REFINITIV STREETEVENTS

EDITED TRANSCRIPT

STM.PA - Q3 2022 STMicroelectronics NV Earnings Call

EVENT DATE/TIME: OCTOBER 27, 2022 / 7:30AM GMT

CORPORATE PARTICIPANTS

Celine Berthier *STMicroelectronics N.V. - Group VP of IR*

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

Adithya Satyanarayana Metuku *Crédit Suisse AG, Research Division - Research Analyst*

Andrew Michael Gardiner *Citigroup Inc., Research Division - Research Analyst*

Janardan Nedyam Menon *Jefferies LLC, Research Division - Equity Analyst*

Jerome Ramel *BNP Paribas Exane, Research Division - Analyst of IT hardware and Semiconductor*

Johannes Schaller *Deutsche Bank AG, Research Division - Research Analyst*

Matthew D. Ramsay *Cowen and Company, LLC, Research Division - MD & Senior Research Analyst*

Stephane Houri *ODDO BHF Corporate & Markets, Research Division - Research Analyst*

PRESENTATION

Operator

Ladies and gentlemen, welcome to the STMicroelectronics Q3 2022 Earnings Results Conference Call and Live Webcast. I'm Moira, the Chorus Call operator. (Operator Instructions) And the conference has been recorded. (Operator Instructions)

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 VP of IR*

Thank you, Moira. Good morning. Thank you, everyone, for joining our third quarter 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 of Finance, Purchasing, ERM and Resilience and our Chief Financial Officer; and Marco Cassis, our President of Analog, MEMS and Sensor Group and also Head of STMicroelectronics Strategy, System Research and Application 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's 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 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*

Thank you, Celine. Good morning, everyone, and thank you for joining ST for our Q3 2022 earnings conference call. So let me begin with some opening comments. So starting with Q3. Q3 net revenues of $4.32 billion and gross margin of 47.6% 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 35.2%. This revenue growth was accompanied by improved profitability, gross margin at 47.6%, up from 41.6%, operating margin at 29.4%, up from 18.9% and net income more than doubling at $1.1 billion.

On a sequential basis, net revenues increased 12.6%. For the 9-month period, net revenues increased 27.2% to $11.7 billion, driven by growth in all product groups and subgroups. We reported a gross margin of 47.3%, operating margin of 26.9% and net income of $2.71 billion.

On Q4 2022. Our fourth quarter business outlook at the midpoint is for net revenues of $4.4 billion, increasing by 23.7% year-over-year and by 1.8% sequentially, with a gross margin of about 47.3%.

For the full year 2022, both revenue and gross margin expectations are in line with the plan we shared in July. The midpoint of our Q4 guidance translates into a full year 2022 revenue growth of about 26.2% to $16.1 billion with a gross margin of 47.3%. We are on track with our 2022 CapEx plan of about $3.4 billion to $3.6 billion.

Now let's move to a detailed review of the third quarter. Net revenues increased 35.2% year-over-year with growth across all product groups and subgroups. Year-over-year sales to OEMs increased 34.1% and 37.4% to distribution. On a sequential basis, net revenues increased 12.6% and were 210 basis points above the midpoint of our outlook. Gross profit was $2.06 billion, increasing 54.7% on a year-over-year basis. Gross margin of 47.6%, coming in 60 basis points above the midpoint of our guidance, increased 600 basis points year-over-year, mainly driven by favorable pricing and improved product mix, partially offset by inflation of manufacturing input costs.

Third quarter operating income more than doubled to $1.27 billion. Operating margin was 29.4%, increasing from 18.9% in Q3 2021, with all 3 product groups contributing to the growth and expansion in both operating income and margin. Both net income and diluted earnings per share more than doubled year-over-year, with net income reaching $1.1 billion from $474 million, and diluted earnings per share increasing to $1.16 from $0.51.

Looking at the year-over-year sales performance by product groups. ADG revenues increased 55.5% on growth in both automotive and in Power Discrete. EMS revenues grew 9.7% with growth in analog, in MEMS and in imaging. MDG revenues increased 47.7% with growth in both microcontrollers and in RF communications.

In terms of operating margin, all product groups demonstrated year-over-year expansion, with ADG operating margin of 25.9%, up from 10.8%, EMS operating margin of 27.2% compared to 24.3%, and MDG operating margin increasing to 36.7% from 23.5%.

Net cash from operating activities increased to $1.65 billion in Q3 compared to $895 million in the year ago quarter. For the 9-month period, net cash from operating activities increased 67.6% to $3.65 billion. CapEx in the third quarter was $955 million compared to $437 million in the year ago quarter and $2.61 billion for the 9 months period compared to $1.28 billion in the same period of last year. Free cash flow was $676 million, up from $420 million in the year ago quarter. For the 9-month period, free cash flow increased 22.6% to $988 million.

During the third quarter, ST paid $55 million of cash dividends to stockholders, and we executed an $86 million share buyback under our current share repurchase program. ST's net financial position increased to $1.46 billion at October 1 compared to $924 million at July 2, 2022. It reflected total liquidity of $4.09 billion and total financial debt of $2.63 billion.

Let's now discuss the market and business dynamics of the quarter. Demand for ST products continued to be strong in Q3, and let me share with you a few data points. First, our backlog still covers 6 to 8 quarters of our planned capacity depending on the product type. Book-to-bill remains well above parity, and our manufacturing capacity is fully saturated. From an end market standpoint, automotive and what we call the B2B part of the industrial market; namely, factory automation and industrial infrastructure, remains strong, driven by semiconductor pervasion and structural transformation. The consumer, industrial and personal electronics markets are softening. The demand for ST products remains solid in the selected areas we target in those markets. The computer peripherals market is softening as well.

Let's now go into more detail on automotive. We continue to see strong demand in Q3, reflecting the combined effects of the ongoing electrification and digitalization transformation of this industry, semiconductor pervasion in legacy automotive, and replenishment of inventories across the automotive supply chain. Bookings remain strong across all customers and geographies. Backlog visibility remains above 18 months and well above our current and planned manufacturing capacity through 2023. We accelerated transformation of the automotive industry continued to drive our design wins during Q3.

For car electrification we again increased the number of ongoing silicon carbide programs awarded. Between the automotive and the industrial markets, we now have 110 projects spread over 79 customers. About 60% of these projects are for automotive customers. We will achieve about $700 million of silicon carbide revenue this year, well in line with our revenue target of about $1 billion of silicon carbide revenue in full year 2023.

We had new design wins in automotive application in Q3 with both silicon and silicon carbide power discrete. This includes business for an Acepack Drive power module based on 1,200-volt silicon carbide MOSFETs and Generation 4 silicon carbide MOSFET for traction inverters projects. We also won designs for multiple electrical vehicle makers with rectifiers and protection products and with ultrafast and silicon carbide diodes. With our broader automotive portfolio, we won several sockets in electrical vehicles with solution for battery management systems, zone control units and car headlight control. This includes a win with our innovative data bus solution in a OLED lighting application that supports simpler, most cost-effective implementation of next-generation car architectures.

In car digitalization, we also secured a number of design wins. This includes a smart power chip for power supplier in a zone architecture vehicle control unit, a win for an automotive microcontroller for a battery management system and an advanced chipset for satellite radio receivers. In our automotive sensor business, we won several new designs for 6-axis sensors and with our recently announced global shutter image sensors for driver monitoring systems.

Moving now to Industrial. Here, we continue to see strong demand through the quarter, especially in business-to-business industrial, with some slowdown in consumer industrial that is bringing the level of demand closer to what we can effectively sell. Demand was strong with both distribution and OEM. During Q3, we saw normalization of inventories of our products and distributors with terms averaging around 4%, but totally consistent with the end market dynamics. Across the industrial market, we see 2 main trends driving a structural transformation in the market and accelerating the increase in semiconductor content: digitalization of devices and systems, and energy management and power efficiency improvements.

We address the industrial market focusing on 3 areas. Business-to-business, the largest part, which includes automation, power energy and transportation. Consumer Industrial, which includes home appliances, smart buildings and power tools. And specialized industrial addressing, for example, health care. Across these 3 areas, we had key wins thanks to our broad portfolio. In business-to-business, we had design wins for products such as motor drivers, metering and power line communication solution, industrial sensors, power discrete and our STM32 [innovative] processing solution, including our industrial microcontrollers and microprocessors. Applications include electrical vehicle charging stations, next-generation smart water and electricity meters, industrial lighting, remote wireless monitoring and photovoltaic systems.

In Consumer Industrial, we have design wins with power, analog sensor and embedded processing products in applications such as home appliances, e-bikes, power tools, vacuum cleaners, consumer power supplies and air conditioners. One innovative win I would like to highlight here is our high-performance STM32 H7 MCU to perform artificial intelligence predictive maintenance in a refrigerator from a major appliance manufacturer. And in specialized industrial, I would like to highlight a win in a medical-grade remote care wearable device with an STM32 wireless MUC, supporting Bluetooth and other short-range wireless [porto] growth.

Before closing on industrial, a few words on our continued investment in building the best ecosystem around our general purpose MCUs. In the quarter, we released a new version of our Touch GFX traffic interface creation tool, and we launched an update to our artificial intelligence development tools, to bring support for deeply quantized neuro networks, enabling more accurate machine learnings on existing microcontrollers.

Moving now to personal electronics. Demand for our product in the selected areas we target in the smartphone market was again above expectations. We have a selective focus in this market on high-volume smartphone application and personal devices. We address them with differentiated or custom products while leveraging our broad portfolio. During the quarter, we won sockets in flagship smartphones and wearable devices with wireless charging solutions, motion and other motor sensors, time-of-flight ranging sensor, touch display controllers, and secure solutions. We also had design wins with high-performance STM32 MCUs in gaming accessories for leading console makers.

In communication equipment and computer peripherals, we continue to see deployment of both 5G infrastructure products and of low earth orbit satellite programs in service around the globe. In parallel, we saw the [copes topephal] market softening. The cloud market remains strong. In this end market, we target selected high-volume application, again with differentiated products or custom solutions, while leveraging our broad portfolio. New wins here include secure solutions, time-of-flight sensors and general purpose microcontrollers for notebook PCs and tablets. We received awards based on our proprietary technologies for optical and wireless infrastructure ICs, with leading-edge mixed signal processes as well as for a CPU for space applications based on 28nm FD-SOI technology. I confirm our continued progress with key customer engagements in our focused application in cellular and satellite communication infrastructure.

Now let's move to our 2022 4th quarter outlook. For the fourth quarter at the midpoint, we expect net revenues to be about $4.4 billion representing year-over-year and sequential growth of 23.7% and 1.8%, respectively. Gross margin is expected to be about 47.3% at the midpoint. Turning in the full year, our Q4 guidance at the midpoint translates into 2022 net revenues of about $16.1 billion representing growth of about 26.2% year-over-year, with a gross margin of about 47.3%, both in line with the plan we shared in July. We confirm our 2022 CapEx reinvestment range of about $3.4 billion to $3.6 billion.

Before concluding, let me briefly summarize some recent key developments related to our integrated device manufacturer model and strategy. As we outlined at our Capital Markets Days in May, we are transforming our global manufacturing operations with additional capacity in 300-millimeter manufacturing and a strong focus on wide-bandgap semiconductors. We have a unique position in our 300-millimeter wafer fab in Crolles, France, strengthened by the new project with GLOBALFOUNDRIES that we announced in July. And we continue to invest into our new 300-millimeter wafer fab in Agrate, Italy. Here, our activities are progressing according to plan with first volume ramping in H1 2023. I am also pleased to share with you that the first production lot has been successfully released recently from Agrate. So successfully means yield at the best. And on October 5, we announced that we will build an integrated silicon carbide substrate manufacturing facility in Catania, Italy to support the increasing demand from customers for silicon carbide devices across automotive and industrial applications. This initiative will be an important step in our silicon carbide vertical integration strategy. Production is expected to start in the second half of 2023. The investment in Catania of EUR 730 million over 5 years will be partially supported financially by the State of Italy in the framework of the national recovery and resilience plan. And it will create around 700 direct additional jobs at full build-out. All this initiative: Crolles, Agrate and Catania, will contribute to our sustainability strategy and commitments. These new facilities will provide our customers with the products and solutions they need to increase energy efficiency and reduce CO_2 emissions. Moreover, our new facilities will contribute to our sustainable manufacturing commitment in terms of energy consumption and greenhouse gas emissions, air and water quality.

To conclude, based upon our year-to-date financial results and fourth quarter outlook, 2022 will be another year of progress for ST, in line with our focus on smart mobility, power energy management and IoT and connectivity within our core business and targeted high-growth areas. Our commitment to our Integrated Device Manufacturer model, with strategic technology and manufacturing investments to support our customers, current and future needs. And our $20 billion plus revenue ambition that we outlined at our Capital Markets Days. Thank you, and we are now ready to answer your questions.

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) First question is from Jerome Ramel from BNP Paribas Exane.

Jerome Ramel - *BNP Paribas Exane, Research Division - Analyst of IT hardware and Semiconductor*

Maybe could you give us a little bit color on the dynamic division for Q4 in terms of revenues? And also an update on volumes versus pricing? That would be helpful.

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

Okay. So I will give some color about the revenue growth of Q4. Clearly, in Q4, we will have automotive contributing to the growth, clearly, in -- including power discrete. In analog, MEMS and sensor -- more analog -- are clearly impacted by the softening of the market in the computer peripheral, so they will not contribute to the growth. And MEMS are impacted by the softening of the market in personal electronics smartphone, okay, which is Android comp. Imaging will grow. And on the MDG, MDG will be, let's say more, let's say, flattish because, okay, there is some growth but offset by, let's say, some specific product and customer. So here is more mix. And Lorenzo about volume and price?

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

By -- if we -- good morning to everybody. Looking at the price dynamic in -- specifically in Q4, we do not expect that to have a material change in terms of pricing, I mean seeing in both directions, both increasing or decreasing in respect to what is the pricing level that we see today in the market, and we have experienced in Q3. So I would say that in terms of dynamic, both in terms of revenues, both in terms of, let's say, gross margin there is no major impact in terms of pricing. Pricing, we see quite stable, let's say, overall. In term of dynamic of the revenues and so also reflecting in terms of the dynamic of the gross margin, maybe there is some impact in the mix. The mix was quite favorable in the previous quarter in Q3 and is one of the reasons of which we beat both the revenues and our midpoint in terms of gross margin. While moving from Q3 to Q4, the mix is slightly less favorable, and this is also explained a little bit the decline in term of gross margin.

Operator

The next question is from Matt Ramsay from Cowen & Co.

Matthew D. Ramsay - *Cowen and Company, LLC, Research Division - MD & Senior Research Analyst*

Yes. Thank you very much, everybody. Good morning. Jean-Marc, I wanted to ask a couple of questions about your silicon carbide business. You were -- one of your key suppliers last evening in the States, Wolfspeed, had some challenges in some of their materials business that affected their own devices' business volumes. But I think an important distinction is that, at least in our models after talking to their management team last night, the estimates that we have in our model for their materials business that they sell to external customers such as yourselves, those estimates actually went up. So I guess the question is just the visibility near term on supply of silicon carbide from your key partners? And then the second part of the question is just your confidence in starting to ramp your internal supply. It sounds like you will be starting to ramp in the second half of 2023? And if you could just give any color around that internal silicon carbide ramp, that would be really helpful.

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

No. I can mention that, first of all, okay, when there is a yield issue in silicon carbide, okay, the [C of ST] is immediately alerted. And when the root cause is amplified the C of ST is calling the [COGT]. So for sure, we have many exchanges with [dayglo], okay, during the quarter. Yes, okay, we faced, okay, some, let's say, issues but which are not, let's say, a limiting factor for our capability to grow our silicon carbide business in 2022 and especially in H2, okay? So again, we will deliver our target of about $700 million. And more important, I take the opportunities and 1/4 of this business is not related to our major customer. Now about our, let's say, internal facilities. Again, this vertical integration strategy decision, okay, is still totally valid. We want to have, okay, about 40% of our internal need covered. We will continue to cooperate, okay, strategically with Wolfspeed. It's an important partner for us, and another source as well. Now we are simply executing our strategy and then, okay, to convert the silicon carbide in [hatige] as soon as we can, okay, to implement innovation, we are working on to optimize the silicon carbide usage. We are simply executing our strategy, but it will not change, okay, our relation with Wolfspeed.

Matthew D. Ramsay - *Cowen and Company, LLC, Research Division - MD & Senior Research Analyst*

Jean-Marc, I really appreciate you addressing that. We got a ton of questions over the last 12 hours on that, just given the nature of the space. So I really appreciate the detail there. Just as a quick follow-up, Lorenzo, I heard your comments just now on gross margin for the fourth quarter, and I get those dynamics. I guess the question I get fairly often is gross margin trends into 2023. If you could maybe talk us through some of the puts and takes there and how you're thinking about margins, maybe a little tiny bit of headwinds in the near term, but off of a really, really high base on a relative basis. So just how you're thinking about margins, puts and takes into next year would be helpful.

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

In -- for Q4, our gross margin, as we said, let's say, the dynamic of our gross margin for this quarter is planned in this range of 47.3%, and as I said, the dynamic looking, let's say, the evolution from the previous quarter is that there are 2 components that are going in the, let's say, in the direction to detriment of our gross margin. That one is, as I was saying, is the mix is a little bit less favorable than what it has been in the previous quarter in Q3. On the other side, you know that progressively, we are impacted by this inflationary cost in our COGS. These are the negative component. On the other side, there is a positive one, that is the exchange rate. The exchange rate is going in the positive direction. When we look at the next year, for sure, let's say, there are the various components. On one side, there are some positive ones that may remain. One is the FX. I mean it is -- it's difficult to predict. But at this stage, if we stay in this level, for sure it will play in a positive way. There is, let's say, the positive on the fact that our product mix is supposed to be improving in the next year. On the other side, we also will -- wins of productivity in our manufacturing, let's say, in terms of ability, let's say, to -- with our full fab, let's say, to gain some productivity. But on the other side, we will have also some headwinds because at the end, the inflationary cost will not disappear. We will continue. So even if probably will not increase structures we have seen this year, let's say, but will still be a negative impact in our gross margin. For sure, next year, we will have the ramp-up of 2 300-millimeter that at the end, you know before the, let's say, to be fully efficient. it will go through a period in which the efficiency will be not at the best. We need to increase their capacity. So at the end, let's say, we will have, let's say, this component, some in the right direction, some in the negative direction.

Overall, now we are working on our sales and operating plan to see how, let's say, we will develop the next year, let's say, and I would say that at this stage, it's a little bit early to give, let's say, a firm indication of the evolution of our gross margin. I think as usual, we will discuss this entering in the next year. We will discuss about the CapEx evolution. We will discuss about the revenue evolution. And we will contain this also with some conversation about the dynamic of the gross margin.

Operator

The next question is from Stephane Houri from ODDO BHF.

Stephane Houri - *ODDO BHF Corporate & Markets, Research Division - Research Analyst*

Yes. Actually, I would love to talk about 2023, even though I know you're not going to give a guidance for next year. But could you share with us your views, your initial views on 2023 with the order book that you have, but at the same time, the environment, which is getting, let's say, more nervous? So as a CEO, how do you prepare to 2023? And how do you prepare the company for next year? And the second question is about the main client. Your main client, there has been a lot of, let's say conflicting news flow during the quarter. So can you share with us what is your vision of what's happening there?

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

Okay. So the situation for 2023. Again, I would like to repeat, okay, what we have both in terms of data point, but also, okay, direct input, okay, from our customer as our relations are more and more close. On automotive, okay, I confirm that there is basically 2 trend. Overall, the production of light vehicle will be around, okay, 85 million vehicles this year; should grow next year. But more important is the electrical battery-based vehicle. So this year, okay, should be around 7 million. And next year should be about 10 million. And you know that there is a factor of 4 to 5 in terms of semiconductor content. So clearly, here, okay, we confirm that, okay, both from a, let's say, data point visibility we have in our backlog, but conversation with our customer the demand from -- for electrical vehicles, so the transformation of electrification is calling for strong demand of semiconductor. And yes, okay, on thermal combustion engine, okay, it's not a secret that here, maybe there is some softening of the market. But here, the content of semiconductor is still increasing. So there is some mitigation effect.

So all in all, okay, we confirm that from our perspective, the semiconductor, automotive, let's say, verticals, okay, will grow next year. About industrial, it's basically quite similar path because, okay, discussing, okay, with our customer, and I guess you have seen this morning some announcement from big customer of ST. The infrastructure, the robotics automation after the lesson learned from COVID, but also shortage of workers and so on. Okay, how are -- the demand is very strong. And the demand of semiconductor in automation, robotics, okay, power energy, infrastructure, renewable energy, the charging station for electrical car, all are calling for very, very important demand and here, same both data points, so means the backlog we have in our hand plus, let's say, the discussion we have with customers are showing, let's say a very strong dynamic, whatever is the geographies. Yes, on consumer industrial, okay, that I named during my speech, there is a softening of the demand in terms of building, okay, home appliances, power tools. But power tools, it is clear, it's power tool from retailers, so for the consumer. But if you take power tool for professional, the demand is still very strong. Why? Because it is increasing the productivity of the worker. But here, again, it's not absolutely not similar than the pure consumer electronics. Here, okay, we see market softening, but just at the level of what we can sell in terms of capacity.

So all in all, that's the reason why when we look at the data point, okay, provided by the various, let's say, industrial analysts, it is clear that the sum of ST in terms of growth, both in 2022 and in 2023, is showing a much better picture than the term of semiconductor. Why? Because the term of semiconductor is heavily impacted by memory and microprocessor serving computer, personal computer, but also, okay, smartphone and personal electronics, and especially, okay, the smartphone, overall Android base. So that's the reason why we do believe that with the data point we have from analysts, the customer view and the backlog. So I repeat, this is what I have said today, okay, when I put the search and operating plan we are building for 2023, and the Q4 run rate we have, we have an overall backlog which represents -- depend product line, of course -- between 6 to 8 quarters of run rate. So at the end, this is, okay, making us very confident to drive the company next year on the trajectory of growth. And of course, okay, we will communicate, okay, the range of expected growth next year, okay, entering in the year in January, where we will disclose the CapEx to support it, and the revenue and as Lorenzo said, the gross margin.

So again, my takeaway is very simple. We have proven points -- proven data point of solid market in automotive and industrial for the reason I have explained. Yes, okay, there is a market softening on consumer. However, coming back to your latest point, the revenue we extracted and the value we extracted through our partnership with our main customer, okay, has been great this year. That drives us on a very accurate way okay? The forecast provided to us entering in 2022, okay, versus the one we have today, okay, shift below 2%, okay? I don't say plus/minus, but within a very, very accurate manner. And we have the visibility for next year. So again, overall, okay, we'll drive the company on a growth trajectory.

Celine Berthier - *STMicroelectronics N.V. - Group VP of IR*

Any more question on [appleg]?

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

This is what I already...

Operator

The next question is from Johannes Schaller from Deutsche Bank.

Johannes Schaller - *Deutsche Bank AG, Research Division - Research Analyst*

There were obviously a lot of questions already on the outlook from here. And I think one of the things you haven't really discussed too much is the pricing dynamics you're seeing. I think in Q4, you're not expecting a big benefit. But how do you conceptually think about pricing in your 3 divisions as we go into next year? And particularly on MDG, I think microcontrollers have obviously seen a very benign pricing environment and also very strong margin expansion on the back of that. How do you think about pricing here? And can you maybe help us understand a little bit better the margin expansion over the last 2 years in MDG, how of that you think was pricing-driven? And is there any risks of pricing actually coming down as we go into next year in some of your divisions?

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

So Lorenzo will take the answer, of course, okay, but I would like to repeat what I said a few minutes ago. Okay, the pricing must be considered versus the market, okay? So I repeat, when you have automotive transformation, electrification, digitalization and B2B industrial, the demand is very strong. Microcontrollers are key components. They are calling for more processing computer power. They are calling for more connectivity, they are calling for artificial intelligence, they are coming for secure connection. So you have to understand that pricing is not across the board. Okay. Pricing, of course, okay, in some countries in Asia, addressing the small consumer device, the small toys and so on and so forth, maybe here, you may have some pressure on pricing. But when you address microcontroller, okay, for automotive, when you address for industrial OEM, it is a total different story. So pricing must be considered at the right level of granularity. For saying that, okay, Lorenzo will give you more color.

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

Yes. At the end, let's say, on top of what already explained by Jean-Marc, what we see. As I said, today, we don't see, let's say, a significant evolution in terms of pricing also when we look at this product line, the microcontrollers in particular. It's true that there is some element, as we said, let's say, on some, let's say, low-end products that maybe we can have a little bit more pressure. But at the end, overall, I have to say that the price is quite stable. In 2023, we are not modeling, let's say, a significant change in terms of pricing. In terms of -- for sure, let's say, we don't think that there will be a significant increase in respect of where we stand today. We more and more, let's say, have relatively stable pricing, let's say, maybe with some small decline, as we said, in some areas, let's say, in which maybe the demand is a little bit less stronger than has been during this year. When we look, let's say, at the dynamic of the profitability of this business, there yes, for sure, our price is a component but has not to be undervaluated also the product mix. The value that we are, let's say, bringing in our products is constantly increasing. And this is actually -- is well reflected in the improvement of the profitability of this product line. So I would say that the 2 components go hand in hand. Let's say, price, definitely, yes, it's true that here we had a positive contribution from pricing. But definitely also the contribution that we saw in terms of product mix, in the top line and in the profitability, has been definitely not negligible. So it's quite important. And here is where I think, let's say, next year, will be the positive element that we take into consideration. Maybe price will not step up, would be more, let's say, flattish or mild decline. But we will continue, let's say, to have a positive impact coming from our product mix and the innovation that we are bringing to our customers.

Operator

The next question is from Janardan Menon from Jefferies.

Janardan Nedyam Menon - *Jefferies LLC, Research Division - Equity Analyst*

I was just wondering about the distribution channel right now, both in China and elsewhere. In the past, you've always talked about what you are seeing at the POS level and in channel in general. Can you give us a little bit of how that dynamic is evolving into Q4? And when you talk about pockets of weakness could be in microcontrollers and some limited areas, would you assume that, that would be coming predominantly in the channel? And have you seen any evidence of that happening so far? And then a small follow-up is just on your Q4 guidance, can you give us what exactly would be the impact from currency, the positive impact on currency on your Q4 gross margin, that will be very helpful.

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

Lorenzo will answer the last question. No, distribution in China, first of all, okay, distribution overall is in a very, let's say a similar situation in terms of backlog coverage than the overall company. So it means the backlog we have from distribution is representing, okay, between 6 to 8 quarters of Q4 revenue run rate. So exactly the same profile. And then distribution is a copy/paste of the market. So clearly, we have distributor -- when we have distributor fully generalized, okay, addressing both automotive, industrial market, and you know that we are pushing. And when I say industrial, let's say B@ -- the infrastructure of industrial, terms of inventory are very high and the POS is growing. When you have, okay, a distributor addressing more consumer industrial, okay, terms are stabilizing and POS is stabilizing. And when you have okay distributor addressing the pure consumer electronics, okay. So small personal electronic device. Yes, okay, you have the POS decreasing and we are monitoring very carefully the inventory turn. Why? because we are controlling the allocation of PCs and allocation of capacity. So in fact, okay, the situation of distribution in China and overall in the world is really a copy/paste of the dynamic of the market and of the verticals. And today, okay, this is the situation we are seeing.

Janardan Nedyam Menon - *Jefferies LLC, Research Division - Equity Analyst*

And in your MDG, you've often talked about having up to 100,000 customers, which I presume in many cases, are small and medium-sized businesses, but sort of in the industrial market. What is the dynamic that you're seeing in that particular segment? Is that still holding up reasonably well?

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

On microcontroller, clearly, about the 100,000 customers, okay, there is customer we address through the distribution and there is okay, what we call medium-sized OEM. In 2022, okay, we set up programs, okay, to specially support medium-sized OEM with microcontroller in order to protect them because, okay, you know that we face okay, this a shortage in terms of capacity. And we were in conflict between, okay, a strong push from automotive industrial B2B OEM. And we set up specific programs, okay, for a medium-sized customer and I can confirm to you that this medium-sized customer, first of all, they grew a lot in 2022, well above the average of the company. And they will continue to grow in 2023. Of course, okay, the small customer and especially those, okay, addressing the personal electronics market in Asia and in China. Yes, okay, certainly here, we have lost some market share against, okay, the local, let's say, microcontroller provider. But okay, it is not the main part of our business. Again, the main part of the business for microcontroller is industrial OEM, definitively important OEM whatever the market, definitively, and we have managed at the best of our allocation. We see some price pressure on the low-end personal electronics. Again, okay, we have the capability to compete because we are using a mature technology, very cost-effective. We are using an important foundry providing now, okay, the right capacity at the right price. And here, we can compete. So we don't see any specific [curtail], okay, to this situation.

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

At the end in the quarter, POS was growing both sequentially than year-over-year.

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

Exactly.

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

So data point. About the effects -- the modeling the effects for our companies is always more or less the same. I was giving a rule of thumb many times, let's say, about the 1 percentage change in the -- euro-dollar, how this translates in our operating margin on our -- in our operating profit in our gross profit, let's say, in the range of 1% of difference in terms of, let's say, exchange rate euro-dollar exchange rate it translates between 280 210 million dollars, equally split substantially between gross profit and operating profit, I mean, half in gross profit and the remaining half in the expenses by growth. So at the end, if you make the computation in Q3, our effective exchange rate was in the range of 1.08 including of course the hedging, in Q4 will be 1.03. So at the end, the positive impact we estimate on our gross margin moving from Q3 to Q4 is in the range of 30 basis points, something like that positive impact. Of course, this is offset by, as I was saying before, by, let's say, less favorable mix and the impact, definitely the impact of continual cost increase in our cost. So at the end, overall, our gross margin is declining 30 basis points.

Operator

Next question is from Metuku Adithya from Credit Suisse.

Adithya Satyanarayana Metuku - *Crédit Suisse AG, Research Division - Research Analyst*

So firstly, I just had a quick clarification on MDG. You said something [a lot] about demand softening driven by a specific customer. I didn't quite catch that. I just wondered if you could give us a bit more clarity there? And then secondly, a question for Lorenzo just on OpEx. Firstly, I wanted to understand how do you expect [all these] CHIPS Act to impact your OpEx and the R&D grants you receive? And secondly, can you give us some color on the gross OpEx and the R&D grants that we should model in Q4 and into 2023, if possible.

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

Okay. So maybe I take this one on the OpEx directly, that is simple to answer. In terms of OpEx for the current quarter, we see definitely an increase in respect to the one of the previous quarter. You have to keep in mind that in Q3, we are impacted by favorable seasonality on our OpEx basis in Europe, where the vacation plays positively in terms of accounting of the OpEx. So at the end, let's say, what we see for the quarter, including the impact of the other income and expenses, that is including the grants, it will be something in the range of $830 million, $840 million in the quarter. If you make the math, you will see that at the end, the quarterly expenses all over the year it will be something in the range of between 800 and 805, let's say, if you take the total expenses of the net expenses divided by 4. That is more or less what we have guided already in Q3, was a little bit higher in Q3, but the difference is mainly driven by the positive impact of the exchange rate.

In respect to the question on the grants, I would say that at the end, in terms of grants for R&D, we do not expect a significant change in respect to what we have had in the past in the sense that at the end, we are -- this year, just to give you an idea, let's say, the overall other income and expenses will be, as already anticipated, more or less in the range of $140 million, something like that. We do not expect moving forward, let's say, significant change. Of course, there could be some -- as it happens also in the past, volatility due to the fact that at the end, you need to conclude and to sign the final let's say, convention with the various bodies, let's say, that are providing these grants, like the government or similar body. And here, you may have some quarter up and some quarter down, depending when you really, let's say, concluded this kind of administrative procedure when there is the renovation of these grants. But in general, moving forward with the visibility that we have today, the level of the grants will remain stable. The difference is, more than the grants in R&D, in the grant financing of investment like the silicon carbide fab that has been announced beginning of October, and Jean-Marc mentioned in his introduction speech, let's say, in which, let's say, for instance, our investment in Catania for the silicon fab, $740 million, has been partially financed through let's say these kind of new instruments that are available now for finance the investment in semiconductor. And this is a difference maybe in respect to the past.

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

So coming back to your question on the microcontroller. General purpose microcontroller, you have everywhere, okay? You have in automotive, noncritical, okay, system where you need to have real-time, let's say, control but you have it in some automotive system. You have it in industrial robotics, automation, infrastructure. You have it in [forestry], in personal electronics, important customer programs and you have it, okay, in communication equipment. And sometimes in computer peripheral, okay, with important customer forum. Everywhere, we are selective. For all this part of the business, either automotive, industry and [or engaged personal] program, okay, the demand is not softening. Where the demand is softening, as I repeat, it is on pure consumer personal electronic, we address through distribution because, okay, we know it's well known that there is a market softening in the consumer area, because the consumer, they change their behavior versus the purchase of this device. So but I repeat clearly for ST, okay, the demand is not softening overall for microcontroller general [postpone] is still very strong. We have still between 6 to 8 quarter backlog coverage versus the capacity we allocate, all the market where we want to address high growing area, the bookings is well -- with a book-to-bill well above 1, so the dynamic is very positive. Yes, okay, we have seen some sign of weakening on pure consumer. But here, we address through the distribution. And through the distribution, we manage our inventory at the right level.

Adithya Satyanarayana Metuku - *Crédit Suisse AG, Research Division - Research Analyst*

Got it. So your previous comment on one customer softening, was that like one of the consumer distributors seeing some softening, but the rest of the business remains very strong.

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

Exactly.

Celine Berthier - *STMicroelectronics N.V. - Group VP of IR*

We have time for 1 last question.

Operator

Today's last question is from Andrew Gardiner from Citi.

Andrew Michael Gardiner - *Citigroup Inc., Research Division - Research Analyst*

Just 2 clarifications really. One on the OpEx comment that you just answered, Lorenzo. If I go back to what you said at 2Q, then you were quite clearly guiding to between $810 million and $850 million per quarter on average for the year. Now you're well below that. Your prior answer seems to suggesting a moderate change, but it feels more significant based on what you've told us previously. How would you characterize that shift? And sort of where are you finding some of these savings, particularly given the inflationary environment you've already acknowledged? And then also on capacity, with the 2Q results you also gave us a sense as to your internal capacity growth relative to foundry wafer supply. How is that at the moment in terms of how your -- the kind of growth that you're seeing in terms of fourth quarter, your ability to get increased wafer supply from the foundry partners? Just an update on that would be helpful.

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

[Could you restate] the first question.

Celine Berthier - *STMicroelectronics N.V. - Group VP of IR*

So the first question was on OpEx.

Andrew Michael Gardiner - *Citigroup Inc., Research Division - Research Analyst*

Yes. On OpEx just going back to the prior statement, it was at a much higher level budgeted for this year than what you've just indicated.

Celine Berthier - *STMicroelectronics N.V. - Group VP of IR*

Not that much, if I can [weight] down because it was [8 50]...

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

I think that, I don't remember exactly when, but I think my indication on OpEx was something in the range 810, 820 in average, let's say. Yes, actually, today, the visibility is a little bit lower. This is not really driven by any significant, let's say, change in our programs or something like that. I would say that -- if you remember, entering Q3, my guidance of expenses was a little bit higher for the quarter than what it came out. Now I didn't enter, let's say, in a lot of detail for Q3, but in Q3, if you count that we had 2 positive effects. One positive effect was that other income and expenses came a little bit higher than expected, and this is a little bit technical. There was some positive on grants and that was positive also related to our FX position, but fine. At the end that this is maybe not recurrent. And actually, there was also, let's say, a little bit higher level of vacation in respect to what was supposed to be entered in the quarter and was the normal seasonality. So at the end, we came lower than expected, a part, let's say, a little bit positive effect of exchange rate.

Moving to Q4, we are back, let's say, at a normal level. Indeed, as I said, we will be between 830 and 840. So at the end of the month, it brings you a little bit down in respect to the 810 and 820, if I remember well that I was guiding a few months ago. Yes, you're right. It's coming a little bit lower. But at the end, to be honest, is not really related to that we have done significant changes in respect to what was our objective in terms of program, project, and things like that. It's not driven by that, but it's mainly driven, if you want, maybe by our ability to forecast so precisely these numbers. But yes, at the end, we are more or less there.

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

So about capacity, if I well capture your question. We are increasing our capacity according to our plan. That's the reason why we have confirmed our CapEx, okay, range between $3.4 billion to $3.6 billion. If you remember well, okay, during the Q2 earnings, I share with you that Q3 revenue will be driven mainly by our capability to increase our manufacturing. And clearly, we increased in Q3 versus Q2, our manufacturing production value by 12.5%, completely consistent, okay, with our revenue increase. Well, I don't want to hide that, yes, we put many equipment maker under scrutiny because they are struggling to deliver their equipment on time versus their commitment. [Mercury], they are facing many issues on their own supply chain. About next year, okay, next year, we will increase our capacity; consistently with the sales and operating plan, we will decide. And consistently with the objective of $20 billion plus that I confirm for 2025 to 2027, and we will increase it consistently. From foundry side, now clearly, there is one partner which is supporting us much better than in 2022 according to our demand, clearly, and it's a very good news for us. especially in the sense that it is supporting our microcontroller business. And other foundry partner we are used to is more complex, okay? They are still facing some issues to increase their support at the expected level because of a capacity limitation.

Celine Berthier - *STMicroelectronics N.V. - Group VP of IR*

Thank you so much. This will conclude our call.

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

Thank you.

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

Thank you. Bye-bye, all.

Operator

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.