

Daniel Newman: Welcome back to the Six Five Summit. Cristiano Amon, we are so excited to have you back again for our second annual Six Five. How are you doing today, sir?

Cristiano Amon: Very good. Very happy to be here. Always a pleasure to talking to both of you.

Patrick Moorhead: Yes. And you add so much to the show. You did last year and you're going to add to the summit this year and I'm really, really happy for that. But Cristiano, let's just dive right in. So, as you're about to prepare to take over leadership of the company, how do you want people to think of the new Qualcomm? And for those who think they know the company and many who don't, who is Qualcomm?

Cristiano Amon: It's a great question, by the way. It's interesting for somebody that's been in the company for 25 years, we're still one of the company that we're part of everybody's lives every single day, and there's a lot of people that don't know about Qualcomm. But here's the elevator pitch on Qualcomm. Qualcomm is... It means quality communications and we're about everything wireless communication. We strive to be the number one in every wireless technology. Of course, we're being well-known from cellular, from 3g, from 4g to 5G, but also we're the number one in wifi technology. It's all about wireless communication and then everything high performance, low power processing at the edge. And I think Qualcomm is the company that really aspire to get everyone and everything connected 100% of the time. And we'll continue to be the company that hopes to be always redefining what is the pace of innovation in wireless technology.

Daniel Newman: Yes. And, we're so excited to watch you in this new role, taking over. You've had a huge role for a long time, and this is such an important and such a big inflection point. So I'm sure Pat and I will both be watching this very closely as well. So many people out there are viewing this event right now. Speaking of the future, let's talk about that for a minute. What is your vision of the future and the role that Qualcomm is going to play in it?

Cristiano Amon: Very good. Look, it's an exciting time right now to be part of Qualcomm. And I'll tell the reason I say that and I'm super happy about what we see in front of us. For the very first time it's becoming clear that there's demand for our technology across every industry. And this whole process to accelerate 5G, basically created this opportunity that Qualcomm can diversify and expand from mobile to pretty much every industry out there, following this trend of digital transformation. And that's how we think about Qualcomm going forward. We had the right strategy. We have 5G in front of us to execute. I'll be happy to spend a little bit of time on that because our mobile strategy is not what people are thinking right now, but we're executing like there's no tomorrow on 5G.

But then what's more important is building on that trend. We see us go into automotive, going into IOT. And the IOT is so broad, we're just scratching the surface of the segment. And it's going to redefine Qualcomm as the company that connects everything to the cloud. And I wanted to start the conversation

and hopefully our investors understand this. If you buy this growth that you'll see in the hyperscalers and they look at the valuation of companies like Microsoft and AWS, it's because you expect everything to be hosted in the cloud and more and more data going to the cloud. So if that is true, you better have a company like Qualcomm on the other side, connecting everything to that cloud. And I think that's the role we're going to play.

Patrick Moorhead: Yes. And I think there's one thing that we can bank on. It's that everything will need to be connected. And like you said, the whole notion of, I'll say, there's trillions of devices out there, will need to come together in an intelligent fashion. But let's swing back to the mobile industry here, which has really been defined as a convergence of many technologies. And by the way, I loved that graphic that you tweeted out, showing all of the different devices that ultimately got sucked into the smartphone. It's super exciting. So what technologies do you see converging in the future in devices, maybe in ways we hadn't expected before? And finally, what is the impact on businesses globally?

Cristiano Amon: That's a great question. And I will start Pat, by saying, one of the things that we always did at Qualcomm, we never bet against integration. And if you look at the story of Snapdragon, it's about integrating more and more into an SOC. And that's the reason I chose that picture, even though I was 25 years younger.

Patrick Moorhead: That's you. So that was you?

Cristiano Amon: It was Photoshopped. It's my face.

Patrick Moorhead: Okay.

Cristiano Amon: It is definitely my face, but I was younger at that time. But, the point is you look at everything that... Every consumer electronic device became part of a smartphone. And I used to say that all back day in the feature phone base, when people will ask me, what's the best camera. And I said, "The best camera is the one that you carry with yourself every day. That's the best camera. That's going to be..." And clearly camera, it's part of your smartphone. But your question is very interesting. Does it end here? Does the smartphone already integrated everything, and what more is coming. And there's a lot more coming.

And when we think about 5G, there are a couple of things that is driving more integration of capabilities. One, it's right in front of us right now, which we always believe that a smartphone, which is mankind's largest development platform, is going to integrate the full personal computer. And we're seeing the full conversions now of smartphones and PCs. The recent, I think, announcement of Apple with M1, it validates what Qualcomm has been working for four years. And to get Snapdragon into PCs, in a partnership with Microsoft, you see the PC during the pandemic got redefined as a communicator device.

If you're talking to me right now, looking at your PC, that's a number one use case on a PC, is a communicator device, and that's accelerated the conversion. So the next thing is, you're going to have all the computing needs in the palm of your hand, and then that technology is going to jump from a smartphone to power the PCs. But with that, there's something else that comes, and I think it's hard to identify all the use cases, but we know what the potential of the platform is. One of the least understood features of 5G, it's on-demand computing. Because 5G, basically it's about connecting everything to the cloud, 100% of the time with virtual unlimited bandwidth like wireless fiber. So what happen is, the cloud plus your device, it could be your PC, for example, or it, could it be your smartphone, they become part of the same computer.

So you can run workloads that you will need, for example, a workstation, if you're doing computer aided design, for example, on your laptop. But you're going to do it in the cloud and you don't even know you're doing it in the cloud. So what's going to happen is you're going to... Every time you need computing power, you're just going to tap into the cloud and you're going to have the ability to have on-demand computing power. That's going to bring so many different use cases to laptops and into phones that we haven't seen before. So the way to think about it, a single laptop with ultra mobility, long battery life, you'll be able to do anything. It doesn't matter what is the processing power that you have on your device, once it's 5G connected. And I think that is going to bring so many new capabilities that are going to get integrated into those devices. Sorry for your long answer, but I'm very passionate about that.

Daniel Newman: No, absolutely. That is a ton of ground that you've covered there. And I love the idea of that seamless experience from device size and profile. And we're starting to see that. This last year really gave a lot of us a lesson in just how essential that connectivity is. And from device to device, super computers on our desks, supercomputers in our pockets, more or less, we are doing everything on every device and from tablet to full PC and desktop all the way down to our smart smartphone, we want that ubiquitous experience. And you guys are definitely working hard at that. It's something we're tracking very closely. I know Pat, you and I talk about this all the time.

Another side of your business that we've had a lot of opportunity to talk about has been your enviable technology assets. They map across mobile and your licensing business sometimes is one of the less understood, but it's something that I think is very important, and I know I'm already hearing you talk more to this. Talk about how this whole technology business and this whole licensing business and the whole demand that's being built around this.

Cristiano Amon: Yes. So I think the license is probably, it has been one of the most misunderstood elements of the Qualcomm business model. But it has been the biggest enabler of scale for the cellular industry because see, the thing people often forget, when wireless happened before Qualcomm, you only have vertical players and platforms, which own everything, and they had the technology and they produce the solution, and it was closed systems. And Qualcomm, a licensing

model, basically enable everybody to have access to the technology and innovate. And that's what I think set Qualcomm apart from any other company. And I like to point that, for example. I'm not sure, both of you were there with me following step-by-step, when we took the challenge to accelerate 5G by one full year. That's the difference between the Qualcomm model and other companies model.

It's not about one company does everything. At Qualcomm it's about, can we bring an entire ecosystem together? And that Qualcomm model is what made possible when we said, "Let's accelerate 5G by one full year." All of a sudden, everybody in the industry, and 40 people... 41 from the largest companies in the world joined and said, "Let's go make it happen." And I think that's about having technology that is invented, centered to standards, licensed broadly, and then you build a horizontal platform that everyone can innovate. And that is what we're taking from mobile to all of those different industries as we expand and diversify the company.

Patrick Moorhead: Yes. One of the most under appreciated elements of what you do is essentially Qualcomm is orchestrating with handset players, with equipment makers and carriers to make this all work. And there's a tremendous amount of value in that. And the other thing... And I always like to say this, and we brought this up, we did an interview with John Han. We talked about the difference between research and development and the billions of dollars that Qualcomm is investing in. Very risky research makes the world go around. Let me shift some gears on you here. So you're about to become the CEO of a leading US fabulous semi-designed company, we're in the middle of a supply shortage, and I'm curious. What are your thoughts on the global semiconductor supply chain and the US government's priority to scale manufacturing capacity on US soil?

Cristiano Amon: This is a great topic of conversation. And I will start talking about the current environment. It's really incredible. I think this is not a small, I think, supply chain crisis in semiconductor. On the positive side, it highlight the importance of the semiconductor companies, the incredible United States fabulous industry that got built, and the role of the semiconductor design companies and the digital economy. Everything is short. I actually tell people that if you're in the semiconductor business right now and you'll say, "Oh, no, I'm fine. I have supply." You should be very worried, you may have a demand problem because everything in Qualcomm is short. But we're happy we're going to climb outside of this. We're able to generate growth, even in the middle of this, and we're going to see this getting better at the end of the year. But you bring a very important question, which is about semiconductor manufacturing. And I think that's a great initiative.

Look, it's so important for our digital economy. This is going to change every single industries with connectivity and con computing, artificial intelligence. And it's no different in terms of critical infrastructure than having a power grid and railroads and ports and roads. It's going to be your ability to support your digital economy and semiconductor manufacture come at the very center. Companies

like Intel, for example, announcing they're going to be a founder, it's great news. We're super happy and interested in collaborating with them. We want to see more companies investing in leading technology and also do an [inaudible]. That helps for a lot, not only our business, but it's good to have a diversified manufacturing source. And one thing that people don't know about it, a big portion of our chips are actually made in the United States, are actually produced in Austin. And I think that diverse on foundries, diverse on location, it's really important and creates a very competitive and healthy business environment for everybody.

Daniel Newman: Yes, absolutely. And that's a big part of the discussion by the way, of everything that's going on in the world right now is, bringing back. Are we going to take more manufacturing back here? And of course, I think a lot of the world doesn't realize companies like Qualcomm are doing a lot of manufacturing here. So it's great for everyone out there who's paying attention, listening now, just to hear this soon here coming from you. You'll continue to be part of the solution too, and driving these conversations and what is next. How do we solve this?

And I'm thrilled to just continue to hear your voice as part of this solution because, wow. It's funny Cristiano, I said, the amount of attention given to this situation. Five years ago you'd bring up chips at dinner table, no one would even know what we're talking about. Now, everybody... You can go in anywhere and talk about chips. And people are like, "Oh yes. Yes, we got this shortage. I can't get my car, I can't get my Xbox, I can't get..." And it brought a ton of attention to this industry.

Cristiano Amon: Chips are important.

Daniel Newman: So with that in mind, you've been there a little while, you'd say, at Qualcomm. If you had to name one thing that you are most proud of during your entire tenure at the company, what would it be, and why?

Cristiano Amon: If I have to say one thing, it's definitely the effort we put together with all of our partners to accelerate 5G. It wasn't a small thing. And I'll tell you the reason I'm very proud of this. And I know both of you have been in many events and many meetings and went through the journey. The company have been through a lot, and Steve and I dealt with a lot of things. I think Steve had to steer the company as we went to some of all the big challenges the corporation face once in their lifetime, we just got all of them all at once. And in the middle of all of this, we have an incredible team that just focus on innovating in accelerating technology, while all this stuff happening. And what we did is, we thought about how can we accelerate fundamental technology like 5G and get that done one year ahead of schedule.

And I embark. First I had this idea with a few folks at Qualcomm and started with five companies and we then added another 40. And then we went on this journey and we achieved something incredible. Before the networks were even launched, you have commercial devices in the shelf with technology that

everybody said it will not work, like a millimeter wave. And it wasn't done before. And people say, "What about a module for industrial?" We have modules, we have devices for fixed wireless, we have everything ready to go. And now when we see the results compared to every other transition, 3g or even 4g, when you think about years from launch to where we are, 5G is striking two years faster than what we saw happen with 4g or even 3g. So I think we all should be very proud of this, for this industry, and, if there's one thing to single out, I'll definitely going to pick that.

Patrick Moorhead: Yes, Cristiano, I was at that Live Mobile World Congress. I was at the front row and all the leaders in the industry got on stage to officially kick it off, and it was impressive. I'll admit when I was getting pre-brief by Qualcomm, I thought it was going to be a... We're going to delay 5G, and it's like, "No, no, we're going to pull 5G in a year." And I had never heard of anything like that in my entire career, and it's hard to imagine today. I remember when 4g first kicked off. I think there was one handset I could choose from here in the United States, and I think there were five handsets in the US with 5G, and it's pretty awesome. So let's shift to the future here. Obviously, Daniel and I, have seen what you've done with 5G, particularly on the smartphone. And by the way, we've also seen what you're doing in automotive. What is going to be the next big surprise from Qualcomm? And if you want to break it at the Six Five Summit, please do that.

Cristiano Amon: Look, because when we look of this whole trend of being part of the digital transformation of many companies, connecting everything to the cloud, I think there's going to be a lot of stuff happening with Qualcomm. And especially in what we call the IOT segment. Not all IOT are created equal, but we think about having a high-performance connectivity and processing at the edge, connecting to the cloud. And we're seeing that happening at a very fast pace, in a number of different industries. But of course, if you want to think about something, which is going to be very unique and it's going to be like a revolution, I probably have to go back to the devices because that's where we live.

And what I'm going to tell you is, we have invested very early in VR, and despite skepticism, nobody wants to talk to us about it. They said, "Yes, those are like peanuts." Right now, VR is not. We're now seeing multiple millions of units, it's already material. If you look at Facebook, Oculus Quest 2, incredible success, and that's VR. But the next thing that is coming is AR. And the way we think about AR is, AR is going to solve the next frontier, which is the limitation of the screen size of your smartphone. The smartphone is way more capable than what you can pack in that screen. But once you put that into a glass like this, then all of a sudden the possibilities are endless. And eventually, the AR could become a standalone device, but we are just at the beginning of day, AR getting a scale. And it's going to dwarf the scale of VR because AR in glasses is something that a lot of humans are going to use it.

So there's a lot of breakthrough technology we're working in, in AR. There's a lot of Qualcomm size problems to solve. You get to get one watt of power consumption. You have to have a lot of processing power connectivity, but we

already see the light at the end of the tunnel. So stay tuned. I think we're going to have a big AR revolution coming up.

Daniel Newman: I'm super excited to hear more about that, Cristiano. It's such a big transition. We've been waiting for it. We love all of what you guys have been doing. Look, it's been a really great road for 5G. You guys are ahead of the curve. You talked a lot about that, and it's just a really exciting time to be in technology as a whole. That's why this summit is so big. It went from one day to five days, 50 plus sessions, and so many great minds are here to talk about where this is all going, and we're really excited. And Pat, I don't want to speak for you, but I think you would agree with me, we are really excited to see where you take this company when you take the CEO role on July 1st, and we're watching closely, and we're going to be checking back in with you. But for this particular segment, Cristiano, it's been great having you. We're super thrilled, and you're always welcome on the Six Five and the Six Five Summit.

Cristiano Amon: Thank you so much. Great pleasure for me to be here.

Daniel Newman: For everybody out there, stay with the event, stick with all the keynotes and all the sessions we have for the rest of the day. We have so much for you to tune into and learn from. More sessions from more great leaders like Mr. Cristiano Amon. For now, we've got to say goodbye. Stay with us the rest of the week.