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TEXT version of Transcript

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Presentation

Operator [1]

Welcome to the conference call for analysts and investors for Infineon's 2023 Fiscal First Quarter Results. Today's call will be hosted by Alexander Foltin, Executive Vice President, Finance, Treasury and Investor Relations of Infineon Technologies. As a reminder, today's call is being recorded.

This conference call contains forward-looking statements and/or assessments about the business, financial condition, performance and strategy of the Infineon Group. These statements and/or assessments are based on assumptions and management expectations resting upon currently available information and present estimates. They are subject to a multitude of uncertainties and risks, many of which are partially or entirely beyond Infineon's control. Infineon's actual business development, financial condition, performance and strategy may, therefore, differ materially from what is discussed in this conference call. Beyond disclosure requirements stipulated by law, Infineon does not undertake any obligation to update forward-looking statements.

At this time, I'd like to turn the call over to Infineon. Please go ahead.

Alexander Foltin, Infineon Technologies AG - Head of Investor Relations [2]

Thank you, operator. Good morning, and welcome, ladies and gentlemen, to our first earnings call in 2023, sitting in between Fed and ECB interest rate announcements. Starting today, our speaker panel for quarterly calls will narrow to our CEO, Jochen Hanebeck; and CFO, Sven Schneider, who will occasionally be joined as is the case today by Andreas Urschitz, Chief Marketing Officer. Our procedure, however, remains unchanged. Jochen will open the call with remarks on the market situation and divisional performance, followed by Sven commenting on our key financials. Jochen again will provide the outlook and highlight key messages.

The illustrating slide show, which is synchronized with a telephone audio signal is available at infineon.com/slides. After the introduction, we will, as always, be happy to take your questions, kindly asking you to restrict yourself to 1 question and 1 follow-up. A recording of this conference call, including the aforementioned slides and a copy of our earnings press release, as well as our investor presentation are also available on our website at infineon.com.

At this point in time, Jochen, over to you.

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [3]

Thank you, Alexander, and good morning, everyone. As we open the first chapters of a new year's playbook, Infineon is consistently steering the course we charted and communicated a couple of months ago. With a clear focus on long-term growth opportunities derived from decarbonization and digitalization, we foster our leadership in power systems and IoT. In financial terms, this needs to translate into profitability and resilience through the cycle. Our December quarter has clearly lived up to these expectations despite some external factors looking quite familiar.

Macroeconomic burdens and geopolitical uncertainties are causing a volatile and challenging environment, while some signs of less bad and fear developments are appearing. Semiconductor markets are bifurcating. Those driven by structural content like automotive and industrial applications show robust dynamics. Others driven more by cyclically fluctuating demand, like consumer, computing and communications, continue to be weak.

Let's take a closer look at our numbers. Revenues in the first quarter of our 2023 fiscal year came in at EUR 3.951 billion, almost exactly hitting our guidance of EUR 4 billion which had been based on an assumed U.S. dollar exchange rate of $1.0. The actual average rate over the quarter was $1.02 and thus caused a slight headwind.

Our profitability continued to progress favorably, ahead of our original expectations, with a segment result of EUR 1.107 billion, the segment result margin came to 28% after 25.5% in the quarter before. Our margin expansion was mainly driven by price progression, positive mix effects, as well as slight easing of cost pressures from the energy and material side. Meanwhile, our backlog of confirmed and unconfirmed orders has gone down as expected. After EUR 43 billion 3 months ago, it stood at EUR 38 billion at the end of December. We attribute this to currency effects and some normalization in customer ordering patterns, reflecting generally better product availability as shortages are easing. The picture is differentiated by type of product and application, and I will comment further on it in my divisional overview.

Automotive recorded revenues of EUR 1.872 billion, a slight sequential decline, influenced by a less favorable U.S. dollar exchange rate. On an annual basis, revenue was up by a staggering 35%. Here, the U.S. dollar had a positive impact. But even assuming a constant exchange rate, year-over-year growth amounts to 26%, showing unabated strength of demand across our automotive product groups. In line with this, we were once again able to bring up our profitability. The segment result for the December quarter improved to EUR 532 million, equivalent to a segment result margin of 28.4%, up by more than 200 basis points compared to the previous quarter. The increase was mainly driven by price and mix effects.

Overall, supply disruptions, material shortages, as well as macro uncertainties still weigh on automotive production volumes, but to a lesser extent. According to S&P Global, the number of cars produced worldwide in 2022 was 82 million, still below pre-pandemic levels. For 2023, S&P is predicting around 85 million units, which we deem somewhat optimistic as a part of pent-up demand might be affected by a lack of consumer confidence. Having said this, structural content growth remains by far more important driver for our business than unit evolution.

From current interactions with our customers, we learn a couple of things. First, the 2 automotive megatrends, e-mobility and ADAS are intact and irreversible. Second, there is a clear willingness to increase visibility and predictability of buying behavior and to secure semiconductor supply by engaging into schemes like capacity reservation agreements or longer-dated committed orders. Third, there is a strong tendency for OEMs to source strategic parts such as xEV-specific components and MCUs either directly or as so-called directed buys and to strive for higher target stock levels. In this regard, our AURIX MCU remains a critical bottleneck part, or golden screw, as demand continues to outstrip supply despite the fact that this year we are ramping our selling rate to close to 1 million pieces per day.

Infineon's Automotive business is well positioned for continued success, which is fully confirmed by recent design win and innovation activity. Since silicon carbide is so top of mind, let's start there. At our customer Hyundai Motor Corporation, we have been awarded a further triple-digit million euro silicon carbide business for the traction inverter of the future platform for the Kia, Hyundai and Genesis brands.

On the ADAS side, we are driving the transition of radar technology from silicon germanium to CMOS-based solutions. We are happy to report on the initial design win for our future 28-nanometer CMOS imaging radar sensor IC at a leading Tier 1 with a low triple-digit million euro volume. With a superior resolution, it will be used in a level 4 truck platform.

Finally, I would like to share a highlight from the forefront of innovation. We have sampled prototypes of a hydrogen sensor to around 20 potential customers. This sensor is based on our automotive qualified MEMS technology and can measure hydrogen concentration by means of thermal connectivity. Potential use cases are measuring lithium ion battery outgassing to prevent battery failures in xEVs, leaking detection for fuel cell and hydrogen combustion applications, or pressure sensing for hydrogen infrastructure applications like storage, transport, or fueling stations. Early customer feedback on this highly innovative solution supporting decarbonization is very positive.

Decarbonization is bringing us to industrial power control, which has a significant part of its business built around the theme. Revenue of IPC in the December quarter amounted to EUR 500 million, down from the record level of EUR 542 million achieved in the previous quarter. Basically, all applications saw seasonal step-downs with the exception of the electrification of commercial vehicles. Most affected were major home appliances with a notable exception of heat pumps, where we are unable to fill buoyant demand.

Renewable energy and power infrastructure solutions in general are showing a robust momentum. Despite the decline in revenue, IPC could increase its quarterly profitability, mainly through better mix and pricing. The segment result increased to EUR 144 million, corresponding to a segment result margin of 28.8% after 25.1% in the prior quarter.

Looking ahead, market dynamics show a differentiated picture. For home appliances, we expect the current weakness to continue. In the field of general purpose drives, there are some first indications of softening demand. However, this is outweighed by a still high backlog, and even more importantly, we are able to shift the respective manufacturing capacities to solutions for renewable energies and the related infrastructure where the desire for green and independent energy supply remains a very strong structural driver.

Overall, we expect our Industrial business to remain highly resilient, supported by our leading position in silicon carbide for applications such as photovoltaic inverters, energy storage systems, and the charging infrastructure for electric vehicles. In this regard, it's worth noting that we have taken another step to secure our supply of silicon carbide materials. We have signed a multiyear supply and cooperation agreement with Resonac Corporation to deepen the long-term partnership regarding silicon carbide materials.

The initial phase of the agreement focuses on 6-inch materials. At a later stage, Resonac will also support our transition to 8-inch wafer diameters. In turn, we will provide Resonac with intellectual property relating to silicon carbide material technologies. This agreement and further ones we are currently finalizing will underpin the significant expansion of silicon carbide manufacturing capacities that we are undertaking for our automotive and industrial business. As you know, with our new plant in Kulim, Malaysia, which is scheduled to start production in autumn of next year, we will increase such capacities tenfold by 2027 compared to last year.

Now coming to Power & Sensor Systems. In the first quarter of 2023 fiscal year, the segment's revenue declined sequentially by 11% to EUR 1.43 billion. Softness in consumer computing and communications added to normal seasonality. A few bright spots were EV charging, residential solar and USB components, where demand remained strong and the easing of capacity constraints allowed the addressing of some backlog. Despite lower revenues, the segment was able to maintain its high profitability level for the quarter with a segment result of EUR 301 million PSS, kept a segment result margin of 28.9%, identical to the quarter before. Going forward, we expect the majority of target applications addressed by PSS to enter a soft period.

After almost 2 years of strong growth, some of it driven by pandemic era extra spending, macro and cyclical headwinds are clearly intensifying. Depressed consumer confidence is weighing on demand for items like smartphone, tablets, TVs, PCs or battery powered tools.

On the data center side, we are noticing a slowdown in enterprise servers and recently also decelerating hyperscaler CapEx. The delayed rollover from one server architecture to the next by a leading vendor is further restraining customer demand. In these areas, we are anticipating a prolonged period of inventory digestion ahead. Conversely, we continue to see good traction for applications linked to decarbonization like solar installation by residential customers and automotive charging. In total, while the near-term conditions are challenging, long-term underlying trends remain strong, in particular, including vibrant demand for gallium nitride-based solutions.

Let's finalize the divisional overview with Connected Secure Systems. On the back of easing supply limitations, CSS brought up revenue to a record level of EUR 531 million, 8% more than on quarter earlier. In particular, security solutions for payment and government identifications increased strongly, supported by higher foundry supply. Bluetooth parts, which had been a blip in the previous quarter, were again in high demand.

Segment result improved to EUR 125 million, equivalent to a segment result margin of 23.5%, sharply up from 17.5% in the quarter before. Higher volumes and supportive pricing were the main underlying drivers. Overall, mid- and long-term growth opportunities for IoT applications are undiminished. However, they are not immune to current macro uncertainties. Momentum for consumer and industrial IoT solutions is slowing, absorbed to some extent by existing strong backlog. On the other hand, the business with security ICs, in which Infineon has a global #1 position, continues to show high resilience, driven by unabated trends like contactless payments and continued recovery in demand for ePassports.

Design wins and product launches keep their high pace. We achieved a key design win at a major Asian automotive OEM for its next-generation connected cockpit platform with our WiFi-Bluetooth combo offering. On the microcontroller side, we launched the XMC 7000 family for advanced industrial applications like industrial drives, EV charging or robotics. And we announced a new PSoC family for the next-generation human machine interface applications, supporting our CAPSENSE touch sensors. Finally, we are the first ones to have introduced a security IC targeting high-volume payment applications based on the future proof 28-nanometer technology node.

Now over to Sven, who will comment on our key financial figures.

Sven Schneider, Infineon Technologies AG - CFO & Member of Management Board [4]

Thank you, Jochen, and good morning, everyone. We had a strong start into our 2023 fiscal year in financial terms.

Revenue and segment results have been covered. Let's look closer at the gross margin. In the December quarter, gross profit amounted to EUR 1.866 billion, equal to a gross margin of 47.2%, up by 280 basis points from the previous quarter. The adjusted gross margin, which excludes nonsegment result effects, amounted to 49.2%. Key reasons for this very dynamic margin progression, the pricing and mix effects in the top line as well as some positive contributions to our cost of goods sold from the development of energy and materials cost.

Now to our OpEx numbers, which we are managing carefully to find the right balance between safeguarding our current profitability and enabling future growth. Research and development expenses were EUR 484 million, essentially flat quarter-over-quarter. Selling, general and administrative expenses went down from EUR 452 million to EUR 410 million in the December quarter. The net other operating income was minus EUR 6 million.

The nonsegment results totaled minus EUR 141 million. Of this amount, EUR 76 million corresponded to cost of goods sold, EUR 10 million to R&D expenses, and EUR 53 million to SG&A expenses. Other operating expenses amounted to EUR 2 million. The financial result for the quarter under report was minus EUR 24 million after minus EUR 33 million before.

Income tax expense amounted to EUR 216 million for the first quarter of the current fiscal year, equivalent to an effective tax rate of 23% and in line with our expectation of a range between 20% and 25% going forward. Cash taxes in the December quarter were EUR 93 million, resulting in a cash tax rate of 10%. For the entire 2023 fiscal year, we expect a cash tax rate of between 15% and 20% as current prepayments will be trued up throughout the year. The difference between the 2 tax rates effective in cash stems from historic tax less loss carryforwards. We expect to benefit from those for at least another 2 years.

Our investments into property, plant and equipment, other intangible assets and capitalized development costs amounted to EUR 605 million in the December quarter, down from EUR 866 million in the last quarter of our previous fiscal year, following a typical seasonal pattern. Depreciation and amortization, including acquisition-related nonsegment result effects were EUR 429 million in our fiscal first quarter after EUR 443 million in the preceding quarter.

The quarterly evolution of our free cash flow from continuing operations is worth commenting as the figure, not unexpectedly, went down steeply from EUR 709 million to EUR 25 million. There were 3 main effects at work here. First, the month of December is when the bulk of annual cash bonuses are being paid out. Second, we recorded an increase in inventories, the reach of which went up sequentially from 120 to 140 days at the end of December. Herein reflected are the differences in business dynamics across the various end markets and applications that Jochen has touched on in the beginning and which he will pick up again in his outlook section. Thirdly, there was an intertemporal reduction of accounts payable quarter-over-quarter.

Now to our liquidity and leverage figures. Our gross cash at the end of December amounted to EUR 3.7 billion. Our gross debt stood at EUR 5.5 billion, a bit down due to the slightly weaker U.S. dollar and corresponding to a gross leverage of 1.1x. Net debt correspondingly decreased below the EUR 2 billion mark to EUR 1.8 billion, equivalent to a net leverage of 0.4x.

To close the financial part, let's look at our after-tax return on capital employed. This metric, of course, reflects the strength of our financial numbers and came in at 16.8% for Q1, a level that is clearly indicative of value creation.

Now back to Jochen, who will comment on our outlook.

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [5]

Thank you, Sven. Before going into our specific projections, let me provide some context. At the beginning of 2023, macro, geopolitical and sector-specific headwinds continue to cause heightened volatility. Some indicators like PMI readings, point to upside projected economic development, but it's still early stages. Semiconductor end markets keep following different pathways, both from a demand as well as from a supply side. On the one hand, market conditions for automotive applications, especially e-mobility and ADAS, as well as industrial ones, in particular, renewables, remain supportive. The underlying trends are strong.

On the other hand, there is weakness in consumer-related applications. Also, corporate spending on IT infrastructure like data centers and communication networks is slowing down.

From a supply perspective, the general situation is improving, with shortages becoming less pervasive and lead times contracting. However, there are still product categories that are scarce, while in others, a certain supply overhang is becoming visible. Hence, also the inventory situation is differentiated one. Overall, channel inventories have only edged up slightly over the course of the December quarter to stand a bit above 9 weeks. However, this average hides the dispersion between items like standard MOSFETs, where stocks at distributors and downstream customers have been replenished, and others that are highly sought after such as MCUs, in particular for automotive, IGBTs for renewables, wide-band gap and analog mixed signal parts.

We see a similar development for inventories on our own balance sheet and have started reducing subloading levels for those products for which a digestion period lies ahead. In parallel, we are still on allocation for some categories and will shift available production corridors to the extent technically and economically feasible. Pricing in this context has remained resilient overall, as customers value supply certainties throughout different cyclical phases. As stated in our last call already, the supply situation for power devices might well remain tighter for longer as e-mobility and renewables are competing for the same type of capacities.

Let's translate this into numbers. For our Q2 and full year outlook, we have changed our assumption for the U.S. dollar exchange rate from previously parity to now 1.05, thus incorporating some headwinds. For the running March quarter, we expect revenues of around EUR 3.9 billion, basically flat compared to the previous quarter considering the adverse U.S. dollar assumption. However, the revenue composition by division is likely to look different.

For ATV and IPC, we expect a sequential revenue increase of a mid-single-digit percentage. CSS should keep stable revenues. As PSS is confronted with market weakness across the majority of its target applications, it should see a further significant revenue decline. This will also affect our group segment result margin for the second fiscal quarter, which we anticipate to come in at a level of around 25%. Sequential step down considers our expectation of a certain level of underutilization costs incurred on purpose to keep inventory levels for slower moving parts in check. Furthermore, we expect further wages increases to kick in.

For the full 2023 fiscal year, we continue to expect revenues of around EUR 15.5 billion, plus or minus EUR 500 million. While this headline number is the same as before, implicitly, we are adding close to EUR 400 million from volume, structure, and pricing. This is due to our less advantageous currency assumptions of $1.05 instead of $1.0 for the U.S. dollar-euro exchange rate for the 3 remaining quarters and using our updated rule of thumb, which estimates a quarterly revenue impact of EUR 25 million for each cent movement.

We expect to be able to absorb the negative currency impact as Infineon's key applications mostly still show robust dynamics. For example, Automotive is fully booked for the 2023 fiscal year. Having said this, the consumer-related weakness should persist against an uncertain macro backdrop. Also, we envisage some inventory digestion to occur throughout the year, for example, in the area of data centers. At the same time, our high existing backlog in other areas should help cushion some of the impact. Taking all of this together, we remain cautious for the second half of our fiscal year and have baked in a certain slowdown. By segment, we expect ATV and IPC to grow above and CSS at the expected corporate average rate of 9% year-over-year. For PSS, we now expect annual revenue to fall short of last year's level.

Now to our margin expectations for the 2023 fiscal year. With a strong first quarter already in the back, adjusted gross margin is expected to land at around 45%, and for the segment result margin, we now anticipate a level of around 25% after around 24% before. While the weaker U.S. dollar is causing a certain burden, we expect this to be more than offset by positive contributions from higher volume, pricing and less high than feared cost increases for materials and energy.

For investments in property, plant and equipment, other intangible assets and capitalized development costs, we project an unchanged level of around EUR 3 billion, including Kulim 3 and the planned new fab in Dresden, as we are convinced of the value of forward-looking investing, preparing ourselves for secular growth.

For depreciation and amortization, we expect a value of around EUR 1.9 billion, including amortization of around EUR 450 million, resulting from purchase price allocations that will end up in our nonsegment result. For free cash flow, we continue to expect a level of around EUR 0.8 billion, including some EUR 700 million planned for the aforementioned major front-end buildings. Excluding those, our projected adjusted free cash flow would come in at around EUR 1.5 billion, representing around 10% of sales.

Before summarizing and opening up for Q&A, I would like to highlight an initiative, the importance of which is much broader than economical. Infineon is supporting NGO rain forest connection with ultra-modern sensor technology to protect one of the most vulnerable regions of our planet. At the heart of the rain forest connections were our guardian devices, powered by solar electricity, transmitting live sound recording from rain forest. Artificial intelligence is used to analyze the data, detecting sounds of threats. To ensure that the devices can not only hear, but also smell, our highly innovative CO2 sensor will be added to a number of them. The goal is to considerably expand the database for recording biodiversity.

In the future, sound recordings can be linked with other information, including temperature, humidity, ozone and now CO2. Our technology can therefore be an important contribution to the protection of climate and biodiversity.

Now ladies and gentlemen, it is time to summarize. We had a strong start in our 2023 fiscal year in terms of profitability, even a very strong one. With EUR 3.95 billion of revenue, we printed a segment result margin of 28%. Bifurcation of semiconductor markets is continuing. Dynamics in key application areas like automotive renewables and also security remain robust. At the same time, consumer-facing markets are seeing demand weakness. Also corporate spending on IT infrastructure is sluggish. A similar divergence can be observed with respect to supply and inventory. Depending on the product category, overhang and scarcity are occurring in parallel.

Vibrant design win activity is showing high customer interest in our value-added system solutions with silicon carbide and gallium nitride continuing to see very good traction. Navigating a challenging environment, we remain vigilant and on our toes to react quickly when needed. We are upgrading our annual outlook in terms of revenues and profitability by absorbing adverse currency impacts while keeping our caution regarding the outer quarters for now. The secular fundamentals for our business remains in place. Semiconductors are indispensable building blocks of decarbonization and deal digitalization.

Alexander Foltin, Infineon Technologies AG - Head of Investor Relations [6]

Ladies and gentlemen, this is the end of our introductory remarks, and we are close to opening our call for your questions. The queue today is quite impressive. Great to see such a high level of interest. [Operator Instructions] Operator, please start the Q&A session now.

Question And Answer

Operator [1]

[Operator Instructions] And my first question comes from Alexander Duval from Goldman Sachs.

Alexander Duval, Goldman Sachs Group, Inc., Research Division - Equity Analyst [2]

Congratulations on the robust start of the fiscal year. Your fiscal year '23 adjusted gross margin target of 45% implies a bit of a step down from the very robust 49%. I wondered if you could just decompose a bit the drivers that one would expect some further pricing benefits to come through, but then also factoring in some level of supply chain constraints easing. So could you help us think about the kind of trajectory we should think about through the rest of the year? And are you expecting any change in pricing environment as you go through fiscal year '23?

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [3]

Yes. This question goes to Sven.

Sven Schneider, Infineon Technologies AG - CFO & Member of Management Board [4]

Yes. Happy to take it. Hi, Alexander. So this is a very good starting question. Let me explain why we have given that guidance. So the 49% to 45%, and also on the segment result, you see the same trend, 28% was the actual number. Now we are guiding for 25%, has for major reasons behind it. The first one is that you see already we are guiding at the dollar exchange rate of $1.05. Nobody knows, at least I don't know where the dollar will be. Today, it's at $1.10. So there are already the first currency headwinds which we have to at least anticipate. And if this would stay for a couple of quarters, you know our rule of thumb, that would be a headwind. Number one.

Number two is, as we alluded in the intro, there is pronounced weakness in the consumer market, consumer communications and compute, which affects our PSS division. PSS division has a significant contribution to revenue and profitability, and we expect the division over the next quarters to come down on both, on the revenue and on the profitability level, which, of course, is negative for gross margin.

Thirdly, in order to have the right balance, and again, we alluded to that in the intro already, on the inventory side, where we have products still from hand-to-mouth, end products which have now replenished the levels, we have to steer the inventory carefully, which means we will reduce on the ones where we do not have hand-in-mouth, we will reduce the loading of the fabs, which means we will incur some additional underutilization costs.

And lastly, as mentioned, we expect some further wage increases to kick in. So this is all factored in, and that explains, from our perspective, why we feel, as of today, in line with what we did last quarter, that this would be a conservative and better approach.

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [5]

And then I may add on the pricing environment 2 sentences. So of course, in the PSS environment, there are pockets where we need to balance between market share and profitability, but the team has done that many times in the past. So I'm very confident that they handle it very professionally.

On the Automotive side, on the other hand, we have concluded VPA starting 1st of January, which were still under the headline of supply security, meaning a favorable pricing.

Operator [6]

And our next question comes from Francois Bouvignies from UBS.

Francois-Xavier Bouvignies, UBS Investment Bank, Research Division - Technology Analyst [7]

So my question is a bit follow-up to Alex, not on the gross margin, but more on the top line. So you mentioned some weakness in the consumer PC. But when we look at your fiscal Q1 and fiscal Q2 guidance, with the growth of 20% year-over-year and Automotive growing at almost 30% more in the first half. To reach your guidance, I mean, you would need to have revenues down year-over-year. So it would be a significant step down from H1, and especially when we see the Automotive growing so strongly, it's kind of difficult to imagine it would go down so quickly and significantly.

So I was wondering, is it something that you see already? Or is it just some conservatism you want to keep for the second half of the year? Because I mean, I guess we would need to imply an inventory correction or even pricing deterioration in the second half to get this kind of decline. Just wanted to clarify on that.

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [8]

Yes. Thanks for the question. Indeed, we are a bit cautious about the second half of the year. The weakness on consumer, you mentioned on Automotive, I still have escalations in terms of allocations on my table. But in this very dynamic environment of inflation, interest rates and consumer confidence, we think that this is a good guidance. But of course, can be upside, can be downside as always.

Sven Schneider, Infineon Technologies AG - CFO & Member of Management Board [9]

And if I just may add, Jochen, very quickly, because I think it's very relevant in this situation. Our guidance last time was at $1.00. Now we are guiding at $1.05. This translates into a headwind for 3 coming quarters, I'm not talking now about the first -- of EUR 400 million, if we just go from $1.00 to $1.05. If we would go from $1.05 to $1.10, it would be another headwind of EUR 400 million. So please factor that in if you interpret our top line numbers.

Operator [10]

Our next question comes from Johannes Schaller from Deutsche Bank.

Johannes Schaller, Deutsche Bank AG, Research Division - Research Analyst [11]

I think I'm kind of coming to the same topic, but maybe from a slightly different perspective. Jochen, you mentioned the bifurcation in the supply-demand situation. There's still allocation on the one side and then things getting weaker on the other side. Can you maybe talk about this a little bit more from a production perspective? You said, look, we are adjusting production where we can. Maybe give us a few scenarios here, where can you actually adjust production and move things, where is it more difficult, and maybe what does that mean for the utilization over the course of the year also maybe considering things get worse in the second half from a macro perspective?

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [12]

Yes. Thanks, Johannes, for the question. So of course, the foundry supply, we order what we need, of course, keeping our inventories in mind also from a strategic point of view. In terms of in-house manufacturing, we anticipated some of this shift, some of this bifurcation already in summer and slowed down, for example, the 8-inch silicon capacity growth and relocated this CapEx rather to those areas, for example, IGBTs, wide-band gap for automotive and renewables, and that plays out now very nicely.

But of course, converting those capacities has its limitations, and it's, of course, limited now in the sense that we cannot absorb some of the weakness we see, for example, in MOSFETs for PSS end markets to the full extent. And therefore, we will incur idle costs mainly in this fiscal quarter in order to get inventories for PSS into the target range. So I think we are doing on a good track, but of course, the consumer-related end markets are definitely weak. We will continue to invest. The headline CapEx number will remain at EUR 3 billion in order to fuel our growth in the aforementioned strong markets as well as into buildings, providing growth opportunities in the future.

Johannes Schaller, Deutsche Bank AG, Research Division - Research Analyst [13]

Maybe a quick follow-up, if I can. The MOSFETs weakness in PSS, I mean that sort of and consumer-related stuff, it sounded like that will continue for a while. Is there anything more you can do from a production perspective to convert that capacity to something else? Or do you kind of have to wait it out in effect?

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [14]

Yes, you can convert it to automotive MOSFETs and to a limited extent to other power devices.

Operator [15]

Our next question comes from Didier Scemama from Bank of America.

Didier Scemama, BofA Securities, Research Division - Director in EMEA Equity Research & Head of European IT Hardware [16]

Congratulations on the gross margins. Really great recovery from where you were a couple of quarters ago. Two quick questions, if I may. So number one, can you talk about the backlog, deconstruct the direction of backlog for ATV, IPC, PSS? It looks like the dynamics are quite different. And then related to that, do you have a feel for where the backlog might trough? Is it in Q1 or Q2 calendar? Or is it further out? If you have a number to share, that would be lovely.

Sven Schneider, Infineon Technologies AG - CFO & Member of Management Board [17]

Yes, Didier, maybe I'll take your question. Sven speaking. So on the backlog, it has decreased, as we have communicated, from 43% to 38%. We have said it multiple times that we could sleep very well with a bit much lower levels given that this is not a normal pattern, if you have a backlog of EUR 40 billion compared to EUR 15.5 billion of revenues. So the gap or the delta between the EUR 2 billion to EUR 5 billion, I would say, about half of the decline is currency. So that's something we just should take out. The other half is a reduction of orders. Here we have some cancellations of long-term orders, but we see a healthy take in of new orders.

Three quarters of the backlog consists of orders up to 12 months, and the big majority is still in automotive. And going up, of course, if you just forecast some weakness on the consumer side. I cannot give you now an indication when it will trough, but I would not be surprised if the backlog goes down further in the coming quarters.

Didier Scemama, BofA Securities, Research Division - Director in EMEA Equity Research & Head of European IT Hardware [18]

Okay. Brilliant. And maybe a quick follow-up. Then to your point earlier, you very kindly broke down the various components of gross margin guide for the full year. But you also said in your prepared remarks that material and energy costs were down. There was a surprise that they were lower than expected for Q1. So do you expect that to continue in the second half? Or do you expect energy and material costs to actually increase?

Sven Schneider, Infineon Technologies AG - CFO & Member of Management Board [19]

Yes. Good question, Didier. Thank you. I mean what we have all seen is this significant increase of energy cost after the Ukraine war, it's material, but it's a lot around electricity. And we have seen that the electricity prices, especially for our front-end fabs in Europe, came down again over the last weeks and quarters. That was basically the main component for our comment. I have not now forecasted any further deterioration or increase, we just took it at current levels and forecasted that for the rest of the year.

Operator [20]

Our next question comes from Jerome Ramel from Exane BNP Paribas.

Jerome Ramel, BNP Paribas Exane, Research Division - Analyst of IT hardware and Semiconductor [21]

Yes. Just a quick question. You mentioned shortages for MPUs in Automotive. Could you help us understand which nodes are particularly shorter capacity?

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [22]

Yes. Thanks for the question. We have our AURIX family ranging from 90 to 28 nanometers, 90 is trailing edge currently; high volume is 65 and 40, and ramp is 28. We still see or would like to take more wafers in 65 and 40 nanometers for automotive microcontrollers.

Jerome Ramel, BNP Paribas Exane, Research Division - Analyst of IT hardware and Semiconductor [23]

And maybe just a follow-up on microcontrollers. And from a competitive standpoint, we hear your competitor talking about big design wins at the 5-nanometer node for domain architecture and ADAS. what is your strategy for beyond L3 and system-on-chip integration for the microcontrollers?

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [24]

Yes. Thanks for the question. So we are focusing on microcontrollers with embedded control. We are not into the regime of microprocessors, which is a very different sort of product. We have a very strong position on the microcontroller side, and we see continuous demand. And of course, our high-end devices of microcontrollers will continue to challenge the position of low-end MPUs, and we believe this is a very attractive market. And the AURIX family is perfectly suitable also for domain architecture, software-defined cars, zone controls and all of that. So the number of MPUs in a car will be very limited in our view.

Operator [25]

Our next question comes from Andrew Gardiner from Citi.

Andrew Michael Gardiner, Citigroup Inc., Research Division - Research Analyst [26]

I had a follow-up, Sven, for you on the point you were making on the gross margin factors as we look through the rest of the year. The first thing you mentioned in those 4 factors was the foreign exchange move. As you say, you set your budget now, you set the guidance based on $1.05. You then said, okay, there could be some further headwind if it stays at $1.10, which I think obviously we cannot work out mathematically.

But by listing that as your first factor for having the weaker guidance into the back half of the year for gross margin, are you suggesting that you left yourself some wiggle room there? If it does stay at $1.10, some of that perhaps could be absorbed relative to the budget? I'm just trying to understand the dynamics that you're trying to highlight.

Sven Schneider, Infineon Technologies AG - CFO & Member of Management Board [27]

Andrew, thanks for the question. I mean if you look at our Q1, you can now, of course, argue we have guided at $1.00, and I think the average rate was $1.02, and we have kept the guidance at least at the levels or even increased. So I would say your reading is quite accurate. We have this currency headwinds, but we would not immediately walk away from our guidance if the dollar moves from $1.05 to, whatever, $1.07, $1.08. But nobody knows. Let's wait until the Central Banks have made their decisions, but also let's be clear. The reason that I mentioned currency as number one does not mean that this has the biggest impact.

I would say the biggest impact on the margin compression is from PSS and idle and not from currency. But just to be here clear, we wanted to highlight that to you given that we would expect questions, why are you guiding at $1.05 if the dollar is already at $1.10. That was the main reason behind it. I hope that's clear.

Operator [28]

Our next question comes from Adithya Metuku from Credit Suisse.

Adithya Satyanarayana Metuku, Crédit Suisse AG, Research Division - Research Analyst [29]

Congrats on the great results. So firstly, I just wanted to understand what is driving the IPC upgrade. You were previously talking about IPC growing in line with the group average and now you're talking about faster growth. And is it at least partly driven by better silicon carbide availability for IPC? Or is there something else that's driving it? Any color here would be very helpful.

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [30]

Yes. Silicon carbide, of course, volume and output from the fabs is growing as planned, but we are also making still very solid and sizable growing business with silicon across the board. And the picture here is that we cannot produce enough for renewables these days. And so even if there is -- or we detect a slight weakness in industrial drives in China, we are ready to switch the capacities, which is, in this case, doable towards more renewables, and you know our market position in renewables, in wind and solar. And there's ample growth, and we are also taking extra measures in production to bring up the output as much as possible here.

Adithya Satyanarayana Metuku, Crédit Suisse AG, Research Division - Research Analyst [31]

Got it. So it's mainly renewables that's driving the upgrade. Would that be fair to say?

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [32]

Renewables, but also power infrastructure for renewables. So not only solar, wind, but power infrastructure, too, big growth.

Operator [33]

Our next question comes from Sandeep Deshpande from JPMorgan. And it seems that Sandeep has stepped away. We will now move to our next question from Lee Simpson from JPMorgan (sic) [Morgan Stanley].

Lee John Simpson, Morgan Stanley, Research Division - Equity Analyst [34]

Morgan Stanley. Just going back to some of the commentary around allocation and the supply certainty that customers are looking for. Could you maybe just characterize that a little bit for us? Because the remarks there about supply being tighter for longer suggests perhaps a quarter, maybe 2 quarters of extra build in the channel. Is that how we should look at that? And you mentioned also that idle costs were a big part of that gross margin impact in the guide. I wonder if you could maybe call out what you think the underutilization charges could be in the back half of the year?

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [35]

Yes. The underutilization charge, I'll leave it for Sven. The first part, I'm not sure whether I really understood. Tighter for longer, I think, refers to my statement that Automotive and then meaning e-mobility and renewables are in competition for the same capacity. So there, this tighter situation can extend far beyond 2 quarters, if that was your question, but please let me know whether I answered correctly.

And the other hotspot in allocation for Automotive is microcontrollers. And here, I refer to my previous statement, we would still take more 65 and 40 nanometer wafers in order to also replenish the supply chain downstream. Sven, do you want to comment on idle costs?

Sven Schneider, Infineon Technologies AG - CFO & Member of Management Board [36]

Happy to do so. So Lee, the idle costs, which we have now taken into our forecast could be up to EUR 500 million this year. Last quarter, we were indicating a 450 number. So you see it's trending up. But more importantly, if you compare that to last fiscal year, we have been at the so-called level of structural idle, which was EUR 150 million. So you see that is a significant contribution negative to the profitability, which we are compensating successfully with other measures. So up to EUR 500 million is the answer. And in Q1, we have incurred a high double-digit number. So the rest is Q2 to Q4.

Operator [37]

And our next question comes from Matt Ramsay from Cowen.

Matthew D. Ramsay, Cowen and Company, LLC, Research Division - MD & Senior Research Analyst [38]

Two topics from my side. I guess the first one on the revenue picture for the company. I think the -- at least my conversations with investors are a little bit different than the tone that you guys have taken, which is that the first half of the year, particularly the March quarter, will be weak for a lot of end markets, and then there's some potential drivers. I mean nobody knows on timing, but for things to improve in PC, smartphones, China consumption, a lot of things through the year.

And I'm just trying to understand if your outlook on the market is quite different than that? So if Automotive remains strong, it sounds like you're baking in some caution for the rest of the year when maybe investors are baking in some recovery and optimism. And the second topic, just quickly, Sven, just to -- you guys guided not just segment margin, but gross margin for the year, and that implies some volatility in OpEx as well. So if you could kind of talk through the drivers of operating expenses for the next few quarters, that would be great.

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [39]

So the second part of the question, Sven will take. And the first part, I give it to Andreas because, of course, there are opportunities for the PSS end markets to recover. But Andreas, maybe you can shed some light, let's say, on upside opportunities, which we have not baked into our guidance yet.

Andreas Urschitz, Infineon Technologies AG - Chief Marketing Officer & Member of Management Board [40]

As it was said before, definitely, we see a strong momentum to continue in renewable, e-mobility, EV charging, then also energy infrastructure, if you will. Nothing to add on this, point one. Point two, with regards to more specifics on the upside side of things, yes, so we see, on the consumer and computer side, still weak demand to happen while we are speaking. Nevertheless, when you listen, so to say, to channel partners, for instance, it seems that the inventory levels of consumer devices here and there are already starting to normalize. So having said that, there might be, in the one or the other subsegment, a bit of an upside coming in the second half. But for reasons, as I noted, by Jochen and also Sven, we prefer to be cautious in this area of consumer compute, telecom infrastructure.

Sven Schneider, Infineon Technologies AG - CFO & Member of Management Board [41]

Okay. And then, Matt, I take your question on the OpEx development. So if you look at Q1, and I'm now referring to the gross margin, so also the clean R&D and the clean SG&A, excluding the nonsegment result effects, which we have shown you in the presentations, we are around 21%, 22% OpEx level. I would expect that to stay in that ballpark, broadly speaking.

Of course, for us, it's always very important that we balance that in the right way. As I said in the intro, I would say there is probably a little bit more leeway to keep OpEx -- sorry, R&D on a good level in order to have the right innovation and products available and to be a bit tighter on the G&A and sales and marketing expenses. But broadly speaking, 21%, 22% for the rest of the year from my perspective would not be too wrong.

Operator [42]

We will now take our next question from Aleksander Peterc from Societe Generale.

Aleksander Peterc, Societe Generale Cross Asset Research - Equity Analyst [43]

Congratulations for very strong results, particularly on the margin trend for the quarter again. Now I'd just like to understand the EUR 500 million in underutilization charges. Is that entirely going to weigh on the PSS division because you singled that out as being the main driver of the sequential weakening of your margins for the remainder of the year. And a very quick follow-up, if you could reiterate your silicon carbide revenue, is it still EUR 450 million? How is it split between Auto and Industrial?

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [44]

Sven, you'll take the two?

Sven Schneider, Infineon Technologies AG - CFO & Member of Management Board [45]

Yes, happy to do so. So Alex, on the EUR 500 million. So normally, a rule of thumb is that more than half of idle costs, given our manufacturing footprint, go to Automotive. So in the current situation, where Automotive is so strong and PSS sees some weaker quarters ahead, I would say there is more coming into the PSS than usually. So you are right. So more idle allocated to PSS and less than to Automotive compared to historic patterns.

On the silicon carbide revenue numbers, we have given last time EUR 450 million. I would say there may be some upside to that. It's a bit early in the year, but EUR 450 million to EUR 500 million, that's the update I would give you. The majority of the revenue is still from our industrial division, but you are aware that automotive has a higher CAGR. So that will, of course, change over time, and all my numbers were related to our fiscal '23.

Operator [46]

And our next question comes from Janardan Menon from Jefferies. [Operator Instructions]

Janardan Nedyam Menon, Jefferies LLC, Research Division - Equity Analyst [47]

Just want to dive a little bit into your Automotive business. Obviously, the numbers you're reporting are very strong. Are you seeing any differences between the different parts of Automotive? Or is it all quite uniformly strong? I'm saying different products like MOSFETs, microcontrollers, sensors, IGBTs, et cetera, as well as between ICE and EVs.

And just a small follow-up. On the microcontroller side, are you saying that you're already getting as many wafers from TSMC, GlobalFoundries, and you're now building up that inventory? Or is it that you expect the ease of availability to improve, and following that, you're saying you will continue to build up? I'm just referring to TSMC's comment during their conference call, and I think they supply you the 65 nanometer, that they would expect the microcontroller shortage to finish reasonably quickly.

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [48]

Yes. Thanks for your question. So I said that we would like to take more wafers on. In order to prepare for a further ramp. AURIX is in full ramp mode. Now focus will shift slowly from 65 to 40 nanometers. We have gotten more wafers, and therefore, the, let's say, burning allocation will get better in the second half. But again, AURIX is ramping, and therefore, we are securing capacities.

I think the 65-nanometer node is still not really opening up to the extent we would like it to be. But I do expect customer escalations to ease for the Automotive microcontroller in the second half of '23, but we need more capacity to fuel the design wins we have achieved in the past.

In general, across the Automotive business, of course, there is some hotspots in terms of strong demand being e-mobility ADAS, also some analog mixed signal parts. Other parts are normalizing. And yes, that's the way I would describe it.

Operator [49]

Our next question comes from Rolf Bulk from New Street Research.

Rolf Bulk, New Street Research LLP - Research Analyst [50]

I want to ask a question about your silicon carbide business. You highlighted around EUR 3 billion of design wins in recent months, and it seems that your peers are also having a very strong design traction. One just announced a new silicon carbide factory yesterday. In that context, I wanted to ask how you think about your existing IGBT footprint? How do you think about growth in that business? And do you see a scenario in which you could refurbish one of your existing 200 millimeter silicon fab with silicon carbide fab, if the need arises in the coming years?

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [51]

Yes. So first of all, I will not comment on individual competitor moves. But let me tell you, in general, our manufacturing strategy. So we think that for 300 millimeter, Europe is a good location. 8-inch, as you know, or 200 millimeter, we are building up in Kulim. Here, we have, of course, a lot of legacy business, but also growing sensors products in that line. So there might be limited opportunity to convert Kulim 200 to silicon carbide. But there might be some -- the majority will be by further expanding Kulim, where you know we announced the first phase of Kulim 3 last year, and there is more room around that factory to go further if required.

Now IGBT. IGBT, as we showed on the Capital Markets Day or at the annual press conference, we still see a huge market in IGBT. We are also seeing competitors no longer investing in these technologies. We see major applications, for example, industrial drives, but also big parts of wind staying on the IGBT side. And in addition, we, of course, have new growth technologies for our 300 millimeter factories. As you know, we are planning to build Dresden 4 for analog mixed signal technologies. And therefore, the 300 millimeter factories will continue to grow and contribute to our gross margin development.

Operator [52]

We have time for one last question today. Tammy Qiu from Berenberg.

Tammy Qiu, Joh. Berenberg, Gossler & Co. KG, Research Division - Analyst [53]

So I have a question about China. So your position looks to be very strong in China. And over the past few years, China has been really aggressive. And recently, we know that they've been doing more in auto industrial space, try to be self-sufficient. What's your take on there? And also, do you think your market share may be impacted because of their pushing into sort of domestic-made products, please?

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [54]

Yes. Thanks for the question. I mean the strategy in China is very clear. Wherever possible, China will try to achieve a higher degree of self-sufficiency. It will never work completely as for any other region in this world, self-sufficiency in terms of semiconductors will not be achievable. But that's basically a continuation of the past.

We always said that, let's say, standard power devices will be something where we will see a commoditization driven by Chinese players. And at some point, when it doesn't make sense, we will back off. But our answer for many years on that one is P2S, product to system thinking, in the sense that we are not only relying on technology leadership, meaning the best MOSFET, the best silicon carbide device, but going into system thinking, combining the power switch with the analog mixed signal devices, with a microcontroller, with software. And there, we think we have quite a lead on competitors, including those in China.

Tammy Qiu, Joh. Berenberg, Gossler & Co. KG, Research Division - Analyst [55]

Okay. And just a quick follow-up, please. Regarding your pricing, would you say your pricing today is a result of the market, or it is actually you changing your pricing method has been really successful?

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [56]

Yes. Andreas, this is a perfect question for you, please.

Andreas Urschitz, Infineon Technologies AG - Chief Marketing Officer & Member of Management Board [57]

Yes. It's a mixture in between a couple of elements. First and foremost, I tend to say that the value that we are creating through very application-specific products that come out of a better system understanding, we often spoke about P2S. Our ability to translate that value that we create for customers into pricing definitely has grown quite substantially. So if you will, price up is a function of value-based pricing where Infineon simply moved ahead along the curve. Other than this, we have structural effects out of our markets where, in particular, demand for power semiconductors, microcontrollers, connectivity devices as a function of decarbonization, digitalization is increasing. That in combination with availability of capacity definitely also was part of the positive impact on pricing overall. But simplifying things, so I believe customers are better and better seeing the value that we do create out of Infineon and are willing to share a fair share of, so to say, margin pockets towards the benefit of Infineon as a company back into our P&L.

Jochen Hanebeck, Infineon Technologies AG - CEO, Labor Director & Member of Management Board [58]

And maybe let me add one thing. When I took over as CEO, I said that the strategy is perfectly fine, but we have to work on our behaviors. And we call this the spirit project or initiative. And this spirit initiative is focusing on 3 behaviors, setting ambitious targets, clear responsibilities, and timely decision making. And you may also attribute some of what Andreas described to the first of the 3 targeted spirit behaviors.

Alexander Foltin, Infineon Technologies AG - Head of Investor Relations [59]

All right. Time to wrap up the call. Thanks for all your questions. Fairly comprehensive, as always. We are concluding now our first quarter's conference call. Any further questions, any item that were left open, please feel free to contact us and the IR team here in Munich. Thank you very much. Take care, and have a good day.