year. Thinking about the year ago quarter, the year-ago quarter was one of the very first quarters during the initial (Technical Difficulty) of getting infrastructure to their employees as they work from home. So a lot of that purchasing, that refreshing probably stalled in the year ago quarter. But looking at the current quarter, we are seeing both refreshing, we are seeing enterprises reopen and serve their customers. But I think what is also important is the Ampere architecture four, five and enterprise solutions as well. This has been a great quarter,

where Ampere is a meaningful part of our sales within progress. The first quarter that we're seeing a full quarter of serving ambition for this market.

Not only is ray tracing important for gaming, it provides a lot of solutions for independent creators, those focused on product design and those working in many of our enterprises now solely as a whole a part of overall companies and working on product designs. So we're very pleased with this overall growth that we saw, a little bit of a lot of different things, but definitely, what you're seeing is the demand for high end graphics and enterprise as well.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Okay. I wanted to switch to automotive, and I couldn't help stop thinking last week when all the information came out of Tesla is pretty impressive. D1 chip and talking about the application or if at all. There is very few companies that have that kind of internal capability. And you have built a pretty big pipeline, which comprises of more than just hardware. So just help us understand how should we think about the timing when this business switches from the legacy infotainment to sell these new initiatives that you have been getting traction with and especially as it relates to autonomous driving, because then the leader in that company showcases AI, we know that the rest of them can be developing or they might be developing their own solutions, but just help us understand the dispositioning and what you're seeing in the pipeline?

A - Colette Kress {BIO 18297352 <GO>}

Sure. So when you think about our automotive business, right now, there's two pieces of focus. One, the legacy infotainment business. We've been a part of that business for more than a decade. And this is an area that we'll probably see a decline over the next year or so, as we move to focus on non-commodity and focused on autonomous driving. We've talked about in the last couple of quarters, our pipeline. Our pipeline to revenue is more than $8 billion going out to 2027. A good part of that is our focus in terms of our agreement that we have with Daimler for all of their fleet of cars to hit over the next several years. You will see an inflection point, probably in the next year and a half or so as our autonomous driving solutions hit in terms of the market from both passenger cars, but also robotaxis and our overall trucking.

We focus on an end-to-end platform. We focus on end-to-end platform that starts even today as the automotive companies have infrastructure inside of their data centers to build out and develop for what they will have in terms of autonomous vehicles in the decade going forward. And we provide probably the strongest performance, but also complete solution from the overall hardware inside of the car and software as we move forward.

In the case of Tesla, they had really demonstrated or validated our full stack approach and the importance of our innovation through systems, networking and software in terms of what we've put together. It's interesting to see Tesla in terms of their overall performance. Always keep in mind, NVIDIA is still working every single day on our roadmap. And I'm sure there will be more that we'll be able to show both our customers as well as our investors in terms of what we deliver.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Great. I think we are close to running out of time, but I wanted to touch on the CPU strategy kind of related to that is a question on ARM. I think you addressed it, particularly during the earnings call, but for those who might have missed it, can you give us a quick update on ARM? And then more importantly, on your CPUs strategy, which is with or without ARM as part of NVIDIA you are continuing to execute on?

A - Colette Kress {BIO 18297352 <GO>}

So let me first start with our overall CPU strategy, Grace. Grace is designed for our giant scale high performance computing and AIs use cases, where memory capacity, bandwidth, energy efficiencies are always considerations and constraining factors. So this is a case where Grace is not designed to be a commodity CPU. It is going to be the largest CPU ever made, but what is important is Grace is designed to be tightly coupled with our GPUs. It's about full stack innovation and thinking about the CPU, the GPU, the DPU, compute, storage and networking in the data center as a whole. We'll hopefully see 10x higher performance, 10x the energy efficiency as well as 30x higher GPU to CPU bandwidth with Grace. We're expecting Grace to start shipping in calendar 2023.

Now when you think about our ARM. ARM is a great overall acquisition. We have been working with regulators throughout this last year, and we do believe they should understand the benefits of the ARM acquisition, both to customers, to the industry and to ARM. However, it is taking a little bit longer than we expected to both answer questions and move through the regulatory process in many of these jurisdictions. So we will come back later with in terms of the timing of when do we think this will close. But right now, we are focusing on all of the jurisdictions across the world.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Great. I have a question from an investor. And the question is on the gaming inventory, while we understand that gaming inventory is lean, but is it up? Do you expect it to increase quarter-over-quarter? And then what do you expect -- what is the normal level of inventory? I know many years ago, you used to give that number of it since that you have refrained from actually giving the quarterly the actual numbers. So if you could please highlight your expectations. And then, what's the normal level?

A - Colette Kress {BIO 18297352 <GO>}

Sure. Let me break down the question a bit here. So there is channel inventory. There is channel inventory that says after we provide to the AICs, they provide to the market for retail and e-tail purchases of our overall gaming cards, as well as number with our OEMs, as they build out overall notebooks. So that channel inventory is at lean levels and probably not aligned to where we've normally seen our targeted levels. We can see this as both levels of weeks of inventory are quite low, but also we see higher pressures in the market as there is an imbalance in terms of demand and supply.

Additionally, if I'm moving back to NVIDIA as whole, NVIDIA has to say what is our inventory that we will have in order to produce new products to now send to our overall AICs and our OEMs. We discussed on the call for Q3, we do expect a sequential increase in our revenue between Q2 and Q3 or our revenue is expected to be higher, as we provide more than we did last quarter to our AICs and our OEM channel partnership this time. But we will at the end of Q3 be continuing to look at the balance between supply and demand. But in Q3, we are still supply constrained in terms of what we could provide.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Got it. And not too unrelated, just a question, when do you expect supply to reach a point where you feel like you're being able to match the demand?

A - Colette Kress {BIO 18297352 <GO>}

So it's always difficult to determine when and what demand will be over the long term. However, what we do have in supply is supply to meet our internal projections for growth, both for the second half of this year, but also what we have planned for the next year of growth. So we are focused on growth, both in H2, but also growth as we turn the corner into our new fiscal year.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Okay. I think that covers it, Colette. Would you like to leave us some final thoughts?

A - Colette Kress {BIO 18297352 <GO>}

Well, thank you so much for hosting us here. I think we have some great overall opportunities with our architecture, Ampere, both for the data center, data center solutions, our focus on AI, high performance computing and the importance of the industry moving towards high performance computing and AI or software solutions. Let's not also forget the importance of high end graphics is not only just a gaming piece, but is an important part of our enterprise focus as well. We are now in the second architecture focused on ray tracing and our solutions on our performance are really in the hearts and minds of these customers. I thank you so much for hosting us here, and look forward to the next event as well.

Q - Ambrish Srivastava {BIO 4109276 <GO>}

Thank you. Thank you so much, Colette. Always a pleasure. Thank you. Take care, folks.

A - Colette Kress {BIO 18297352 <GO>}

Take care. Bye-bye.