ON Semiconductor Corporation, Q2 2023 Earnings Call, Jul 31, 2023 (EditedCopy)

TEXT version of Transcript

Corporate Participants

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* Parag Agarwal

  ON Semiconductor Corporation - Vice President of Investor Relations & Corporate Development

* Thad Trent

  ON Semiconductor Corporation - Executive VP, CFO & Treasurer

Conference Call Participants

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  BofA Securities, Research Division - Research Analyst

* Christopher Adam Jackson Rolland

  Susquehanna Financial Group, LLLP, Research Division - Senior Analyst

* Christopher Brett Danely

  Citigroup Inc., Research Division - MD & Analyst

* Gary Wade Mobley

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* Harsh V. Kumar

  Piper Sandler & Co., Research Division - MD & Senior Research Analyst

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* Nathaniel Quinn Bolton

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Presentation

Operator [1]

Good day, and thank you for standing by. Welcome to the ON Semi Second Quarter 2023 Earnings Conference Call. [Operator Instructions] Please be advised that today's conference is being recorded. I would now like to hand the conference over to your host today, Parag Agarwal, Vice President of Investor Relations and Corporate Development. Please go ahead.

Parag Agarwal, ON Semiconductor Corporation - Vice President of Investor Relations & Corporate Development [2]

Thank you, Liz. Good morning, and thank you for joining ON Semi's Second Quarter 2023 Quarterly Results Conference Call. I'm joined today by Hassane El-Khoury, our President and CEO; and Thad Trent, our CFO. This call is being webcast on the Investor Relations section of our website at www.onsemi.com. A replay of this webcast, along with our 2023 second quarter's earnings release will be available on our website approximately 1 hour following this conference call. And the recorded webcast will be available for approximately 30 days following this conference call.

Additional information is posted on the Investor Relations section of our website. Our earnings release and this presentation include certain non-GAAP financial measures. Reconciliation of these non-GAAP financial measures to the most directly comparable GAAP measures under GAAP financial measures are included in our earnings release, which is posted separately on our website in the Investor Relations section.

During the course of this conference call, we'll make projections or other forward-looking statements regarding future events or the future financial performance of the company. We wish to caution that such statements are subject to risks and uncertainties that could cause actual events or results to differ materially from projections. Important factors that can affect our business, including factors that could cause actual results to differ from our forward-looking statements are described in our most recent Form 10-K, Form 10-Q and other filings with the Securities and Exchange Commission and in our earnings release for the second quarter of 2023.

Our estimates or other forward-looking statements may change, and the company assumes no obligation to update forward-looking statements to reflect actual results, change assumptions or other events that may occur except as required by law. Now let me turn it over to Hassane. Hassane?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [3]

Thank you, Parag. Good morning, and thanks to everyone on the call for joining us. The executive staff and I are thrilled with the results, following another successful quarter for ON Semi with Q2 revenue of $2.09 billion and non-GAAP gross margins of 47.4% both above the midpoint of our guidance. Our worldwide teams are firing on all cylinders. Well, maybe I should start saying there are spinning all motors now. Our approach of disciplined, consistent and reliable execution continues to be the winning formula for ON Semi quarter after quarter.

We have again exceeded our targets despite the current market environment, all while delivering best-in-class performance for our customers. The most recent example is our silicon carbide performance. We ramped a new and highly complex technology while continuing to surpass internal manufacturing and financial metrics, and we are all very proud of everyone that contributes the success daily.

Given our progress in Q2 silicon carbide revenue growing nearly 4x over Q2 '22, we remain on track to achieve our first $1 billion revenue year and remain on track to have more than 50% of our substrates coming from our internal production by the end of Q4. EV is the fastest-growing part of this business, followed by energy infrastructure. Customers are excited to work with us. Our successful capacity expansion is creating an opportunity for ON Semi to gain share in silicon carbide by supporting new demand amid ongoing supply uncertainty in this space.

In Q2 alone, we signed more than $3 billion of new silicon carbide LTSAs, bringing our total lifetime silicon carbide revenue committed through long-term supply agreements to over $11 billion. One of our largest wins last quarter was with Vitesco, a leader in modern drive technologies and electrification solutions who signed a $1.9 billion agreement to support their growing need for silicon carbide in electric vehicles. They are co-investing $250 million as part of this 10-year LTSA to ensure capacity for the ramp.

We also extended our silicon carbide engagement with BorgWarner to integrate our EliteSiC 1,200 and 750-volt power devices into its power modules to deliver increased power density and higher efficiency, which increased the range and overall performance of EVs. We have had a long-standing relationship with BorgWarner, and this extended LTSA now amounts to $1 billion of committed silicon carbide revenue.

Finally, with Magna, 1 of the world's largest automotive suppliers, we have signed a silicon carbide LTSA to expand our strategic collaboration, which has long included technologies across our intelligent power and sensing portfolio. Together, we will integrate our 1,200-volt intelligent power devices into Magna's traction inverter solutions to improve the performance of electric vehicles over the next 10 years.

By integrating ON Semi's industry-leading EliteSiC technology, Magna eDrive systems will deliver greater cooling performance and faster acceleration and charging rates that will help improve efficiency and increase the range of EVs.

In addition, they will co-invest $40 million in new silicon carbide equipment in our Hudson and Czech Republic locations to ensure access to future supply. LTSAs have become an integral part of the way we do business with our strategic customers. LTSAs continue to provide us with extended visibility, stability in pricing and volume commitments while allowing us to plan for long-term capacity.

In terms of market dynamics, both Automotive and Industrial remained healthy in Q2 with quarter-over-quarter growth of 8% and 10%, respectively, and now account for 80% of our total revenue. It was the first time that our Automotive revenue surpassed the $1 billion mark in a single quarter, driven by strength in intelligent power for electric vehicles and intelligent sensing for advanced safety applications.

New regional regulations will require that vehicles be equipped with both a wider field of view to detect vulnerable road users such as pedestrian and cyclists as well as high-speed electronic braking for highways. These new standards can only be met with higher resolution image sensors like the 8-megapixel device, which we first introduced 2 years ago and is now widely adopted by top carmakers for production in their 2024 models. With this accelerated adoption, we expect our 2023 revenue for our 8-megapixel image sensors to more than double year-over-year.

We have further expanded our intelligent sensing portfolio with the newly introduced Hyperlux family of image sensors for Automotive and Industrial markets, designed to eliminate flicker, all while delivering the highest dynamic range available in the market. For industrial applications, such as surveillance and machine vision, our new products also offer very low power with intelligent wake on motion to even further extend energy savings.

Another significant milestone this quarter is the sampling of our automotive-grade image sensor out of our East Fishkill fab to leading global ADAS customers and partners making ON Semi the only image sensing supplier with a U.S.-based 300-millimeter fab and both internal and external sources across every step of the imaging supply chain. Customers value the investments ON Semi has made to improve supply resiliency.

With evolving vehicle requirements and consumer behavior, automotive design cycles are getting shorter and continue to get compressed, therefore, we must remain at the forefront of the latest trends and regulations and ahead of our customers' needs. We are innovating with the best in the world and being recognized for the value we provide.

Most recently, we received a prestigious Volkswagen Group Award for innovation for our strategic partnership on future electric vehicles with our broad portfolio of intelligent power and intelligent sensing technologies, along with our focus on establishing vertically integrated silicon carbide production capabilities. We are grateful for partners like VW as well as our other strategic customers who trust ON Semi's packaging expertise, scalable manufacturing capabilities and problem-solving approach to deliver joint innovation in the rapidly evolving Automotive market.

In Industrial, our revenue grew 5% year-over-year and 10% sequentially, with continued strength in medical applications as well as energy infrastructure, which increased nearly 70% year-over-year in Q2. Our growth in the industrial segment is driven by the accelerated adoption of high-growth energy infrastructure applications like solar inverters, energy storage inverters and EV fast chargers.

Solar is forecasted to surpass coal and gas and installed capacity by 2027, and ON Semi has the #1 market share position with a full suite of silicon, silicon carbide and packaging technologies to deliver the most highly efficient and system optimized solutions to customers. We have now secured $1.95 billion in long-term supply agreements for power modules with leading global manufacturers of solar inverters, among which are 8 of the top 10 solar inverter suppliers. These customers are securing supply assurance to support their growth.

Highlights in medical include market expansion for continuous glucose monitors or CGMs, driven by the reimbursement of monitoring therapies. We are #1 in CGM, which we support with our sensor interface portfolio, and we expect this market to continue to grow at a 20% CAGR over the next 5 years.

In hearing aids, we have partners with innovative customers who will push accelerated adoption in the market with over-the-counter solutions, improving accessibility and lowering cost of ownership. Lexie Hearing is 1 of the world's game changers in hearing aid and uses ON Semi's intelligent sensing technology at the heart of their solution, earning them recognition as 1 of TIME 100's most influential companies in 2023. Once again, I want to thank all our employees who work on our incredible silicon carbide effort around the world as well as those who remain focused on all of our other strategic growth areas of intelligent power and sensing.

We have a unique opportunity as a company to accelerate our investments in areas where we believe we can outpace the market with the capital generated by our mature and growing businesses. The size and scale of our operations have allowed us to leverage our infrastructure and expertise inside the company to tackle complex problems and drive increased output to support the growing needs of our customers. And now let me turn the call over to Thad to give you more details on our results. Thad?

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [4]

Thanks, Hassane. We're pleased to report another stellar quarter for ON Semi. Our Q2 results and our Q3 outlook clearly demonstrate our consistent execution outpacing the industry while navigating the soft macro environment. We are uniquely positioned as our business is being powered by multiple secular growth drivers in the fastest-growing end markets of Automotive and Industrial.

All our Q2 financial metrics exceeded the midpoint of our guidance. We grew revenue 7% sequentially, expanded gross margin by 60 basis points to 47.4% and delivered a 12% quarter-over-quarter increase in earnings per share to $1.33, which exceeded our guidance range. Our global teams have transformed the business to deliver predictable and sustainable performance with above-industry growth at attractive margins. Revenue for the second quarter was $2.09 billion, roughly flat compared to the second quarter of 2022 and increased 7% over Q1. The sequential increase was driven by growth in the Automotive and Industrial end markets with accelerating demand for electrification and renewable energy.

Even without silicon carbide, our revenue increased at an impressive pace sequentially. Turning to silicon carbide. Hassane mentioned, our continued execution and increasing number of LTSAs with Automotive and Energy infrastructure customers. We are ramping our silicon carbide production to support the increasing demand and remain ahead of our internal plans.

Over the past 2 years, we have made strategic brownfield investments to expand capacity and ramp production much faster by leveraging our existing manufacturing footprint and expertise. These industry-leading ROIC investments are now contributing to our financial results. In the second quarter, our silicon carbide business nearly doubled gross margin sequentially. And I'm proud to report our silicon carbide business achieved its first profitable quarter, delivering high-teen operating margin on a fully loaded basis, which includes all start-up costs.

I'd like to take this opportunity to thank the 33,000 ON Semi employees across the globe for their commitment to success in delivering outstanding results quarter after quarter. Turning to end markets. Our

Automotive revenue hit a new record of over $1 billion in Q2, growing 8% quarter-over-quarter and 35% year-over-year, driven by the accelerating adoption of electrification and the continued need for sensing in vehicles.

In Q2, Industrial revenue grew 5% year-over-year and 10% sequentially with continued strength in EV charging, medical applications as well as energy infrastructure, which increased nearly 70% year-over-year and is now a meaningful part of our overall revenue. We continue to exit volatile noncore businesses, which included another $57 million in Q2 revenue, bringing our total year-to-date of exited revenue to more than $100 million and nearly $400 million since the start of our transformation. We will continue to be opportunistic in noncore markets where margins are favorable and engagements are strategic with our customers.

We now expect to exit $350 million to $400 million in 2023. Looking at the split between operating units. Revenue for the Power Solutions Group, or PSG, was $1.12 billion, an increase of 6% year-over-year, with more than 60% year-over-year increase in Auto and nearly 70% year-over-year increase in Energy infrastructure. Revenue for the Advanced Solutions Group, or ASG, was $650 million, a 9% decline over Q2 '22, driven by deliberate exits and continued softness in noncore markets, offset by strength in Automotive and Industrial.

Revenue for the Intelligent Sensing Group, or ISG, was $325 million, a 4% increase year-over-year, primarily due to the automotive shift to higher-value sensors in our portfolio such as 8-megapixel image sensors. Our GAAP and non-GAAP gross margin of 47.4% improved 60 basis points quarter-over-quarter, driven by silicon carbide and despite the significant headwinds from EFK we disclosed last quarter.

We continue to improve the cost structure of the fab, but we expect EFK to be dilutive to gross margins by approximately 250 basis points for the next several quarters. We remain committed to maintaining our long-term gross margin trajectory as we execute our Fab Right strategy of driving efficiencies and further consolidation in our internal as well as our external manufacturing network.

Now let me give you some additional numbers for your models. GAAP operating expenses for the second quarter were $318.7 million as compared to $453.1 million in the second quarter of 2022. Non-GAAP operating expenses were $305.5 million as compared to $317.7 million in the quarter a year ago. GAAP operating margin for the quarter was 32.2% and non-GAAP operating margin was 32.8%. Non-GAAP operating margin increased 60 basis points quarter-over-quarter.

Our GAAP tax rate was 15.3% and our non-GAAP tax rate was 15.8%. GAAP earnings per share for the first quarter was $1.29 as compared to $1.02 in the quarter a year ago. Non-GAAP earnings per diluted share was $1.33, flat year-over-year and above the high end of our guidance. Our GAAP diluted share count was 448.7 million shares, and our non-GAAP diluted share count was 438.7 million shares.

In Q2, we repurchased $60 million of shares at an average price of $86.49 per share, and we remain committed to our long-term strategy of returning 50% of free cash flow to our shareholders.

Turning to the balance sheet. Cash and cash equivalents was $2.6 billion, and we had $1.1 billion undrawn on our revolver. In Q2, we proactively downsized our revolver by $500 million to $1.5 billion and extended the maturity to 2028 to align to our long-term needs and projected cash flow.

Cash from operations was $390.8 million and free cash flow was negative at $39.8 million due to timing of investments in capital expenditures and growth in strategic inventory in the second quarter. We expect free cash flow to return to positive for the remainder of the year. Capital expenditures during Q2 were $430.6 million, which equates to a capital intensity of 20.6%. As we indicated previously, we are directing a significant portion of our capital expenditures towards silicon carbide and enabling our 300-millimeter capabilities at EFK and expect our capital intensity to be in the mid- to high-teen percentage range for the next several quarters.

Accounts receivable of $944.4 million, increased by $63.5 million and DSO was 41 days consistent with the first quarter. Inventory increased by $149.5 million sequentially and days of inventory increased by 4 days to 163 days. This includes approximately 54 days of bridged inventory to support fab transitions and the silicon carbide ramp. Excluding these strategic builds, our base inventory declined 7 days quarter-over-quarter.

We continue to proactively manage distribution inventory. Distribution inventory increased $20 million sequentially with weeks of inventory at 7.7 weeks in Q2 versus 7 weeks in Q1. Total debt remained flat at $3.5 billion and net leverage is 0.27. Let me now provide you key elements of our non-GAAP guidance for the third quarter.

A table detailing our GAAP and non-GAAP guidance is provided in the press release related to our second quarter results. Our business continues to strengthen with improved visibility, and we expect to recognize approximately $6.4 billion of committed revenue from our LTSAs over the next 12 months in addition to our noncancelable and nonreturnable orders. Given the soft macro environment, we are taking a cautious stance in our guidance. We anticipate Q3 revenue will be in the range of $2.095 billion to $2.195 billion. We expect Automotive and Industrial to increase quarter-over-quarter with other markets down mid- to high single digits as we plan further exits in our noncore markets. We expect non-GAAP gross margin to be between 46% and 48% due to lower factory utilization, EFK headwinds and the dilutive impact of silicon carbide, which remains ahead of plan. This also includes share-based compensation of $4.4 million.

As we have previously stated, 2023 will be a transition year for our gross margins, and we expect to maintain our trajectory as we manage these temporary headwinds. We expect non-GAAP operating expenses of $300 million to $315 million, including share-based compensation of $29 million. We anticipate our non-GAAP [OIE] will be negligible for the quarter. We expect our non-GAAP tax rate to be in the range of 15.5% to 16.5% and our non-GAAP diluted share count for the third quarter is expected to be approximately 439 million shares. This results in non-GAAP earnings per share to be in the range of $1.27 to $1.41. We expect capital expenditures of $440 million to $480 million, primarily in brownfield investments in silicon carbide and EFK.

To wrap up, the structural changes we've been implementing since the start of our transformation have improved the resiliency of our business and enabled us to better navigate the soft market environment. We have delivered another quarter with results above expectations, reinforcing that consistent, reliable execution is our path forward to achieving our long-term model. We have reduced the volatility in our financials and held to our commitments while navigating short-term market dynamics, and we plan to continue to deliver for our shareholders 1 quarter at a time. With that, I'd like to turn the call back over to Liz to open for questions.

Question And Answer

Operator [1]

[Operator Instructions] Our first question comes from the line of Chris Danely with Citi.

Christopher Brett Danely, Citigroup Inc., Research Division - MD & Analyst [2]

Guys, my first question is just on the overall cycle, Hassane. How would you compare taking silicon carbide out, just pure semis now versus 3 months ago. Would you say it's gotten a little better, a little worse? Any comments on visibility and just the overall semi cycle now versus last quarter at this point?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [3]

Yes. I mean I'll tell you Auto and Industrial remains healthy. Even if you take out silicon carbide, that business is up. And that's really the way we position those -- both of these businesses in a lot of the mega trends that are underlying it with the EV and energy infrastructure. So when you put both of those, without silicon carbide, that's also supporting growth in general for our, what I would call, the silicon business. So strength in these markets is sustained.

Christopher Brett Danely, Citigroup Inc., Research Division - MD & Analyst [4]

And how about non-auto and industrial?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [5]

Non-auto and industrial, we'll see it slightly down -- flat slightly down. And that's a lot of our peers that are more exposed to those businesses are seeing and we see the same thing.

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [6]

Yes. And for our non-auto and industrial was up slightly, but as Hassane said, we expect it to be down mid- to high single digits in Q3.

Christopher Brett Danely, Citigroup Inc., Research Division - MD & Analyst [7]

Yes. Great. And for my follow-up, any changes in -- on specific lead times and shortages quarter-over-quarter? Has your lead times gone down, gone up, stayed the same; shortages up, down, stayed the same versus 3 months ago?

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [8]

Yes. On the lead times, if you look at our average lead time, it's very consistent quarter-on-quarter. There's been pockets where lead times have decreased, a few pockets where they've increased. But on average, they're relatively flat quarter-on-quarter.

Operator [9]

Our next question comes from the line of Vivek Arya with Bank of America.

Blake Edward Friedman, BofA Securities, Research Division - Research Analyst [10]

This is Blake Friedman on for Vivek Arya. So first, I just want to start off with that ON Semi has signed a number of silicon carbide LTSAs. So I was hoping you could provide the mix of autos versus non-autos? And then looking further into the industrial market, your growth is up 5% year-on-year, which is certainly well above other peers down 10% to 20%. I know silicon carbide is a partial contributor, but I was hoping you can describe maybe what you're seeing versus what peers aren't?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [11]

Yes. A couple of things. On the silicon carbide, it's still within the same mix we've talked about before. About 90% is auto, about 10% is industrial. The LTSA that we talked about in Industrial are the $1.95 billion, that's for the whole market. So that includes silicon and silicon carbide or IGBT because we talked about the hybrid modules, we're able to provide, that's driving that $1.95 billion. On the industrial side, specifically, what really breaks us apart is the fact that we are extremely focused on the growth markets within industrial.

We talked about energy infrastructure, which includes renewable and includes charging all of that, that is driven -- those are mega trends underlying the industrial and in my prepared remarks, I talked about our focus on the medical side of the business, which is also under the Industrial. And that's seen its own transformation from the hearing aids going over-to-counter to CGM being part of the reimbursement scenarios.

All of these are driving underlying growth, but they're very specific to where we have chosen to put our strategy from a company perspective, that's where our investments have been and the growth is coming specifically. So that's the reason I can pinpoint exactly what is specific to ON Semi versus the general peers.

Blake Edward Friedman, BofA Securities, Research Division - Research Analyst [12]

Got it. And then as a follow-up, I was just hoping you can provide an update on the progress of in-sourcing silicon carbide substrates and your time line to be fully in-sourced. And I understand the strategy has been focusing on brownfield investments, but with industry silicon carbide supply expected to trail demand for the foreseeable future, would management ever consider building its own greenfield facility down the road?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [13]

So I'll answer both of these separately. So the progress is still on track. I reiterated the fact that we're going to be exiting this year with majority coming internally. So we're still on track. That business is actually -- that operation is actually performing better than we expected. So high confidence in our commitment that we've made about 6 to 9 months ago. So we're going to exit this year with majority internal.

As far as brownfield, greenfield, we have a lot of runway with the brownfield. We have a great fab and back-end exposure. And what we're doing is we're going to utilize it. We don't see that needing to go to greenfield at any time in the future. Of course, that's dependent on business and economic sense.

Right now, with all the wins that we have disclosed, those are -- we are able to support those with brownfield, specifically as we embark on our Fab Right strategy that Thad described in our Analyst Day. That's going to be supporting all the LTSAs that we've disclosed. And look, if business is even better than what we are talking about today, and we have to go to greenfield, then that's a really good reason to do it. But for now, brownfield is the path and we're able to support it. And that really highlights the good ROIC that we've been able to deliver.

Operator [14]

Our next question comes from the line of Harsh Kumar with Piper Sandler.

Harsh V. Kumar, Piper Sandler & Co., Research Division - MD & Senior Research Analyst [15]

Guys, can you hear me okay?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [16]

Yes?

Harsh V. Kumar, Piper Sandler & Co., Research Division - MD & Senior Research Analyst [17]

Okay. First all, congratulations. This is yet another fantastic quarter and guide from you guys. So congratulations. And I had 2 questions, Hassane. I'm seeing a little bit of a change in your business. I used to see sort of transactional business in silicon carbide. You get orders, you get customers, but now we're seeing really large orders, really large customers, multiyear, multibillion-dollar deals. Is this happening because of the competitive environment more recently? Or is this happening because you are much more comfortable taking on these orders? And if so, why are you more comfortable taking on these kind of orders? And then I know you've said that you never want to sell wafers, but I just want to clarify, are these orders strictly all 100% chips? Or is there a portion of wafers you're involved as well? And then I've got a follow-up.

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [18]

Yes. So let me answer the latter part because that's straight forward. We're still not interested in selling what we call substrates. We're not in the business of substrate. Our focus on the substrate manufacturing is for internal consumption. That has not changed. And look, the demand that we've been talking about utilizes all of our substrate operations. So we're increasing that capacity in tandem just ahead of our revenue or the ramp from our customers. That remains unchanged, and that remains our focus.

And, look, that operation is performing ahead of plan. So I'm very, very satisfied with what the team has done there. As far as the strategic engagements with the customer, it's not our -- it's not only our willingness to take that business on. We've always been willing, and we've talked very confidently about our capabilities and what we have been ramping. What is changing is if you think about the landscape, we have -- we are the only 1 that's scaled very quickly and is a silicon carbide supplier at scale.

And that is now very, very clear to our customers and their customers, whether it's Tier 1 or an OEM and that ability to scale and really deliver exactly on our commitments to all the customers who had LTSAs with us have gotten what they want, no hiccups in ramp, no hiccups in technology, no hiccups in expansion. So they're coming back and expanding those agreements because they're winning more business with our products and they want to secure more of their future. So it's a win-win, really. And it's how you want it to be.

Harsh V. Kumar, Piper Sandler & Co., Research Division - MD & Senior Research Analyst [19]

Fantastic. And for my follow-up, I know investors always look forward and kind of want you to deliver on the next thing. So the question is that 8-inch wafers. We hear a lot from investors about the cost disruption that, that might bring, supposedly lower costs. Curious if your customers bring this up with you at all at this point in time, and then I know you have plans for 8-inch wafers. Maybe you could update us on those while you're at it.

And then Hassane, I also had a clarification on your previous question. Are you shooting for more than 50% internal by the end of the year for silicon carbide or the vast majority?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [20]

We're -- okay. The latter one, we are expecting over 50% by the end of the year, but that's not what the goal is. The goal is above that, and we'll reach that in 2024. So we're going to exit above 50% this year. And we're going to keep going into 2024, and we'll update you on kind of where we see that depending on the market and the dynamic there.

The first part of the question...

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [21]

8-inch...

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [22]

8-inch. So we're still consistent and on track with what I've described in the past. We are running 8-inch currently. We are running it for what we -- what I call building the baseline, baseline yield, baseline, all of that. So we're -- we have been producing 8-inch wafers in order to kind of flush out all of the manufacturing. So when we go to ramp, we are able to ramp as fast and as successfully as we have done in 6-inch.

So our customers don't ask for that. What our customers care for is delivering the cost structure to be competitive, delivering the capacity to be able to ramp and be in there when they need to ramp. We're able to deliver on all of these commitments, both on 6-inch today and 8-inch moving forward. Our customers looked and audited our manufacturing capabilities on site. They feel as comfortable as we are and look -- and you see it with when somebody signs a 10-year LTSA, you know it's got 8-inch in it. And that's the confidence that they have in our business that we're able to deliver.

Operator [23]

Our next question comes from the line of Gary Mobley with Wells Fargo.

Gary Wade Mobley, Wells Fargo Securities, LLC, Research Division - Senior Analyst [24]

Guys, can you hear me?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [25]

Yes.

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [26]

Yes.

Gary Wade Mobley, Wells Fargo Securities, LLC, Research Division - Senior Analyst [27]

We're cutting out here at the end of the introduction, I apologize. I appreciate the fact that you're probably going to increase your silicon carbide revenue for fivefold this year. Then maybe if you can speak to a preliminary view for fiscal year '24 considering supply constraints. It sounds like you're not demand constrained, but maybe focusing primarily on the supply side?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [28]

Yes. We're not going to guide for 2024, but you can basically, when we get to Q4, you can take the exit rate, which is going to be healthy and then project forward. But we're not projecting into 2024, it will be substantially higher.

Gary Wade Mobley, Wells Fargo Securities, LLC, Research Division - Senior Analyst [29]

Okay. And maybe if you can give us an update on any sort of government subsidies, chipset funding, equivalents, elsewhere, specific to the silicon side of the business. And then as well, silicon carbide, I understand there really weren't a chip support for silicon carbide, but I think you had an opportunity to comment on that. Maybe if you can give us an update on where that stands?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [30]

Yes. Look, we're engaged in all parties, not just in the U.S., but of course, in Europe, and we have a big operation in Korea, which has their own or variant of The CHIPS Act. So we're engaged in all 3. We've announced a $2 billion investment for an end-to-end silicon carbide manufacturing, which will be the only 1 in the world really from substrates all the way to wafers on the same site.

And we're considering all 3 of these regions because we have brownfield capabilities in all 3 of these regions. We talked about a decision made between now and the end of the year of where it's going to be. And part of the decision is -- well, the main decision is purely economic and financial. Therefore, the funding from the government plays a big role in swinging it 1 way or another for depending on which site we're in the process and the discussions of all of these, but that 1 is specifically related to silicon carbide to comment on your question.

As far as in general, we have made comments on silicon carbide, specifically in The CHIPS Act, but that's really up to them to what they do with it, and that's part of our decision-making progress. We're going to go where it makes sense to get the best ROIC for our investments, and that's how we create shareholder value. That remains the top of our priority, and we're going to make that decision between now and end of the year of where it goes.

Operator [31]

Our next question comes from the line of Christopher Rolland with Susquehanna.

Christopher Adam Jackson Rolland, Susquehanna Financial Group, LLLP, Research Division - Senior Analyst [32]

Thanks for the question and great quarter. So my question is around your strategy, your thinking around co-investment on SiC. Some of your competitors are looking for $1 billion almost financing through these commitments. I know you did well with like Vitesco and Magna here for smaller amounts. But I'm really wondering about the strategy here. Are they investing in new capacity? Are -- what are they getting out of this? Are they getting a haircut on wafers? Or is it just dedicated capacity? And how are you thinking about this? And the amount you want to take in overall from your customers as well to help finance this?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [33]

Yes. Look, I will start at a very high level. One, what differentiate ON Semi? We can afford our own investments because of the cash flow from operations. So we're not looking at funding as a way to help us grow the business and help us build capacity. You look at our balance sheet, you look at our cash position and you look at the cash from operations, and our CapEx investments, all of them are able to be supported by our operations.

So a very different financial posture when it comes to capacity expansion. Where it comes strategically from a customer is really, it's a win-win. It's the commitment. There is no higher commitment on an LTSA than one where the customer co-invest with us. And that co-investments have multiple scenarios with it, depending on the customer and what problem or what opportunity they look for.

So it's not a haircut. It's -- basically, it's an offset of depreciation. It doesn't change our cost structure for the value that we provide. It just offsets depreciation, whether it's depreciation on our book or their book based on the ownership of the equipment and how we apply that investment. And again, those are strategic in nature, which means everyone is specific to what that specific customer is trying to solve for and we work constructively with all of these customers. But it is not a -- we must get that money for us to ramp.

This is a -- we are able to ramp and those are strategic investments. So it's a very different field we're playing in. And the reason for the delta in dollars that you see is, again, goes back to brownfield versus greenfield. We're investing in brownfield, which Thad at Analyst Day talked about a 40% better CapEx than a greenfield. So that gives you kind of the delta why we're able to ramp so quickly much higher in output for much lower cost.

Christopher Adam Jackson Rolland, Susquehanna Financial Group, LLLP, Research Division - Senior Analyst [34]

Yes. We definitely understand the efficiencies there. I also wanted to talk about solar. I wasn't expecting $2 billion in LTSAs from solar, which is, I believe, part of industrial. Are you expecting industrial SiC now to ramp faster? And then just as a follow-on there, just talking about gross margins for SiC overall. You said they doubled first profitable quarter. Talk about this progression? Is this all moving faster than you would expect? And is it in part because of these industrial as a percentage of SIC as well?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [35]

Yes. So on the revenue ramp for Industrial, specifically on the energy infrastructure, the $1.95 billion is both silicon and silicon carbide. Remember that market is being serviced by a very unique value proposition we have. Simon talked about at the Analyst Day, the hybrid module, where we're able to put the best technology required into a single module to provide those customers. So that $1.95 billion is on both power technologies, IGBT or silicon and silicon carbide.

As far as the ramp, look, they'll be ramping in tandem together. But the automotive number, given the TAM in automotive, we'll just ramp up to a higher number. But as far as percent ramp, they're both going to be a ramp. And if you recall, last year, we talked about how that business ramps 70% growth for the last 2 years. So it's pretty healthy growth. But from a dollar, of course, it's going to trail the automotive purely because of the TAM of the market that we're addressing. But both growth, both CAGR are very healthy and will remain healthy over the next 5 years as we execute those LTSAs.

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [36]

Yes. And on the performance -- the financial performance of the silicon carbide business, look, we're extremely proud of what the team has accomplished there, doubling gross margins quarter-over-quarter. Achieving the first profitable quarter, again, on a fully loaded basis. And operating margins in the high teen percentage is very impressive for the performance there. What I would tell you is we have line of sight to that. It's ahead of schedule because we are ramping well. And on all metrics, we're ahead of plan.

So -- although we have line of sight to profitability, we've achieved it quicker than what we was in our original plan. So I think as we go forward, we'll continue to see that expansion. And as revenue grows, that will continue to contribute to the bottom line.

Operator [37]

Our next question comes from the line of Joshua Buchalter with TD Cowen.

Joshua Louis Buchalter, TD Cowen, Research Division - Vice President [38]

I did want to follow up on the last one. So you mentioned in the prepared remarks, I think it's high-teens operating margin for silicon carbide. Any way to disaggregate the levels, internal substrates versus external and should we expect, as you ramp internal substrates over the coming quarters, should that continue to move higher? Because I would imagine, at least initially, it would be -- it could be a headwind to margins.

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [39]

Yes. Look, we're not breaking up as what it is. You can take it as an aggregate, totally mix adjusted is what the number is. And it's going to keep going up, of course, as that business absorbs the start-up costs because look, there's still start-up costs in that business. So as we scale that business, start-up costs will be more absorption, and that is how we will be continuously improving the gross margin trajectory, which consequently will improve the operating margin.

So that financial milestone that we have achieved is not the destination. It's just a milestone. We have always had line of sight to it, like Thad said. We achieved it earlier than we expected, but the ramp or the, call it, the slope of that improvement will just continue from here, and we'll continue to improve on all financial metrics as that business scales and as that mix changes.

Joshua Louis Buchalter, TD Cowen, Research Division - Vice President [40]

Got it. I'm going to try to ask a question that involves the other 80% of your business now. East Fishkill headwinds for 2 quarters in a row have come in higher than anticipated. Can you walk us through just what's going on there? Why are they higher for longer? And should we expect it to sort of trough in the beginning part of 2024? Is that the right time frame?

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [41]

Yes. I think if you go back to what we disclosed and what we announced last quarter, it's very consistent, right? We got a surprise in the cost structure there. We've now been spending 6 months really getting our arms around it and understanding what we need to get that cost structure back in line. Look, we've got a large manufacturing footprint. We know how to run fabs efficiently. We benchmark. We know exactly what we need to do. As I say, this is like locking and tackling of what we need to do to take the cost structure out, but it takes time. it's hard to take costs out when you're running a fab at full capacity.

So the time horizon is a little bit longer than we expected. It will be for the next several quarters. I think you can think about this as being probably a year, maybe slightly more than a year of headwind for us as we continue to take the cost out. But we expect, by the time we exit 24, we've got that fab at parity and running efficiently.

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [42]

But one thing I would also highlight is, yes, the headwinds are higher than we expected. But to use your words, if you look at all the other operational metrics that we've delivered reflected in the reported gross margin and the guide, we're able to absorb it and then some, given the beat this quarter and the rates for next quarter. So back to Thad's point, we know how to fix this stuff. We've been fixing it for the last 2 years. That's just another thing we're going to work on. We have line of sight, which is going to take time.

But of course, the rest of our business is operating in stellar, including the underutilization that we had to do. So our margin is structurally very different from what it used to be. And that, I can say, I'm very, very comfortable, happy and confident about.

Operator [43]

Our next question comes from the line of Quinn Bolton with Needham.

Nathaniel Quinn Bolton, Needham & Company, LLC - Senior Analyst [44]

Hi, Hassane, and congratulations on the nice results. Thad, I guess I just wanted to see if you could give us a little bit more color on the gross margin. Revenues trending up, sounds like SiC margins are moving higher. So I'm just wondering, are there any particular headwinds in the third quarter for the 40 basis point decline in gross margin at the midpoint?

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [45]

Yes. Look -- so we've got a number of things, right. We just talked about EFK. So clearly, that's a headwind. You've got utilization. Utilization dropped down slightly in Q2 from 71% to 70%. As we look forward, we think about utilization being kind of in that flat to down category. So we may have a little more headwind on that. But the key contributor to that margin stepping down just slightly is the ramp of silicon carbide. So even though the margins have doubled, it's still dilutive to the corporate average. So as revenue increases, you have more of a dilutive impact on Q3. So I would think quarter-over-quarter, really the delta is a little bit more underutilization charge and then this impact of the ramp of silicon carbide.

Nathaniel Quinn Bolton, Needham & Company, LLC - Senior Analyst [46]

Great. And just a quick follow-up. Do you expect quarter-to-quarter the SiC margins to improve, understanding they're still below corporate average?

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [47]

Yes, absolutely.

Operator [48]

Our next question comes from the line of Timothy Arcuri with UBS.

Timothy Michael Arcuri, UBS Investment Bank, Research Division - MD and Head of Semiconductors & Semiconductor Equipment [49]

Do you have any update to the $4.5 billion LTSA from 2023 to 2025 and kind of anything to help us think about what silicon carbide could be next year and into '25?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [50]

Yes. No, we're not giving an update. Our focus right now is obviously this year, we'll be giving an outlook on 2024 as we get for reporting of the fourth quarter, given the run rate and where we are. Of course, we have the number in LTSAs, but we're not talking about it yet. We're not guiding for it. It will be substantially higher than where it is in 2023, given the LTSAs and the ramp. But right now, we're focusing on the execution in the short term.

Timothy Michael Arcuri, UBS Investment Bank, Research Division - MD and Head of Semiconductors & Semiconductor Equipment [51]

Great. And then, Hassane, how do you think about the captive versus external mix? You did say you're going to be more than 50% this year. But when you sort of lay this out longer term, how do you weigh where you want to take that number to longer term, given some of the investments that some others are making, particularly in China. Is there like an upper range of where you want to push that 75%? Or how do you sort of think about balancing that?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [52]

Yes. Look, there are multiple factors of how we balance it. Our focus is to be able to support our customers. When we have LTSAs and we look at supply resilience and supply assurance, we have to be able to manage the two. We're not going to be -- we don't want to be 100% internal. I've said that in the past. You can think about it 80%, give or take, and that's going to be dependent on, of course, supply assurance, especially as you can't ignore the geopolitical aspect of it when you say sourcing out of China, right? That is not a supply assurance path as we stand today with the geopolitical environment. So that, of course, has to play a role.

And more importantly, it's the cost. We have a factory, we have a factory at scale, and we have a factory that is performing very, very well. So for us to want to get supply from the outside, it has to make also economic sense compared to what we are able to do internally. So all of these, we always consider that we always look at what the scenario is going to be. But you can think about it as 80%, give or take, depending all of these factors that I mentioned.

Operator [53]

Our next question comes from the line of Tore Svanberg with Stifel.

Unknown Analyst [54]

Yes. This is Jeremy on for Tore. I guess a couple of follow-ups on the earlier questions on the co-investments. Can you help us understand what the mechanics of this are, the impact potentially to gross margins, maybe cash flows? Just wondering how the $40 million or the $250 million co-investment is going to be played out in the financial statements?

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [55]

Yes. So as we -- this is Thad. So as we receive the cash from customers, obviously, that goes on the balance sheet. The way that it gets accounted for is it gets amortized over the life of the agreement. So if you think about an LTSA that maybe have 5 to 10 years, you can think about that dollar amount getting amortized over the life as those products are shipped, it actually is recorded through revenue. So actually, it's a bump in margin over that time frame. But you can think about the cash coming in, in advance as we make payments going out, hopefully, it's favorable from a cash flow standpoint. That's the intent that we get cash before we make the commitment to the equipment.

And again, just as a reminder, all of the capacity that we're bringing on is to support these LTSAs on those committed revenue. So we're not building capacity on the hope that we can fill it. So in these situations, as Hassane mentioned earlier, these customers are co-investing for assurance of supply with us. But the accounting works that actually hits the revenue line over time.

Unknown Analyst [56]

Great. And just a quick follow-up to that. Is the -- so this is like a revenue prepayment. It's not any kind of ownership of the equipment and are there any limitations on -- maybe if it's specific to the equipment, it's not any limitation on to use that for other customers?

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [57]

Yes, every situation is a little bit different. What I just described there is a prepayment rate, if you think about it, a customer deposit. We do have situations where customers will consign product or selling equipment to us. In that situation, it is a little bit different. It's just a lower depreciation off of our books and that sits on their books. But every situation is a little bit different, depending on the customer situation.

Obviously, we want as much flexibility as we can have as we develop these things. So we try not to tie up capacity for 1 customer and have the ability to move our production on any of the lines on any of the locations. So it's designed to have the ultimate flexibility for us.

Unknown Analyst [58]

Great. And 1 last question, if I could. With the slightly different free cash flow results this quarter and the high teens -- and the capital intensity that seems to be consistent with your targets outlined at the Analyst Day, is there any change to that in the very long term, in the 2027 targets? Are you seeing anything in terms of higher costs and also maybe in terms of the ability to achieve the head count you need to ramp this capacity? It seems like that's been the problem with some of the other fab ramp-ups that we're seeing around the world? Is this something that is [indiscernible] you guys at this point?

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [59]

Yes. No, I don't think we're -- I mean outside the norm, I don't think we're seeing a labor shortage, right? And part of this is leveraging our brownfield investments and brownfield footprint where we have head count. In terms of the capital intensity, no change to the long-term plan. This is more of a short-term. As I said, the free cash flow will go back to positive for the remainder of this year. So it's really just the timing of getting that equipment in as well as the ramping of our strategic inventory to support our fab transitions and our silicon carbide ramp.

But longer term, our capital intensity targets all remain the same. We think we'll be in the mid- to high teens for the foreseeable future, but then stepping down over time, as we've outlined previously.

Operator [60]

Our next question comes from the line of William Stein with Truist Securities.

William Stein, Truist Securities, Inc., Research Division - Managing Director [61]

Congrats on the great results and outlook. Hassane, at the Analyst Day, you discussed your emerging products in digital power control. I think that is likely related to servers that are focused on AI, maybe you can confirm that understanding and also remind us of your targets and traction towards that?

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [62]

Yes. So obviously, part of that focus on what we call, driver and controllers is the server or the cloud infrastructure, which applies definitely to AI. That's the play we have there. But most of it is also targeted towards our primary markets, the Auto and Industrial. With every switch or call it, silicon or silicon carbide switch, we have the opportunity with -- the flywheel effect that Sudhir talked about to increase that content. We're on track there.

From a technology perspective, we have already some of the products for internal, I guess, performance. And we will be making progress in sampling come early next year. So very fast progress. It's like what you saw us do in silicon carbide. We're going to -- we decided. We're doubling down. We're starting to run, and we're going to start delivering on that. That's going to be the winning formula for this new business also. So stay tuned for more updates as we get into Q4 or Q1 of '24.

William Stein, Truist Securities, Inc., Research Division - Managing Director [63]

Great. And then a follow-up, if I can. You've reiterated many of the goals around the ramp of silicon carbide today, but there's 1 I'm not sure. I heard you talk about yet, and that's the margin exiting the year. I think, in the past, you've said it will be neutral to the -- at the enterprise level. Is that ready for an update? Is it possible you could do better than that? Or any reason you're backing off that goal?

Thad Trent, ON Semiconductor Corporation - Executive VP, CFO & Treasurer [64]

Will, this is Thad. No, our expectation remains the same. As I was saying earlier, Q3 is the highest dilution impact of silicon carbide just because of the ramp and again, the margins being below the corporate average. We believe by the time we exit the year, we'll have those margins at the corporate average, as we've stated previously.

Operator [65]

That concludes today's question-and-answer session. I'd like to turn the call back to Hassane El-Khoury for closing remarks.

Hassane S. El-Khoury, ON Semiconductor Corporation - President, CEO & Director [66]

Thank you again for joining our call. We plan to continue to put our winning formula to good use with deliberate execution and operational excellence as we continue to navigate the soft market environment. Through it all, we remain committed to delivering value for our shareholders and confident in our long-term outlook of outgrowing the semiconductor market by 3x through 2027. Thank you.

Operator [67]

This concludes today's conference call. Thank you for participating. You may now disconnect.