

TEXT version of Transcript

Corporate Participants

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STMicroelectronics N.V. - Group Vice President of Investor Relations

* Jean-Marc Chery

STMicroelectronics N.V. - President, CEO & Member of Managing Board

* Lorenzo Grandi

STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO

Conference Call Participants

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* Aleksander Peterc

Societe Generale Cross Asset Research - Equity Analyst

* Andrew Michael Gardiner

Citigroup Inc., Research Division - Research Analyst

* Anthony Joseph Stoss

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* Didier Scemama

BofA Securities, Research Division - Director in EMEA Equity Research & Head of European IT Hardware

* Gianmarco Bonacina

Equita SIM S.p.A., Research Division - European Equity Research Manager

* Sandeep Sudhir Deshpande

JPMorgan Chase & Co, Research Division - Research Analyst

* Sébastien Sztabowicz

Kepler Cheuvreux, Research Division - Head of Tech - Equipment Research

Presentation

Operator [1]

Ladies and gentlemen, welcome to the STMicroelectronics' Q2 2022 Earnings Results Conference Call and Live Webcast. I'm Moira, the Chorus Call operator. [Operator Instructions] And the conference is being recorded. [Operator Instructions] The conference must not be recorded for publication or broadcast.

At this time, it's my pleasure to hand over to Celine Berthier, Group Vice President, Head of Investor Relations. Please go ahead, madam.

Celine Berthier, STMicroelectronics N.V. - Group Vice President of Investor Relations [2]

Thank you, Moira. Good morning. Thank you, everyone, for joining our second quarter 2022 financial results conference call. Hosting the call today is Jean-Marc Chery, ST's President and Chief Executive Officer. Joining Jean-Marc on the call today are Lorenzo Grandi, our President and Chief Financial Officer; and Marco Cassis, President of Analog, MEMS and Sensors Group and, in his global corporate role, Head of Strategy, System Research and Applications and Innovation Office.

This live webcast and presentation materials can be accessed on ST's Investor Relations website. A replay will be available shortly after the conclusion of this call.

This call will include forward-looking statements that involve risk factors that could cause ST's results to differ materially from management expectations and plans. We encourage you to review the safe harbor statement contained in the press release that was issued with the results this morning and also in ST's most recent regulatory filings for a full description of these risk factors.

Also to ensure all participants have an opportunity to ask questions during the Q&A session, please limit yourself to one question and a brief follow-up.

I'd now like to turn the call over to Jean-Marc, ST's President and CEO.

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [3]

Thank you, Celine. Good morning, everyone, and thank you for joining ST for our Q2 2022 earnings conference call.

Let me begin with some opening comments, starting with Q2. So Q2 net revenues of \$3.84 billion and gross margin of 47.4% came in above the midpoint of our business outlook range, driven by continued strong demand for our product portfolio.

Year-over-year, net revenues grew 28.3%. This revenue growth was accompanied by improved profitability, gross margin at 47.4%, up from 40.5%. Operating margin at 26.2%, up from 16.3%. And net income more than double to \$867 million.

On a sequential basis, net revenues increased 8.2%.

On the first half of 2022, net revenues increased 22.9% year-over-year to \$7.38 billion, driven by growth in all product groups and subgroups. H1 operating margin was 25.5%, and net income was \$1.61 billion.

On Q3 2022, our third quarter business outlook at the midpoint is for net revenues of \$4.24 billion, increasing by 32.6% year-over-year and by 10.5% sequentially, with a gross margin of about 47%.

For the full year 2022, we will now drive the company based on the plan for full year 2022 revenue in the range of \$15.9 billion to \$16.2 billion, above the high end of our previous expectation. We now anticipate gross margin to be about 47% for the full year.

Now let's move to a detailed review of the second quarter. Net revenues increased 28.3% year-over-year, with higher sales in our 3 product groups and all subgroups. Year-over-year sales to OEMs increased 31.7% and 22.2% to Distribution. On a sequential basis, net revenues increased 8.2% and were 240 basis points above the midpoint of our outlook.

Gross profit was \$1.82 billion, increasing 50.2% on a year-over-year basis. Gross margin increased by 690 basis points year-over-year to 47.4%, mainly driven by favorable pricing and improved product mix, partially offset by inflation of manufacturing input costs. Our second quarter gross margin was 140 basis points above the midpoint of our guidance, driven by similar pricing and product mix factors.

Second quarter operating income doubled to \$1 billion. Operating margin was 26.2%, increasing from 16.3% in Q2 2021, with improvements in all 3 product groups.

Both net income and diluted earnings per share more than doubled year-over-year, with net income reaching \$867 million from \$412 million and diluted earnings per share increasing to \$0.92, up from \$0.44.

Looking at the year-over-year sales performance by product groups. ADG revenues increased 35.1% on growth in both Automotive and in Power Discrete. AMS revenues grew 11.3% on a higher Analog, MEMS and Imaging Product sales. MDG revenues increased 39.5% on growth in both Microcontrollers and RF Communications.

In terms of operating margin, all product groups demonstrated year-over-year expansion, with ADG operating margin of 24.7%, up from 9.5%; AMS operating margin of 23.8%, up from 18.6%; and MDG operating margin increasing to 34% from 22.9%.

Net cash from operating activities increased to \$1.06 billion in Q2 versus \$602 million in the year ago quarter. On a trailing 12-month basis, net cash from operating activities totaled \$3.78 billion, increasing 45.8% from \$2.59 billion.

CapEx in the second quarter was \$809 million compared to \$438 million in the year ago quarter. After the strong investment in CapEx, free cash flow was \$230 million compared to \$125 million in the year ago quarter.

During the second quarter, ST paid \$54 million of cash dividends to stockholders. And we executed \$87 million share buyback under our current share repurchase program.

Our net financial position was \$924 million at July 2, 2022, compared to \$840 million at April 2, 2022. It reflected total liquidity of \$3.44 billion and total financial debt of \$2.52 billion.

Let's now discuss the market and business dynamics of the quarter. Overall, demand for ST products continued to be strong. Let me share with you a few data points. Our backlog exiting Q2 covered 6 to 8 quarters of planned capacity. Depending on the product type, book-to-bill is well above parity. Our manufacturing capacity is fully saturated. From an end market standpoint, demand both in automotive and in what we call the business-to-business part of the industrial market, so factory automation, robotics and industrial infrastructure, remains strong, driven by semiconductor pervasion and structural transformation.

In the consumer electronics and PC markets, there are some broad signs of softening. But demand for ST products remained strong in the selected areas where we target in this market.

Going now in more detail on the automotive market. We continued to see strong demand in Q2, still reflecting the combined effect of replenishment of inventories across the automotive supply chain and the ongoing electrification and digitalization transformation of the industry. Bookings remain strong across all customers and geographies. Backlog visibility is now above 18 months and well above our current and planned manufacturing capacity through 2023.

The accelerated transformation of the automotive industry with electrification and digitalization and semiconductor pervasion continued to drive wins for ST during Q2. For car electrification, we again increased the number of ongoing silicon carbide programs. Between the automotive and the industrial markets, we now have 102 projects spread over 77 customers. These projects are mostly equally split between the 2 end markets, and we are in line with our revenue target of \$1 billion silicon carbide revenues in 2023.

We had a number of new design wins in Q2, with a range of silicon and silicon carbide power discretes. This includes generation 3 silicon carbide MOSFET dice with a module maker, rectifiers, ultrafast and silicon carbide diodes and our ACEPACK power modules for traction inverter, onboard charger and other electrical vehicle-related applications.

We also won sockets for power management ICs in onboard chargers, DC-DC conversion and electronic parking brake application at multiple Tier 1s and carmakers.

In car digitalization, we announced last week a new cooperation model with the Volkswagen Group for our next-generation digital automotive solutions, the Stellar microcontroller family. This will include the direct usage of our high-performance Stellar microcontroller family and the joint development with Volkswagen car yard for a system-on-chip Stellar microprocessor. Both the MCU and the system-on-chip MPU will address multiple applications within the new zonal architecture platform of the Volkswagen Group, which is called Volkswagen Trinity project.

In our automotive sensor business, we had multiple wins for devices in our 6-axis automotive sensor family, including our embedded machine learning core sensor.

We continued to gain traction for our automotive global shutter product family, with major OEM program design wins.

Moving now to industrial. Here, we saw strong demand through the quarter in business-to-business industrial from both Distribution and OEM, with Distribution inventories of our products remaining lean across all product families and high inventory turns. Across the industrial market, we see 2 main trends accelerating the increase in semiconductor content: digitalization of devices and systems; and energy management and power efficiency improvements. These trends are driving a structural transformation in this market.

We addressed the industrial market focusing on 3 areas: the business-to-business industrial segment, the largest part, which includes automation, robotics, power energy and transformation; consumer industrial, which includes home appliances, smart buildings and power tools and a more specialized part addressing, for example, health care.

Across these 3 areas, we have important wins with our broad portfolio. In business-to-business industrial, we had multiple design wins for products such as intelligent power switches, industrial sensors, high- and low-voltage MOSFETs, wireless charging solutions and our STM32-embedded processing solutions. Application includes programmable logic controllers, robotics, energy storage and wind turbines.

In consumer industrial, we have design wins in applications such as major home appliances, power tools, cleaning robots, consumer power supplies, point-of-sales terminals and building air conditioner systems.

And in the specialized part, I would like to highlight just one innovative example in health care, where we announced the incorporation of an NFC tag into a connected syringe by NP Plastibell.

Before closing on industrial, a few words on embedded processing, where we continue to build on our #1 position in 32-bit MCUs and where we announced enhancement to our security offer with Amazon Web Services, extension of our support for Microsoft Azure RTOS across the product range and addition to our NanoEdge artificial intelligence studio.

Moving now to personal electronics. Demand for our products in the selected areas we target in the smartphone market was above expectations. In this market, we focus on selected high-volume smartphone applications, addressing them with differentiated or custom products while leveraging our broad portfolio to address other high-volume applications.

During the quarter, we won sockets in these devices with motion and environmental sensors, time-of-flight ranging sensors, touch display controllers and secure solutions. We also made progress with our wireless charging solutions, with wins in flagship smartphones and smart watches.

In communication equipment and computer peripherals, we continue to see deployment of 5G infrastructure products and of low earth orbit satellite programs and services around the globe. Here, we target selected and volume application, again, with differentiated products or custom solutions while leveraging our broad portfolio. New wins here include pressure sensor for hard disks, time-of-flight senses for laptops and our MasterGaN family for high-power-density charging adapters. I would like also to confirm our continued progress with key customer engagements in addressing selected applications in cellular and satellite communication infrastructure.

Now let's move to our 2022 third quarter outlook and plan for the full year 2022. For the third quarter, at the midpoint, we expect net revenues to be about \$4.24 billion, representing year-over-year and sequential

growth of 32.6% and 10.5%, respectively. Gross margin is expected to be about 47% at the midpoint.

Looking at the full year, we now plan to drive the company based on 2022 net revenues in the range of \$15.9 billion to \$16.2 billion, representing growth of about 25% to 27%. This plan includes a gross margin of about 47%. We confirm our 2022 CapEx investment range of \$3.4 billion to \$3.6 billion.

Before concluding, I want to highlight the recent announcement we made together with GlobalFoundries. We signed an MOU to create a new 300-millimeter semiconductor manufacturing facility adjacent to ST existing 300-millimeter facility in Crolles, France. This is a projected multibillion euro collaborative investment that will include significant financial support from the state of France. The project is subject to the execution of definitive agreements and various regulatory approvals, including from the European Commission's DG Competition.

As you know, we are transforming our manufacturing base with a significant expansion of our 300-millimeter capacity, a major enabler supporting ST's \$20 billion plus revenue ambition. We already have a unique position in our 300-millimeter wafer fab in Crolles, which will be further strengthened by this important initiative. We continue to invest into our new 300-millimeter wafer fab in Agrate, near Milan, Italy, ramping up in H1 2023 with an expected full saturation by the end of 2025 as well as in our vertically integrated silicon carbide and gallium nitride manufacturing. This new facility will enable us to support even more our European and global customers across all end markets and to advance our leadership objectives in automotive and industrial as well as our focus activities in communication infrastructure.

Importantly, we are targeting to make this new fab a leader in sustainable semiconductor manufacturing. For example, it is designed to be 10 to 20x less emissive in terms of greenhouse gases than similar projects in Europe and in the rest of the world. And of course, working with GF will allow us to go faster, lower the risk pressures and ultimately reinforce the European FD-SOI ecosystem.

To conclude, our Q2 financial results and plan for the full year 2022 are aligned with our ST's strategic focus on core business and targeted high-growth areas. We continue to leverage our early investments in smart mobility, power and energy management and IoT and connectivity. We are building on the unique strength of our integrated device manufacturer model, complemented by partnerships with foundries and suppliers, customer relationships and our established end market and application strategy. These initiatives will support the \$20 billion plus revenue ambition we outlined at our Capital Markets Day.

Thank you, and we are now ready to answer your questions.

Question And Answer

Operator [1]

[Operator Instructions] The first question is from Aleksander Peterc from Societe Generale.

Aleksander Peterc, Societe Generale Cross Asset Research - Equity Analyst [2]

The first question would be really on your full year guidance upgrade and the very strong traction in the third quarter. With all your supply constraints for the rest of the year and although there may be some price hikes, those were already baked into the previous guidance, I suppose. So could you explain where this extra billion of revenue is coming from in the year? Is it improved foundry capacity access or better internal efficiency, more internal capacity, although your CapEx plan is unchanged and H1 was pretty much in line or a little bit below expectations? So if you could just explain where -- what's driving this additional revenue for the year.

And my quick follow-up would be on OpEx, which actually came in a little bit below expectations for the second quarter, so no sign of undue inflationary pressure there. How should we think about OpEx for the remainder of the year?

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [3]

Thank you for your questions. So Lorenzo will answer on OpEx.

About the second half, let's say, improvement with our, let's say, indication for the year. Well, basically, there is 2 cumulative effects. One effect, of course, is moving through the year, it is clear that we are able to secure our, let's say, supply chain, both the equipment arrival, setup, which we're supposed to add capacity in our phone manufacturing. So now, okay, we have better visibility. So it was, for us, the opportunity to increase our manufacturing. But as an example, okay, the production value of ST in Q3 will increase by 12.5% versus Q2. So this is the reason why, okay, we have this capability to increase our revenue target. We have better support from foundry partners, I have to say.

The second effect is pricing and mix. Clearly, we have still a favorable environment. And pricing and mix is also contributing to this \$1 billion additional target revenue for the full year.

And Lorenzo, your answer on OpEx?

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [4]

Yes. Good morning to everybody. In terms of OpEx, what we model now for the current quarter for Q3 will be to have OpEx -- a net OpEx, so including also other income and expenses similar to the one that we had in the previous quarter in Q2. So now we are, let's say, in a range between \$810 million, \$850 million. Of course, we are benefiting also from the seasonality this quarter because, as you know, in Europe, there is vacation, and this is a benefit for our expenses as well as also for the exchange rate.

For the year, I would say that if I look for the year -- the total year and in the average, as you know, usually, what I share with you is the quarterly average expenses in the year. But I would say that the level will stay more or less in this range of between \$810 million, \$850 million. This is where we see today, let's say, lending our expenses for the full year. So this means that there will be an increase in Q4, as usual, due to the seasonality. But in the average, we will be there.

Operator [5]

Next question is from Adithya Metuku from Crédit Suisse.

Adithya Satyanarayana Metuku, Crédit Suisse AG, Research Division - Research Analyst [6]

Yes. Congrats firstly on a great guide. Just 2 questions. Firstly, can you give us some color on how you're thinking of growth by division in the third quarter and for the rest of the year?

And secondly, I just wondered, when I look at the seasonality for the fourth quarter at the midpoint of your guide, it looks like you're assuming 4% sequential growth in the fourth quarter versus 5-year seasonality of 12%. So are you assuming some kind of underlying demand slowdown? Or is that driven by your capacity increase plans? What is driving that seasonality that you're assuming in the fourth quarter? Any color there would be helpful.

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [7]

Maybe I comment on the second half for [indiscernible] by group, and you comment on the seasonality, Lorenzo.

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [8]

Yes. No, no. No problem. I can comment.

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [9]

So overall, for H2, so Q3 and H2, well, clearly, we continue to see a strong growth in ADG definitively, both Automotive and Power Discrete. And it is clearly sustained by our capability to increase our manufacturing supply chain.

AMS will grow in H2. But you know that here is the usual attraction of our engage customer programs, which are, let's say, increasing in Q3 and then in Q4. We will grow as well for Analog and MEMS. But clearly, this field of product group, here, we are limited by our old capacity.

Microcontrollers will grow. But similar to Analog and MEMS, we have also a limitation in capacity, and we will grow quite materially our RF Communications division related to customer engage program.

And Lorenzo, you comment on the seasonality.

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [10]

I think you have covered, but at the end, if you want a little bit more color about Q3. For sure Q3, there is our seasonality in personal electronics that is a strong driver for our growth. So at the end, the driver of the growth in the current quarter and on a sequential basis definitely will be AMS. AMS is enjoying -- let's say, is one of our group that has more exposure to personal electronics as you know, so at the end, it will be the driver of the growth.

Anyway, all the groups will contribute to the growth in the current quarter. We continue to see traction -- a strong traction in ADG that we will continue to grow, let's say, as well as also in MDG. But on Q4 and on the second half, Jean-Marc was covering, let's say, the evolution.

Adithya Satyanarayana Metuku, Crédit Suisse AG, Research Division - Research Analyst [11]

Got it. So essentially, AMS will be the main growth driver in the third quarter, followed by ADG and the MDG?

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [12]

Correct. Correct. Let's say, this is not a surprise because at the end, you know that at the end -- in the second half and particularly in Q3, personal electronics, for us, is a strong driver. Anyway, I confirm that all the groups will contribute, let's say, and ADG and MDG will be 2 groups contributing as well to this growth.

Adithya Satyanarayana Metuku, Crédit Suisse AG, Research Division - Research Analyst [13]

Got it. And would you say that the growth in AMS would be abnormally strong this quarter?

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [14]

But I don't know what means abnormally strong, let's say.

Celine Berthier, STMicroelectronics N.V. - Group Vice President of Investor Relations [15]

You mean sequentially or...

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [16]

Sequentially strong.

Adithya Satyanarayana Metuku, Crédit Suisse AG, Research Division - Research Analyst [17]

Yes. Is there any content growth that we need to think about when we're modeling AMS revenues in the third quarter? Any significant content growth?

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [18]

Sorry? No, maybe you said the content growth. The content growth -- about the content, you know that now, let's say, in AMS, in personal electronics, we have a variety of products, let's say, that are contributing to the growth. I would say that is really, I would say, a matter of volume here. Let's say, the content is what it is.

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [19]

Now we don't see any abnormal signature in the profile of the revenue between H1 and H2 and related to the new device introduction. So absolutely a normal seasonality.

Operator [20]

The next question is from Anthony Stoss from Craig-Hallum.

Anthony Joseph Stoss, Craig-Hallum Capital Group LLC, Research Division - Partner & Senior Research Analyst [21]

My congrats as well on the exceptionally strong execution. Jean-Marc, you talked about having visibility through 2023. I'm wondering if you can comment on your confidence level in maybe the percentage of orders that are noncancelable or what percent you think could be at risk to be down shifted?

And then when you look into 2023 on the gross margin side, again, 47%, darn impressive. For this year, do you think based on mix, you can continue to grow gross margins into 2023?

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [22]

So Lorenzo will comment on the gross margin. About the data point for 2023, again -- okay, I share with you the fact we have in our hand. So I repeat that the backlog we have requested by our customers basically is covering, depending the product family, between 18 to 24 months of planned capacity, not existing capacity. I have to say planned capacity, which are related to our CapEx we will spend this year and a part of the CapEx we will -- we intend to spend next year.

So first of all, okay, we have 2022 sold out, and basically, we have 2023, which is either sold out or partially sold out, okay, depending of the product group. On automotive, okay, the full capacity of 2023 is sold out. So that's the reason why that -- when I am questioned about when we do believe we'll come back to, let's say, normal lead time, capability to replenish inventories, okay, I always say, of course, not before end of 2023 and then in 2024. So this is what we say.

Then what other data point I can share with you. So we have, let's say, during H1 this year, changed our policy of confirmation of order. So now we really scheduled the order up to 2023, so on 24 months rolling. And for us, it was important, okay, to make this exercise because we have detected potential double ordering. And I have to say that it was very, very marginal, very, very marginal. So we are absolutely not seeing, let's say, double ordering in the channel, okay, we are using.

The inventory level at our distributor is lean. Inventory turns are below the standard level higher -- sorry, very higher standard level to make business. So there is still potential of inventory replenishment but that we are not capable to do at this present time.

More than in the field of the 2 end markets I have spoken about during my address, the automotive and the industrial B2B, the pressure of customer -- the demand is huge. We have, okay, multiple call every day, every week to find solution to supply them. Yes, we have seen some sign of softening. I confirm in Chromebook, notebook, PC, middle-end, low-end Android smartphone, not too much in accessories. And the famous customer we sell, okay, in Q2 was above our expectation and will be strong and solid in H2.

We know the engage customer program we have for 2023, new circuit we win. So I confirm silicon carbide, \$1 billion revenue at least in 2023. Well, this is all the data points we have and I can share with you.

So about the gross margin, Lorenzo?

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [23]

About the gross margin, for sure, at this stage, let's say, is a little bit early to go and to discuss about 2023. What I can say is that definitely, let's say, we will have some tailwinds that definitely will be -- the exchange rate will remain at this level, for sure, will help. The mix -- the product mix will be in the right direction in this respect. For sure, what I can say is that, yes, we see, in terms of inflationary costs, these inflationary costs that, by the way, are impacting already the second half of the year in 2022.

But what I can say is that, let's say, 2023 will be another year that is -- will put us in our trajectory to be, between 2025 and 2027, let's say, in the range of 50% gross margin.

Operator [24]

The next question is from Sandeep Deshpande from JPMorgan.

Sandeep Sudhir Deshpande, JPMorgan Chase & Co, Research Division - Research Analyst [25]

Congratulations on really strong guidance. Is -- regarding the guidance, third quarter, your guidance in revenue growth is almost 33% year-on-year. How much of that year-on-year growth is coming from unit increase and how much from pricing increase? And is pricing still increasing in terms of your product? And as a corollary to that, is pricing increases similar in all your end markets or, in some particular end markets, you're seeing much higher pricing increases than in other end markets?

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [26]

So Lorenzo will answer.

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [27]

Yes. Thank you for the questions, Sandeep. But when we look at the dynamic in terms of increasing of our revenues, let's say, for sure, there are 3 components, if you want. On one side, there are, yes, price increase because price increase this year, when we look at 2022 compared to the previous year, is an important component as well as volume and the mix because mix was another ingredient. But I would say that we are talking here, let's say, more or less in the range of 40-60. Let's say, 40% is pricing, and rest could explain -- for the rest, 60%.

When I look at the current guidance for the current quarter, actually, we do not have embedded any significant price increase on a sequential basis. For sure, year-over-year is better, the reason because there's been an increased pricing during the first half. But on a sequential basis, there is no significant -- we do not expect any significant price increase. We will be more or less stable in respect to that.

Well, yes, of course, there are differences in terms of pricing dynamic in the different market. I would say that for sure, when we look at mass market, when we look at distribution is where, let's say, we have the highest level of price increase. Then we have a price increase also in the area of automotive that is material, mainly driven by the fact that, let's say, there is a significant, let's say, higher demand in respect to what we were able to produce.

While -- when we look at a market like the personal electronics, I would say that we have more stabilization of pricing, more than price increase. Here and there, we have some, of course, price acceleration. But overall, I would say that, in this market, there is no significant price increase, while in respect to the past, maybe there is not strong price pressure. We will say more or less -- we can say that we are more or less stable.

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [28]

And Sandeep, that's the reason why I share with everybody the number. In Q3, the production of ST will increase by 12.5%, supporting this sequential growth of 10.5% of Q3 and prepare in Q4. Yes.

Celine Berthier, STMicroelectronics N.V. - Group Vice President of Investor Relations [29]

Did this answer your question, Sandeep?

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [30]

Probably, yes.

Celine Berthier, STMicroelectronics N.V. - Group Vice President of Investor Relations [31]

Probably, yes. I hope so.

Operator [32]

The next question is from Sébastien Sztabowicz from Kepler Cheuvreux.

Sébastien Sztabowicz, Kepler Cheuvreux, Research Division - Head of Tech - Equipment Research [33]

Regarding the 300-millimeter fab buildup with GlobalFoundries, what kind of CapEx should we add to our model going forward for this specific fab?

The second one is returning to the question on sequential growth in your main divisions in Q3. Could you provide a little bit of more granularity on the kind of growth we can expect sequentially by division for Q3?

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [34]

About the CapEx, the project we intend to complete with GF is consistent simply with our \$20 billion plus ambition. Of course, when we have prepared this plan, we assessed many scenarios of manufacturing supply to enable this \$20 billion plus ambition. No, and I have to say that the scenario to build an adjacent fab to call with GlobalFoundries, with significant support from the France is making the scenario competitive, clearly.

And then, okay, we'll, let's say, also give to both ST and GF some scaling advantage. But the CapEx, okay, is -- will be simply consistent with the \$20 billion plus ambition.

Sébastien Sztabowicz, Kepler Cheuvreux, Research Division - Head of Tech - Equipment Research [35]

And the sequential growth, maybe Lorenzo?

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [36]

Sorry, sorry. No. Okay. As I said before, AMS is a group that is driving the sequential growth, but I think that this will not be a surprise if I say that it is our Imaging Products that are really, let's say, driving inside the AMS -- the growth. There will be contributions, sure, for Analog and also MEMS that will be, let's say, less significant of the one of Imaging.

In the second half of the year, our, let's say, customer engage program that we have in personal electronics with our main, let's say, customers is technically one that is important for us. And definitely, Imaging is quite exposed on that. So at the end, let's say, the growth comes from there in AMS.

But I wanted to repeat that at the end is not the only one, AMS. We have still significant growth in ADG, in MDG as well, let's say. We will continue, let's say, to see growing these groups.

Operator [37]

The next question is from Gianmarco Bonacina from Equita.

Gianmarco Bonacina, Equita SIM S.p.A., Research Division - European Equity Research Manager [38]

Just, for me, a clarification on the cooperation you recently announced with Volkswagen. It was not clear how broad it is within the Volkswagen Group because I know you announced, for example, some time ago, a very important cooperation with Renault. So just to understand if it's basically a broad collaboration with Volkswagen on the future platform or it's just, let's say, will have a minor impact.

And then related to this, I think you already mentioned at the Capital Market Day that you are changing the way you interact with automotive OEM. So I just wanted to know if you have continued in the last months to sign a new long-term contract with, let's say, attractive pricing for you?

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [39]

No, this -- first of all, okay, this is a public project called Trinity at Volkswagen aiming to develop the, let's say, software-defined vehicle architecture and zonal. And here, and this platform, okay, will be deployed across the board in all the Volkswagen Group, full. And here, basically, ST will have, let's say, participation today, okay, awarded in 2 critical components.

The MCU, so the high-performance Stellar MCU developed on 28 FD-SOI embedded PCM technology, which is a product developed, okay, in our technology -- manufactured in our technology. And then, okay, ST is participating to the development and the architecture of a complex system-on-chip's embedded, let's say, processor but also real-time processors, which are IP of ST called Stellar, which are also present in the MCU. And ST, okay, we'll have the ownership of, let's say, the engineering, the manufacturing of this system-on-chip in cooperation with TSMC. It is exactly a very similar model of what we have with Mobileye.

So when we had, at Volkswagen Group level, full deployment, the capability, okay, to have like Mobileye, the ownership of the MPU system-on-chips in cooperation with Volkswagen car yard and TSMC plus all the MCU that we will manufacturing ourselves. Starting 2026, it will be material for ST.

Gianmarco Bonacina, Equita SIM S.p.A., Research Division - European Equity Research Manager [40]

Okay. And with the other OEMs, you have continued to change, let's say, the relationship on LTA that kind of contracts?

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [41]

With -- it is clear that we see an evolution with the relation in the ecosystem between a carmaker, Tier 1 EMS and ST. It is clear that our preferred, let's say, model is either the traditional carmakers, Tier 1 and us, of course, okay, changing the way the value chain operate, okay? I guess now everybody has understood that semiconductors are not a commodity with infinite capacity and very short lead time. So I guess everybody has understood that you have to plan investments, you have to plan capacity, you have to give visibility. And when the value chain is carmaker, Tier 1 and semiconductor, okay, it's much better to keep it as it is.

Then what we are seeing -- we are seeing some evolution in some carmakers that, for some part of the system of the car, clearly, there is an evolution where the carmaker wrote the IP, start to design the architecture of the system and the device, and we'll operate more in a mode like a smartphone, where you will have the carmaker using an EMS but, okay, with a straight relation with us imposing the type of semiconductor that the EMS will have to use.

And clearly, we see this trend, okay, increasing a lot definitively. But this is basically the 2 models that we will see in the future. Well, then, okay, if there is some specific agreement between carmaker, ourselves, in any case, must be done, okay, with the agreement of the Tier 1.

Celine Berthier, STMicroelectronics N.V. - Group Vice President of Investor Relations [42]

Thank you. We have time for 1 or 2 more questions, depending on the length.

Operator [43]

The next question is from Andrew Gardiner from Citi.

Andrew Michael Gardiner, Citigroup Inc., Research Division - Research Analyst [44]

Just a clarification of your response, Lorenzo, to Sandeep earlier in terms of the pricing. I just want to make sure I heard it correctly. You're saying, of the sort of year-on-year growth in revenue that you're seeing in the second half of this year, 40% of that is coming from pricing. Is that right?

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [45]

Yes, broadly, yes, in the sense that when we look at the growth in terms of revenues, there is a component of pricing. There are 3 components, I said. The one is price, one is mix, let's say, and the other one is, for sure, volumes, let's say. When we look overall, the price component is in the range of about 40%, yes, on a year-over-year. While this quarter is increased, when you look year-over-year, while sequentially are substantially stable, the pricing.

Andrew Michael Gardiner, Citigroup Inc., Research Division - Research Analyst [46]

Okay. And in terms of your visibility into further price rises into next year, given that you are essentially fully booked, as you said, and particularly for the OEM-related business where you've got these longer-term contracts, I presume you've got visibility into further price rises into next year on a like-for-like basis.

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [47]

But today, let's say, we have some contract that, of course, are defining the evolution of the pricing. Let's say, in terms of mass market, I would say that probably will be a little bit more stable than this year, the price. Then this is what is our visibility today in terms of evolution of pricing.

Andrew Michael Gardiner, Citigroup Inc., Research Division - Research Analyst [48]

Okay. And then just sort of a final one. In relation to the comment you've made about the rise in the production capacity, internal production capacity in the third quarter, the 12.5%, clearly, you're continuing to invest in terms of CapEx later this year and into next year. But is there any reason that that's not a good starting point for us to start thinking about the kind of capacity that you're looking to build into 2023 volume growth based on that kind of capacity increase plus a pricing element? Are those reasonable building blocks to start with 2023?

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [49]

No, today, where we are -- first of all, okay, it is clear that we know where we want to position the company next year, for a simple reason that our whole supply chain is, let's say, providing some constraints in terms of lead time. You know that for scanner, lead time basically is 24 months, okay, for, let's say, thin film deposition, etcher or the -- most of our process tool is basically 18 months. And then for assembly and test over and so on is above 12 months.

So it's clear that today, we have put all the orders, okay, to book. And we have a clear visibility on the level of investment that potentially, okay, we will put on the table next year.

Well, today, we are in the process to really secure it because this year, okay, we faced, okay, a poor reliability in the delivery of equipment maker. And now, okay, this is something we are deep diving in because they have also their own constraints. Don't take it as a joke, but the early meeting by semiconductor, in fact. And it is an end-to-end exercise that -- which is quite complex, but it is mandatory to make it because, as I said, we changed also our policy. Now we are confirming the order to our customer on 24 months rolling. So it's very important for us, okay, to have, let's say, a secure and reliable forecast from the equipment maker.

Well, this exercise is going on definitively. And we will provide, as usual, the visibility of the CapEx spend and on the 2023 revenue indication, let's say, in January -- end of January during Q4 earnings. But what is important is, again, in H2 2022, we will have benefits of the CapEx we spend, let's say, Q4, Q3 -- Q4 last year and Q1 this year, sorry, and beginning of Q2. We increased our capacity and volume by 12.5%. And H2, okay, we will deliver a revenue of \$8.7 billion.

Andrew Michael Gardiner, Citigroup Inc., Research Division - Research Analyst [50]

Appreciate it. I had to try and ask a bit more about next year.

Celine Berthier, STMicroelectronics N.V. - Group Vice President of Investor Relations [51]

Thank you, Andrew. But we will take a final question, not to stay with it. So Moira, we'll take a very final question now, the last one.

Operator [52]

The last question for today is from Didier Scemama from Bank of America.

Didier Scemama, BofA Securities, Research Division - Director in EMEA Equity Research & Head of European IT Hardware [53]

Congratulations. Just one question for you, Jean-Marc. So clearly, Imaging, this is going to be a big driver in the second half of this year. You've said previously that your engagements with that top customer was going to -- was, at least, extended through calendar year '23. So I just wanted to ask you a question. If you were to lose that contract in the later part of '23, given your current backlog and sort of book capacity, do you think that there would be much impact to the company in terms of top line or margins in calendar year '23? I've got a quick follow-up.

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [54]

This scenario is not existing.

Didier Scemama, BofA Securities, Research Division - Director in EMEA Equity Research & Head of European IT Hardware [55]

Voila. So the next question. So -- no, next question, I'm going to go back to Andrew's question. You tried very cleverly. So I'm going to try very clumsily. So if I take your Q4, I had a bit of capacity, you're effectively guiding at least everything being equal for revenues in probably \$17 billion to \$18 billion, and I'm probably being cautious there. Is that the right way to think about it?

And then Lorenzo said pricing, sort of flattish next year. Presumably, your depreciation will go up. So do you think gross margin would be stable? Or would you think gross margins would decline even on a big revenue growth next year?

Jean-Marc Chery, STMicroelectronics N.V. - President, CEO & Member of Managing Board [56]

Lorenzo, you want to [say more]?

Lorenzo Grandi, STMicroelectronics N.V. - President of Finance, Purchasing, ERM & Resilience and CFO [57]

At this stage, I don't know why we should decline. I mean, at the end, let's say -- for the time being, what I said is that, let's say, today, what we see is that we will be some tailwinds that are the exchange rate, for sure, some improvement in our manufacturing efficiency. There are, let's say, negative impact related to the cost, inflationary cost, these kind of things. There is the, let's say -- this is where we see -- as I said before, I think that next year will be another year moving us to the path to the 50% gross margin in 2005, 2007 -- 2025.

Didier Scemama, BofA Securities, Research Division - Director in EMEA Equity Research & Head of European IT Hardware [58]

\$20 billion next year. Okay. Great.

Celine Berthier, STMicroelectronics N.V. - Group Vice President of Investor Relations [59]

I think this will complete our call. Thank you very much, everybody, for the questions. Moira, it's up to you.

Operator [60]

Ladies and gentlemen, the conference is now over. Thank you for choosing Chorus Call, and thank you for participating in the conference. You may now disconnect your lines. Goodbye.