# MediaTek 3Q21 Earnings Call

Tuesday, Oct 26, 2021, 3:00pm Taiwan Time

## PREPARED REMARKS

**Jessie Wang, IR Deputy Director**

Good afternoon, everyone. Joining us today are Dr. Rick Tsai, MediaTek CEO and Mr. David Ku, MediaTek CFO. Mr. Ku will report our first quarter results and then Dr. Tsai will provide our prepared remarks. After that, we will open for Q&A.

As a reminder: Today's presentation will provide forward looking statements based on our current expectations. The statements are subject to various risks and factors which may cause actual results materially different from the statements. The presentation materials supplement Non-TIFRS financial measures. Earnings distribution will be made in accordance with financial statements based on TIFRS. For details, please refer to the safe harbor statement in our presentation slides.

In addition, all contents provided in this teleconference are for your reference only, not intended for investment advice. Neither MediaTek nor any of independent providers is responsible for any actions taken in reliance on contents provided in today's call.

Now I would like to turn the call to our CFO, Mr. David Ku, for the first quarter financial results.

**David Ku, Chief Financial Officer**

Good afternoon, everyone. Now let's start with the 2021 third quarter financial results. The currency here is in NT dollar. Revenue for the quarter was NT$131.1 billion dollars, up 4.3% sequentially, and up 34.7% year-over-year.

Gross margin for the quarter was 46.7%, up 0.5 percentage points sequentially, and up 2.5 percentage points year-over-year.

Operating expenses for the quarter were NT$31.9 billion dollars, compared with NT$29.2 billion dollars in the previous quarter and NT$28.4 billion dollars in the same period last year.

Operating income for the quarter was NT$29.3 billion dollars, up 1.6% sequentially and up 100.2% year over year. Non-TIFRS operating income for the quarter was NT$29.9 billion dollars.

Operating margin for the quarter was 22.3%, decreased 0.6 percentage points from the previous quarter and increased 7.3 percentage points from the year-ago quarter. Non-TIFRS operating margin for the quarter was 22.8%.

Net income for the quarter was NT$28.4 billion, up 2.8% sequentially and up 112.2% year-over-year. Non-TIFRS net income for the quarter was NT$28.9 billion dollars.

Net profit margin for the quarter was 21.6%, decreased 0.4 percentage points from the prior quarter and increased 7.9 percentage points from the year-ago quarter. Non-TIFRS net profit margin for the quarter was 22%.

EPS for the quarter was NT$17.92 dollars, up from NT$17.44 dollars in the previous quarter and up from NT$8.42 dollars in the same quarter last year. Non-TIFRS EPS for the quarter was NT$18.23 dollars.

A reconciliation table for our TIFRS and Non-TIFRS financial measures is attached in our press release for your information.

That concludes my comments. Thank you.

**Jessie Wang, IR Deputy Director**

Thank you, David. And now I would like to turn the call to our CEO, Dr. Rick Tsai for prepared remarks.

**Dr. Rick Tsai, Chief Executive Officer**

Thank you. Good afternoon, everyone. Third quarter was another solid quarter for MediaTek. Quarterly revenue came in at the upper end of our guidance with a slightly-higher gross margin, mainly driven by healthy demand across our four revenue groups.

Today I would like to start with our fourth quarter guidance and provide some colors on our near-term growth drivers.

For the fourth quarter, we expect revenue to be in the range of NT$ 120.6 billion dollars to NT$ 131.1 billion dollars, flat to down 8% sequentially, and up 25% to 36% year-over-year at a forecasted exchange rate of 28.0 NT dollars to 1 US dollar. Fourth quarter gross margin is forecasted at 47.5%, plus or minus 1.5 percentage points. Quarterly operating expense ratio to be at 25%, plus or minus 2 percentage points. Based on the mid-point of fourth quarter guidance, MediaTek's full year 2021 revenue growth is expected to be 52%, and gross margin rate to be 46.4%, both of which are better than what we guided three months ago, which was revenue growth of greater than 45% and gross margin rate of 46%.

The strong performance in both revenue growth rate and gross margin improvement are not limited to 2021 only. Since 2018, MediaTek has grown our revenue by 106% and our gross margin rate has improved by 7.4 percentage points, based on current 2021 full-year guidance midpoints. This is the result of our continuous investments in technologies as well as competitive and synergistic product portfolio. Our track records have demonstrated MediaTek's competitiveness in an intensely competitive global environment and we are now more resilient against regional volatilities

In fact, we are now the largest smartphone SoC maker globally and we continue to gain shares across all regions of the world. In addition to our leading shares in several emerging markets, our Android smartphone market share in North America will also exceed 35% in 2021.

As we continue to make investments in our technologies, we believe MediaTek will become even stronger facing any global competition.

We also believe the same strengths during the past few years will carry us through 2022. We see 2022 is another year of solid revenue growth with healthy profitability. With that, I'd like to share some trends we are seeing.

As we all know, global digital transformation has sped up technology migration and resulted in higher demand for semiconductors and higher semiconductor content. We have been seeing great benefits across all product lines from accelerating technology migration such as 5G, WiFi 6 and 6E, Bluetooth LE(low energy) and 10GPON. Our technology and product portfolios also give us strong competitive edges in flagship segments. Now let me explain in details.

On Mobile Phone side, with our flagship entry and our strong position in global 5G expansion, we expect to see continuing strong growth in our 5G shipments and increases in blended ASP next year.

Flagship is a new segment for MediaTek and we are very confident in our ability to grow our share in this important segment. With MediaTek proprietary design architecture, expertise in low-power design and best-in-class TSMC 4nm process technology, our first flagship product delivers premium performance and superior power consumption. We are excited that our products are being highly recognized by customers. Today, all major China brands have adopted our 5G flagship SoC. Revenues of the flagship product will begin at end of this year and ramp from first quarter next year. There will be more flagship products in the pipeline for further expansion.

Furthermore, with 5G rollout entering its 3rd year, 5G solutions have been more widely adopted around the world. This year, global 5G penetration rate is at high-30s% and we expect it to exceed 50% next year. We believe our global leading market share in mobile phones will give us a huge base to enjoy 5G migration in the coming years, supported by our competitive sub-6Ghz and mmWave solutions. In addition to our strong 5G presence in Mainland China, we are also seeing strong design-in activities in Americas, Europe, India and other emerging regions with global brands.

In summary, our world-class technology and product portfolios have led and will continue to enable MediaTek to enjoy advantages of early participation in new product cycles as well as flagship and global expansions in all revenue groups.

That said, let me update you our current business progress by each group.

First, Mobile phone. Mobile Phone was 56% of third quarter revenue and grew strongly at 72% from last year, driven by continuous 5G migration and share gain. However, due to seasonality and a short-term smartphone mix shift towards mid-range phones in the fourth quarter, we expect revenue from this group to decline sequentially but still represent a strong growth from last year. We expect mobile phone business will be back to its growth track in the first quart of next year when we ramp flagship SoCs.

For IoT, Computing and ASIC, it contributed 23% of revenues in the third quarter while growing 22% year-over-year, mainly driven by accelerating 5G and WiFi 6 penetration as well as customer new product launches in smart devices, True Wireless Stereo Bluetooth headphones and tablets. We expect the momentum to continue in the fourth quarter and start shipping WiFi 6E products to high-end notebook.

For Smart Home, this group accounted for 14% of revenues in the third quarter and grew 13% year-over-year. Global digital TV demand has been steady. Demand in other TV-related products also stays healthy.

And then Power IC. This group accounted for 7% of the third quarter revenues, growing 26% from last year, mainly driven by higher demand in Power IC amid the 5G and WiFi 6 upgrade trend.

To sum up, we have demonstrated our capability to deliver strong revenue growth with improving profitability under intense global competition and macro economy uncertainties in the last several years. With our continuous investments in technologies and the ability to capture growth opportunities under global digital transformation trend, we are confident that MedaTek will continue our profitable growth in the foreseeable future. Together with our new cash dividend policy, in which we raise the payout ratio to 80%~85% and an additional NT$16 special cash dividend for 4 years, we believe MediaTek shareholders will enjoy a strong return.

That concludes my prepared remarks, thank you.

## QUESTIONS AND ANSWERS

**Q - Gokul Hariharan, JPMorgan**

Maybe my first question is on more near term dynamics. There's been a lot of concerns recently about demand weakness in China, especially for overall consumption, including technology products and smartphones. Could you talk a little bit about what MediaTek is seeing from a demand perspective, given MediaTek has a reasonable exposure in China? And I think also you had talked about supply being a little bit limited in the last quarter. After some of these demand weakness, do you still feel supply is still tight or there has been some relaxation in terms of the supply? That's my first question. Thank you.

**A - Dr. Rick Tsai, CEO**

All right. The market -- I know people are concerned about the some -- there may be some slowdown or inventory buildup. We are seeing, in general, still a healthy demand and also a healthy inventory with our customers. Of course, if you look at the inventory level compared to, say, 4 -- 3 quarters ago, you had somewhat, but it's still healthy. Even -- especially, compared to the demand picture. So we are comfortable with our demand. And that's why we said earlier in my remarks that we view 2022 still a year of strong -- solid growth and a healthy profitability.

From a supply point of view, since the -- we see, I wouldn't say a softening of the supply constraint, but we see supply to be uneven with some products -- a good example maybe WiFi, we are really way below. Our supply is still way below our demand. However, we are seeing adequate supply for our mobile SoC needs. We are -- in general, I think our supply -- we have managed our supply chain in such a way that we can meet our comments earlier for 2022 business, which is a solid growth and healthy profitability. Thank you.

**Q - Gokul Hariharan, JPMorgan**

Thanks, Rick. Maybe one more question on your flagship chip, given that we are very close to the chip launch. What is the kind of feedback you're getting? You talked about every China OEM -- major China OEM designing in. How do you benchmark with your primary competitor right now? And what kind of market share do you feel that you could actually get in the first year? And what is your expectation when we think about next 2 to 3 years in this segment? Like, what kind of market share would MediaTek be looking to secure given that it's a completely new segment that MediaTek is entering into right now?

**A - Dr. Rick Tsai, CEO**

All right. Well, flagship chips. First, we, of course, understand this is the first time, first year that we're entering this very important segment. We are confident we have a very competitive product in the market. We have shipped silicon to our -- all our major customers, and that's why we have the confidence to design our product. Comparison to our competitor's product, I would advise you to -- I think there's quite a bit of reporting on the Internet about some comparison. But as I said earlier, we are very confident in our performance and also really a superior power consumption performance. The market share, we -- again, this is the first year we're moving into this segment. We believe we will -- we will catch a reasonable market share. But we're here. We're in this for the long haul. It's not just a one year thing. We are already working on second generation, third generation with better and better IPs and better and better process technologies. We're here for the long haul. So I'm not too worried about the first year market share or not. I think we are -- we have a really good product. We will have our share of the market. But even more importantly, it's critical that we build our foundation this year, and then we can have a better and improving market share going forward next year and the year after. Thank you.

**Q - Randy Abrams, Credit Suisse**

Yes, thank you. And good results. I wanted to ask the first question, it's 2 parts, on the 5G. First, on the ASP increase. The last 2 quarters, you mentioned expectation for blended pricing to continue to trend up into next year. Could you go through how much is from launch of flagship versus also new features on the mainstream, keeping up pricing on the mainstream tier relative to 4G when we saw more erosion on the same tier? And then the second part is on that mainstream, how do you see market share and pricing dynamics with your competitor getting better supply and more product out of TSMC?

**A – David Ku, CFO**

Randy, I think for the 5G ASP next year, we believe actually with our product portfolio and also the mix how we focus for next year, and part of the reason -- actually sort of big part of the reason is the flagship entry. We actually feel confident that 5G ASP -- blended ASP will continue. Like you say, I think it's a big part of our 5G entry strategy. I think that's your first question. I think the second question is actually regarding the mainstream's 5G smartphone. I think, overall, we are seeing -- I think our CEO talked about earlier, that smartphone competition, which, including 4G and 5G, are always intensive competition out there. And we will say it's not getting worse, but actually it's just stabilized. It doesn't mean -- stabilized doesn't mean it is at -- it's actually is at a normal level of intensity, if you like. But, overall, I would say it's actually stabilized right now in terms of competition.

**Q - Randy Abrams, Credit Suisse**

And that goes to the second question. In regards to foundry pricing, it's been well publicized about the lead foundry taking up pricing. If you could run through how you're seeing ability to pass it on, if you could see actually improving pricing across product category? And then for the implication on margin where now you've lifted it to 47% for the outlook, how do you see margin if you factor in the input costs? Do you think this is the new level, it could go higher or potential risk on the margin?

**A – David Ku, CFO**

Randy, I think for the cost up or cost increase on our side, which including the foundry also back-end, to some extent which also including some material. It's actually -- I think that's a industry norm for everyone. So unfortunately, we need to work with our customer to resolve that. So long story short, I guess, we do have a new pricing kicking in, I think, starting from late fourth quarter. And that's, I think, part of the reason why you're seeing the gross margins up a little bit.

And on top of that, I guess, we're also trying to resolve the cost up issues through our optimization of the overall product portfolio, which means we need to -- with the limited resource, limited capacity resource also reach the higher costs, we need to optimize our product portfolio. So it's really a combination of pricing and plus optimization of the product portfolio. And I think our goal actually is trying to stabilize -- and also stabilizing also better margin even in favor of the cost environment. I think that's our goal.

**Q - Randy Abrams, Credit Suisse**

Yes, and to clarify first, stable or better margin. Is that implication -- just to clarify your remarks so far -- pricing would take effect late fourth quarter. I think earlier you mentioned mobile would get back to growth, was that sequential? So at this early stage, we should think factoring pricing mobile up, you could see above-seasonal or even growth in the first quarter?

**A – David Ku, CFO**

I think for the new pricing, actually its old product lines kicking in the fourth quarter. I think specifically to smartphone, I think what our CEO talked about earlier, I think, it's actually really talking about, they're only based on a quarter-over-quarter basis. From a year-over-year perspective, we still see even for fourth quarter on the smartphone side, it's still very strong on growth. So I would say, probably the better way to think about on a year-over-year perspective rather than on a quarter basis. In quarter basis, I would say probably the better way to describe that is just the seasonality -- the normal seasonality.

**Q - Randy Abrams, Credit Suisse**

But you did say smartphone Q-over-Q and year-over-year?

**A – David Ku, CFO**

Fourth quarter over smartphone actually coming down a bit due to the seasonality. But fourth quarter year-over-year it's still growing strongly.

**Q - Randy Abrams, Credit Suisse**

But first quarter -- sorry, first quarter Q-over-Q would grow?

**A – David Ku, CFO**

Yes, given that new product kicking in.

**Q - Bruce Lu, Goldman Sachs**

I think one thing I want to ask is that, what is the target of profitably right now. So most of the good companies are talking about value their product with a better profitability. We already see the positive margin trend. So what would be the historical MediaTek was talking 45% plus/minus gross margin, but now we're already at 47%. So is that the new normalized gross margin we can expect for the mid-to-longer term? Does that include the foundry price hike or other cost hike potentially in the coming years.

**A - Dr. Rick Tsai, CEO**
Well, of course, for next year's outlook, we will address in more detail in the January conference call. However, I think where I can comment on overall profitability picture. As we are forecasting today, we guide 47% gross margin for fourth quarter. And, I think, David also addressed a bit earlier on when answering the question. We see a more stable gross margin going forward. We certainly would, of course, try to beat our record, hopefully, quarter-to-quarter, at least year-over-year. We guided 44% to 46% gross margin earlier in this year. But we certainly have achieved that at the higher end -- actually above the higher end of our guidance. We'll give you a guidance 3 months from now, but I think 47% is the beginning of our new guidance. Thank you.

**Q - Bruce Lu, Goldman Sachs**
Is the beginning of the upward trend, is that what I should interpret?

**A – David Ku, CFO**
Bruce, we will give you this percentage next quarter. Let's stay with the next quarter.

**Q - Bruce Lu, Goldman Sachs**
So another thing is that we definitely see a mismatch in terms of the components. I think we have some components, for example, like 4G or WiFi is in big shortage. However, some components are -- in like some -- some inventory. So can you help us to understand how investors should view this kind of situation? Because for certain components, they are like -- they see some inventory, for certain components they see that deep shortage. When do you think this kind of mismatch can be resolved?

**A - Dr. Rick Tsai, CEO**
That's a good question. I think investors should look at MediaTek as a whole. MediaTek is a -- of course, we in today's remarks, we really spent most of our effort and time on 5G, because our market position and our flagship share. However, you must not overlook the other, I think, 43% or 44% of our revenue with also a very good profitability.
MediaTek, as a company, I think is -- we can continue to deliver a solid revenue growth and a healthy profitability next year, because we have this large -- to a large degree, we have this very balanced portfolio, and they balance each other. Sometimes we are a little low here, but we are somewhat up in the other places.
But in general, I would say again, for the smartphone, which, of course, is our largest segment, we have, I think, a good supply for -- we ship -- how do we say that --

**A – David Ku, CFO**
Matching segment.

**A - Dr. Rick Tsai, CEO**

We shipped not only the SoC, but all the matching components. We have the capacity to ship all our 5G and 4G solutions, shall we say, to our customers next year. However, some segments, and as we all know -- when is the -- the notebook -

**A – David Ku, CFO**
The Chromebook.

**A - Dr. Rick Tsai, CEO**
Yes, the Chromebook shipment has slowed down somewhat, but that is more than compensated by our still very, very strong WiFi 6 demand. So, overall, I think we are -- we have concerns about supply/demand. But, in general, we are doing, I think, just quite well. Thank you.

**Q - Bruce Lu, Goldman Sachs**
I think the more for me is like, of course, MediaTek is doing a lot better than most of the companies. But at the end of the day, if you have more capacity, you actually can generate more revenues. So when do you think this kind of situation or mismatch for your wafer supply can be resolved?

**A - Dr. Rick Tsai, CEO**
I think that will take -- if everyone wants to have all the capacity they want, I think, that will take another year or somewhat longer. The mature technology capacity is now being built by multiple foundries. But as you know, the fab building and the process will take 2, 3 years. So we're looking at some time in 2023. But by that time, I'm sure other picture will change too, but that's the best we can see.

**Q - Roland Shu, Citi**
My first question is -- first, correct me, please, if I heard you wrong. So Dr. Tsai, did you say now you are seeing some extra supply of the mobile SoC? Yes. So my question is, do you mean this is -- extra supply is mainly for 5G or 4G SoC or for both? So this is my first question.

**A - Dr. Rick Tsai, CEO**
Okay. Let me be clear. I'm saying we have a good supply for our 5G and 4G shipment next year. We have that. Well, we can use some more, but especially on the 4G side. But we have, I think, a good supply.

**Q - Roland Shu, Citi**
Okay. Good supply, not extra supply. Okay. So how about now the capacity -- since earlier this year, you said that you already secured enough capacity -- foundry capacity to achieve 40% or 45% of growth this year. So how much revenue you can grow next year from the foundry capacity you have secured so far?

**A – David Ku, CFO**

Roland, actually, as we say, currently, it's still early -- I won't say early, still have some time to get to next year. So right now, probably the best guidance we can provide a solid growth next year. So the actual range or guidance, please bear with us, wait until first quarter next year.

**Q - Roland Shu, Citi**
Understood. My second question is, last quarter, you said that you already started a few new switch IC volume production from last quarter. So how was the revenue contribution of the switch ASIC last quarter? And how will the revenue in 4Q? And also how big will the switch ASIC account for the total revenue next year?

**A – David Ku, CFO**
Well, assuming you're referring to our enterprise ASIC business, right, when you say switch IC, it's actually more than switch, just enterprise ASIC. I think we got several of the design-ins and design-wins, I think the revenues gradually ramp. But the overall product cycle, especially the ramping up schedule on the enterprise ASIC side, in general, is much lower compared to normal consumer product. So on the absolutely revenue contribution right now is still mild, especially if we only focus on fourth quarter this year.

**Q - Roland Shu, Citi**
So for fourth quarter this year, we are going to see some revenue contribution, right?

**A – David Ku, CFO**
Yes, we will have some revenue, yes, small revenue.

**Q - Roland Shu, Citi**
How about next year?

**A – David Ku, CFO**
I think it will continue to ramp. It will not just stop one quarter. Once we get into design-ins and design-wins and start the ramp, normally it's a multiple quarter if not years of ramping up. Sometimes very slow, sometimes the speed maybe vary. But in general, one project will go for, I would say, 8 quarters plus in terms of ramping up.

**Q - Nicolas Gaudois, UBS**
Just going back to the question on the foundry and I know that price increases. How much of that is already factored in your guidance for Q4 '21? And how much more could we see in 2022? And how do we think about the net impact on your gross margin? I know you're setting that through mix shift, pricing, et cetera. It's the first question.
And the second question is beyond what you commented upon on smartphones where you've effectively have shifted to the higher end next year. Could you give us other examples where you think you have still ability to shift mix to the higher end over the next 2 to 3 years, also in that way offsetting

some of these input cost increases, we think?

**A – David Ku, CFO**

I think the first question first, in terms of pricing, as we explained earlier, our new pricing will start to kick in the fourth quarter. We probably will not be able to separate that, the net impact to our gross margin, as I explained. The overall gross margin is a combination of the new pricing and also the product mix and sometimes it's actually gets a correlation and therefore they are interrelated. So we probably will not be able to separate it out.

Probably the better way to think about that is actually, we kind of talking about a gross margin trend although it's even in the environment of cost up environment, we're trying to stabilize and also better the gross margin a bit through pricing and also product mix. I think that's point number one.

Your question number two is really the product mix. I think we kind of explained is that, while the key point next year is truly just a flagship entry. And flagship -- the higher -- much higher ASP profitability in general is better. And also, they will have the ripple effect. They help us both on the mainstream and also on the entry level as well. And once we can get into the flagship, I think, overall, the product mix will continue to -- we do have some capability, especially given the fact that overall capacity is still very tight, even though with ample capacity. But ample mean actually we can twist or allocate the capacity to the product portfolio, we think probably the more reasonable. And I think this is how we get into a better product mix. But by and large, I think one of the key major factor is still the flagship entry.

**Q - Brett Simpson, Arete**

Rick, I had a question for you on the captive chip efforts we're seeing in the industry. I think with -- this is not something that's new, but we've seen Oppo more recently build a sizable semiconductor team, a lot of ex MTK guys have joined that team. We've also seen Google launched their own application processor in the Google Pixel 6. Can you just share with us your perspective on this? How do you assess these captive efforts? And to what extent might this negatively impact your Android growth opportunity over the next 2 to 3 years?

**A - Dr. Rick Tsai, CEO**

Brett, yes, that's a good question. I agree with you that this is a trend going on in the industry. The OEMs and the -- maybe sometimes ODM and chip suppliers. I view this as -- I would say, net neutral. Of course, some Internet company or OEM, designing their own chips, which we may have the access if they don't. But on the other hand, we've also worked with many of them to supply our IP and our design expertise, so that become other kind of business opportunity for us. Actually, we are -- we are actually actively engaging in that kind of business already. And in many ways, we get because of our superior and the key IPs that many of them are coming to us so that they can use our key IPs, and our integration chip design integration capability to build a competitive product for them, and business opportunities for us.

So it's very difficult to say exactly it's negative or positive, and I don't really view that way. I just view them as different kind of opportunity, and we are -- we just continuously invest in our capability so that we become – the most importantly, we become technology-wise much more relevant. So we will get our share of the business. Thank you.

**Q - Brett Simpson, Arete**

That's very helpful. Maybe just as a follow-up, I was keen to get your perspective on 5G adjacencies. So what's MediaTek's strategy to leverage what you've done in smartphones into new markets? So we hear a lot about 5G fixed wireless access and automotive going -- car industry going 5G. I think Qualcomm has talked about a $10 billion order backlog in their automotive business. We can hear a lot about industrial modules going 5G. Can you maybe just share with us, how does MediaTek, sort of, leverage all this 5G know-how into these adjacency markets? And how should we think about the timing here for you to build businesses -- sizable businesses outside of smartphones with 5G?

**A - Dr. Rick Tsai, CEO**

Well, we are very keen on this part of the business. 5G modem capability is one of the more rare, I would say, as such in the market and will become even more so going forward. So we are -- and we also -- and if you look at the modem applications up to now, it's mostly in the smartphone or high-speed applications. But there are other applications -- the low-latency part, the massive connected device part of the 5G technology is still remain to be marketed, shall we say. So we are certainly developing modem IPs extending into different operating regimes, so that we can capture the applications, some of which you just mentioned yourself. But we don't -- well, I hope that we can say that we don't leave any stone unturned here. But this is one -- some of the CPE business that we are working with the operators -- major operators are just a beginning of our endeavor in this part. Thank you.

**Charlie Chan, Morgan Stanley**

So my first question is to follow Nick's question about the generation of customers' semiconductor. So besides the Pixel phone using the internal processor, I think recent news also indicated that one of your key customers, Oppo, trying to develop their own SoC. So my question is that whether that is also a threat and whether that there is a processor instead of using an SoC?
And also in the Chromebook, I think, Google also mentioned that they probably want to do their own processor. But that seems to be one of your long-term opportunity as well, for those Chromebook processors. So can you further address those 2 issues?

**A - Dr. Rick Tsai, CEO**

Yes, I think this question quite similar to what Brett just asked. Again, my position is, the key -- is the key -- is technology and IPs that we must develop that -- that very few people can do as well as we can. We have to outrun your potential competitors, and sometimes they are also our partners. So it's all a matter of, when you look at it, the IP's capability, the schedule of the availability and the integration, because integration of those very highly sophisticated chips takes a lot of resources -- a lot of resources. So all those combined together, I think, provide us opportunities and competition.
But, I think, up to now, we have -- we have at least access to the opportunities. We cannot sometimes

serve all the opportunities either, because we have also limited resources for our own products and for other partners' requirements. Hope I answered some of your questions.

**Charlie Chan, Morgan Stanley**

Yes, I think that's helpful. My personal opinion is that modern still a very difficult and key technology. So maybe there's still your key advantage here.

And another question is more about your gross margin sustainability into next year. So great to hear that you can pass through some costs and stabilize your gross margin. But if you look at the end markets, there are some hard data, right? For example, the China smartphone sell-through or sell-in Y-on-Y is still like down Y-o-Y in recent months.

And another key data from MIIT shows that the 5G mix in China continue to decline from 82% in July to 73% in September. So in that conjecture it seems like a demand is not that strong and also the mix of the 5G is actually kind of going down. So what's your assumption for the 5G penetration for China, whether you can reaccelerate again? And also for the emerging markets outside of China, what would be your 5G penetration assumption?

I ask this because it looks to me if 5G penetration need to go up next year, probably the price points for 5G SoC need to go down by one or 2 nodes. Not sure if that is also what the company is seeing.

**A - Dr. Rick Tsai, CEO**

Okay. Well, we all read China's data carefully. We all have equal access. So we have that in our assumption in our plan for 2022 5G shipments. Of course, for us, we understand the China basic -- general smartphone sales has slowed down. 5G penetration probably also -- well, 80% is a very high ratio, that's a very high rate considering the short period of time. To achieve that is a really amazing. So the things will moderate somewhat. But -- so important thing for us is to, as stated several times, really to up our mix -- it's really to up our mix, so on both quantity and the revenue mix.

But on the other hand, we also look at very carefully of the 5G demand outside of China and especially to our surprise, actually, the more emerging markets that the sales of the 5G phone in 2021, the growth has been surprisingly good. And the way we -- actually, we just had a review -- actually just now today for India. We see really a robust growth for those markets. And our chips are really well suited for those market also. So a lot -- I would expect a lot of our quality will go to those markets outside of China, but we also expect some of our high-end ships to also go to those markets outside of China, too. We are still, as I said earlier, we still see a really healthy growth in our revenues in the 5G smartphone next year.

**Charlie Chan, Morgan Stanley**

So in that case, do you think smartphone margin or 5G margin can be still similar to corporate average in next year, yes, given some weak demand or customers their own kind of margin pressure?

**A – David Ku, CFO**

Well, I think Charlie, short answer is yes. Like we explained earlier, I think overall corporate gross margin goal is to stabilize and better under the sort of cost up situation. And if you do the math, I mean, the smartphone gross margin, you need to do the similar pattern given the fact smartphone in fourth quarter will account for more around 55%, 56% of the overall revenue. So it's in line with corporate average.

**Q - Laura Chen, KGI**
My first question is that we already see that MediaTek as #1 smartphone SoC maker globally. I'm just wondering that aside from our collaboration with Android or Google in Chromebook, I'm not sure if MediaTek has any plan to work with Microsoft on Windows on laptops, because we see that could be a sizable market for MediaTek to further leverage your current technology and advantage. That's my first question.

**A - Dr. Rick Tsai, CEO**
Good question, Laura. Short answer is, yes. We, certainly, intend to do that. It's not going to be easy, of course. But we have the capability from our technology, our IPs. And I think if all -- well, it's becoming -- the ARM architecture is also becoming more and more mainstream, but we're not going to just leave that market untouched.

**Q - Laura Chen, KGI**
Yes, that's good to know that. But yes, but do you have any like maybe near-term target or any timeframe or when we can see that more announcements about MediaTek progress on Microsoft?

**A - Dr. Rick Tsai, CEO**
No. I think, Laura, I think the -- today's statement is a bit more than quite enough. We will not really comment further. Thank you.

**Q - Laura Chen, KGI**
And also a follow-up question, that since we know that in the supply chain the imbalance situation continues, so I'm just wondering from MediaTek's perspective, how do you think that situation will persist. And since the inventory base in the past 2 quarters are also gradually picking up. So how do you manage the overall supply-demand situation? Thank you.

**A - Dr. Rick Tsai, CEO**
Again, we see supply -- I wouldn't say really ample supply, but we are seeing -- we have a good enough supply to meet our 2022 business need. We can use somewhat more, but we understand here that the supply situation also varies from different node to different node. There's a lot of also -- the supply chain -- it is -- I must say, over the past, I would say, 30 years or longer that I have been observing, the supply chain situation is very, very complicated this time. Because not only we have a physical supply deficiency, but also for complicated, shall we say, geopolitical effects. So in that sense, it is much more difficult to manage the supply than before. But saying all that, we are still, our point of view, optimistic about our capability in managing our supply. But the overall supply constraint and the complication, I think, will last for another year, for sure. Thank you.

**Q - Frank Lee, HSBC**
So I just have 2 questions. The first one is just in terms of -- I think you talked a bit about your outlook for next year and then the end market and the focus on moving to the high-end for your 5G smartphone. On the other hand, you're also talking about, I guess, next year growth in the emerging market as opportunity for 5G. So I'm just trying to understand, I guess, the mix of shift of -- on a company level, moving your product mix towards high-end. But on the other hand, you have kind of an end market next year where higher growth might be more in the mid-to-low end market. So just thinking about like how should we look at the combination of these 2 forces going into next year? That's my first question.

**A – David Ku, CFO**
Frank, actually the long story short, I think we kind of answered upfront. On a blended basis, if you put everything together, like you said, flagship entry and also some of those shipments -- 5G shipments from the emerging markets, I think we still going to see both the volumes increase and also the ASP increase. I think that's based on what we talked about earlier -- all those variables put in, and that's our focus so far.

**Q - Frank Lee, HSBC**
And then the second one, just -- my question is on the competition for next year. You mentioned that it is very -- the supply chain is still quite complicated, but the SoC doesn't seem to be as tight as other components. So as you go into next year, how do you see the environment? I know you talked about the chip being competitive, but we're also seeing potential -- do we see perhaps a bit more competition than we've seen in the last 2 years, especially as some of your competitors are able to get more capacity support for next year?

**A – David Ku, CFO**
Frank, I think like our CEO say, currently, we believe we got ample supply for next year's growth target. And also, we keep talking about we could certainly use more capacity if there's available. And maybe now that we explain this, actually from industry perspective, I think it's still very tight -- it's still very tight. Otherwise, actually, you're not going to see all those vendors, those including foundry and also the backend are increasing their pricing. Normally, you won't see that unless that overall industry still see some tightness out there. So, again, to answer your question directly, I think we have well secured enough support -- enough capacity support for our growth target, but we could certainly use more. And I think that's it.

**-End of Q&A session-**