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PRESENTATION
Operator

Good day, ladies and gentlemen, and welcome to the Amkor Technology Second Quarter 2023 Earnings Conference Call. My name is Diego, and I will be your conference facilitator today. (Operator Instructions) As a reminder, this conference is being recorded.

I would now like to turn the call over to Jennifer Jue, Head of Investor Relations. Ms. Jue, please go ahead.

Jennifer Jue  Amkor Technology, Inc. - Senior Director of IR and Finance

Thank you, operator. Good afternoon, everyone, and thank you for joining us for Amkor’s Second Quarter 2023 Earnings Conference Call. Joining me today are Giel Rutten, our Chief Executive Officer; and Megan Faust, our Chief Financial Officer. Our earnings press release was filed with the SEC this afternoon and is available on the Investor Relations page of our website, along with the presentation slides that accompany today’s call.

During this presentation, we will use non-GAAP financial measures, and you can find the reconciliation to the U.S. GAAP equivalent on our website. We will make forward-looking statements about our expectations for Amkor’s future performance based on the environment as we currently see it. Of course, actual results could differ. Please refer to our press release and SEC filings for information on risk factors, uncertainties and exceptions that could cause actual results to differ materially from these expectations. Please note that the financial results discussed today are preliminary, and final data will be included in our Form 10-Q.

And now I would like to turn the call over to Giel.

Giel Rutten  Amkor Technology, Inc. - President, CEO & Director

Thank you, Jennifer. Good afternoon, everyone, and thank you for joining the call today. Amkor delivered second quarter performance in line with our expectations with revenue of $1.46 billion and EPS of $0.26. Demand for advanced packaging increased in the second quarter, notably demand for consumer wearable products and for high-performance computing devices.

For the first half of 2023, revenue of $2.9 billion was down 6% versus the first half of 2022, better than the semiconductor industry estimated decline of over 20% in that same period.

Overall business continues to be dampened by challenging macroeconomic conditions, high inventories and weak end market demand. With our technology leadership and broad geographic footprint, Amkor is outperforming the industry and is well positioned to capitalize on industry mega trends that we expect to propel growth beyond the current cycle.
Now let me review the dynamics in each of our end markets. Revenue from our communications end market decreased 11% sequentially and increased 7% year-on-year. Inventory consumption is taking longer than anticipated due to weaker end market demand, especially in the Android supply chain. Smartphone units declined around 10% in 2022 and are expected to decline a further 5% this year. We have a leadership position in advanced packaging throughout premium tier smartphones, and we expect semiconductor content to continue to increase to support new features and functionality. This, combined with our continued investments in technology, in close cooperation with key customers, positions us well to outperform the market and to accelerate when the industry exits the current cycle.

In the first half of 2023, revenue from the automotive and industrial end market increased 5% compared to the first half of 2022, with advanced packaging revenue up 30%. In the second quarter, revenue from conventional automotive and industrial application softened due to inventory control by certain customers. In the quarter, ADAS and electrification applications remained resilient at record quarterly revenue levels.

Despite near-term variability, semiconductor content per car is expected to continue to increase, driven by the proliferation of ADAS, electrification, infotainment and telematics. Amkor is the leading automotive OSAT and has multiple decades of experience meeting the stringent requirements of the automotive industry. Our qualified manufacturing lines in multiple geographies such as Korea, Japan and Portugal and our broad technology portfolio ranging from advanced packaging, wire bond and power are important differentiators to our customers.

Revenue from the computing end market represents 20% of total revenue and increased 15% sequentially and 5% year-on-year. Increasing demand for leading-edge advanced packaging supporting high-performance computing devices for AI applications led to the sequential growth. As a technology leader, Amkor is enabling the OSAT supply chain with the deployment of 2.5D heterogeneous integration technology, integrating high-bandwidth memory and ASIC on interposers, combined with modular attach on substrates.

In the computing market, we support leading customers in all areas of data centers and networks, ranging from CPUs and GPUs, memory and AI accelerators to routers and switches. We continue to invest in the high-performance computing market, both in capacity and technology to support customers with innovative solutions for next-generation devices.

Revenue from the consumer end market increased 33% sequentially but decreased 27% year-on-year. Advanced SiP for wearable devices increased from a trough in the first quarter as we observed first signs of inventory reductions. Consumer IoT devices require miniaturization at high levels of integration into small form factors. These IoT devices are increasingly incorporating wireless connectivity, sensors and devices for data protection, combined with ultra-low power requirements. Achieving the form factor and power profile requires advanced system and package solutions. Although we observed multiple near-term headwinds impacting the consumer markets, including product life cycle changeovers, reduced consumer demand and excess inventories, we expect that beyond the current industry cycle our system and package expertise positions us well for growth.

In the first half of 2023, our manufacturing organization continued to demonstrate operational excellence across our factories, focusing on quality and supplier reliability while diligently managing cost at lower capacity utilization. Geopolitical dynamics continue to impact the semiconductor supply chain. Amkor is uniquely positioned to support our customers with reliable and cost-effective manufacturing across a geographically diversified manufacturing footprint. Investments in our new Vietnam factory continue as planned with the goal to be production ready late this year. We have established silicon carbide capabilities in Japan and are expanding these capabilities to multiple other factories, including Portugal.

We are also expanding our wafer processing, advanced flip chip and test technology in Portugal in close cooperation with foundry partners to support a seamless European semiconductor supply chain. In Korea, we are expanding capacity for 2.5D technology in support of customers ramping devices for AI applications. In the U.S., we continue to be actively engaged in discussions with customers, partners and economic development agencies to establish a U.S. manufacturing facility.

Now let me turn to our third quarter outlook. We expect performance to improve from the first half with revenue of $1.775 billion at the midpoint of guidance. This represents sequential growth of 22%, driven by advanced packaging in support of the full launch of premium tier smartphones. With that, I will now turn the call over to Megan to provide more detailed financial information.
Megan Faust - Amkor Technology, Inc. - Executive VP, CFO & Treasurer

Thank you, Giel. And good afternoon, everyone. Second quarter revenue of $1.46 billion was flat compared to the first quarter with increases in consumer and computing, offset by declines in communications and auto and industrial. Amkor's technology leadership and strong market position are mitigating cyclical variability and providing the resilience needed to exceed industry growth. First half 2023 revenue was down 6% compared to the first half of 2022. This reflects strong outperformance compared to the semiconductor industry, which is estimated to have declined over 20% during the same period.

Gross margin for the second quarter was 12.8%, and gross profit was $187 million. We have continued to focus on cost discipline during the cycle, which is essential to preserve profitability. Sequentially, we reduced manufacturing costs by another $10 million. The manufacturing teams are carefully balancing current and future needs, and we have maintained the structure required to support the anticipated increase in demand in the second half of 2023.

Operating expenses for the second quarter were lower than expected at $111 million due to lower incentive compensation as well as other cost control initiatives. Operating income was $76 million, and operating income margin for the quarter was 5.2%. Net income for the quarter was $64 million, resulting in EPS of $0.26. This represents a more than 40% improvement in bottom line profitability compared to Q1. Approximately half of the increase is in operating income, while the other half is due to favorable foreign currency balance sheet remeasurement, lower net interest expense and lower taxes.

Second quarter EBITDA was $245 million, and EBITDA margin was 16.9%. We ended the quarter with $1.2 billion of cash and short-term investments, and our total liquidity was $1.9 billion. Our total debt as of the end of the second quarter is $1.1 billion, and our debt-to-EBITDA ratio is 0.8x. Amkor’s cost and CapEx discipline during this cycle has resulted in continued financial strength as demonstrated by our strong balance sheet. This allows us to continue to invest through this cycle to enable future growth with lead customers.

Moving on to our third quarter outlook. We expect Q3 revenue to be $1.775 billion at the midpoint of guidance, representing sequential growth of 22%. The strong ramp into Q3 is primarily due to the introduction of new premium tier smartphones. We expect gross margin to be between 13.5% and 15.5%. We expect Q3 operating expenses of around $115 million. We expect our full year effective tax rate to be around 17%. Third quarter net income is expected to be between $90 million and $130 million, resulting in EPS of $0.36 to $0.53. We are fine-tuning our full year CapEx target, reducing it by $50 million to $750 million. This is 17% lower than 2022. We are continuing to invest in strengthening our global manufacturing footprint and our advanced packaging technology.

Amkor has 55 years of experience in the semiconductor industry and has successfully navigated through many industry cycles. Over the past several years, we have transformed our operational performance and balance sheet to a position of financial strength. Our strong financial position enables our technology leadership and diverse geographic footprint, allowing us to perform significantly better than previous cycles and to capitalize on the industry mega trends, which we expect to drive accelerated growth as we exit the cycle.

With that, we will now open the call up for your questions. Operator?

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) Our first question comes from Randy Abrams with Credit Suisse.

Randy Abrams - Crédit Suisse AG, Research Division - MD and Head of Taiwan Research in the Equity Research Department

I want to ask my first couple of questions about the financial outlook first. For the second half outlook, you had mentioned on the third quarter the growth from the seasonal smartphone. I think, first, just within that, do you see a normal profile or any change to timing for this year for that
smartphone ramp? And then for other applications, if you could go through a few of the other areas, how you're seeing auto, industrial, compute, consumer trending and an initial view for fourth quarter if you expect continued growth.

Giel Rutten - Amkor Technology, Inc. - President, CEO & Director
Okay. Randy, let me try to answer that here. Let’s first focus on the communication market and your question whether we go back to a normal seasonal pattern in the second half of the year. Now if we take the 2 ecosystems, the iOS ecosystem, we see there a normal pattern. It’s clear the volumes that are going to be shipped are in line with previous years and we see a ramp in multiple devices supporting that phone ramp. On the other hand, for the Android ecosystem, we still see weakness in the second half of the year, specifically because it takes a longer time to replenish or to build down the existing inventory, both with respect to end products as with respect to inventory in the supply chain. So for the full market, not a full return to normal seasonality.

With respect to the latter part of the year, we see some first signs that the seasonal pattern on a quarterly basis gets back to a normal seasonal pattern. Then with respect to the other markets, we saw a bit of inventory corrections in our second quarter for automotive, and we expect the automotive market in general to stay resilient for the latter part of the year. We have multiple new products in the pipeline, specifically when it comes to applications like ADAS, electrification. I think these markets will continue to be strong, and we expect that the corrections for inventory will be temporarily -- temporary in the second quarter.

So for the other markets, specifically on the computing market, a little bit give and take in the third quarter because there, we see some customers phasing some products out and phasing in new products. But overall, we believe that for the remaining part of the year, we see a good, let’s say, basis for a strong business in the second half of the year.

Does that answer your question, Randy?

Randy Abrams - Crédit Suisse AG, Research Division - MD and Head of Taiwan Research in the Equity Research Department
Yes. Actually, maybe just to follow up. The fourth quarter, I think you mentioned on comps. I guess just overall, because it’s a good sequential ramp-up of second quarter. But fourth quarter, I think, can swing either way, depending on the year. But how you see the profile coming up because there was a correction early this year if you expect [it will] improve...

Giel Rutten - Amkor Technology, Inc. - President, CEO & Director
Well, I mean the Android side is still a little bit uncertain, Randy, certainly in the latter part of the year. On the other hand, we see first signs in the later part of the year in the fourth quarter to go back to normal seasonality. And as you mentioned before, it can be up a little bit, it can be down a little bit. I think that’s what we currently -- the view that we currently have is that’s what we are expecting.

Randy Abrams - Crédit Suisse AG, Research Division - MD and Head of Taiwan Research in the Equity Research Department
Okay. No, that’s helpful. The profitability leverage for the margins, are there inflationary costs that you’re dealing with or a mix shift to system and package with higher material content? Just curious on the margins where, some years even going to pickup, I think, a bit more, but I’m wondering if there’s any factors impacting some of -- gross margins.

Giel Rutten - Amkor Technology, Inc. - President, CEO & Director
Yes. I guess Megan can comment to that, Randy.
Megan Faust - Amkor Technology, Inc. - Executive VP, CFO & Treasurer

Randy, yes. So for the Q3 profitability with the increase of 22%, we're looking at about 170 basis points of gross margin expansion. So that is lower than what our typical guideline would be for incremental flow-through. However, the primary reason for that is a product mix shift to the higher material content products. So as we mentioned, the driver for the Q3 increase is communications, and advanced SiP is one of the biggest technologies supporting that in -- for the premium tier smartphone launches. And so with that higher proportion of advanced SiP and other advanced products, that's what's contributing to, I would say, a higher material content. We can also use the proof point that advanced SiP for Q2 was even up 12% year-over-year.

So that's the primary reason. There is some seasonal increase in electricity and pricing in Q3. In addition to the higher volume, we do have the summer rates, which, together, we usually see in Q3, on average, an increase of 10%. So while the gross margin is important, just wanted to also focus on the full picture because gross margin is compressed, as you know, by that material content increase. However, you will see significant increase in the gross profit dollars growing much faster than revenue as well as operating income. And the bottom-line EPS for Q3 is growing over 70% sequentially.

Randy Abrams - Crédit Suisse AG, Research Division - MD and Head of Taiwan Research in the Equity Research Department

Great. And for the co-ops opportunity or maybe broadly on Al, if you could discuss a bit more the processing or capability you can provide. And how do you see the revenue opportunity? And is there a lead time where if you get orders that may come in a bit later? Or do you have capability to ramp up? So if you could just talk a little more on what you're seeing and what capability you can provide to that market.

Giel Rutten - Amkor Technology, Inc. - President, CEO & Director

Yes, that's a good point, Randy. Let me try to comment to that. I mean Amkor is engaged in 2.5D technology for multiple devices, multiple customers already for several years. Currently, we see driven by the adoption of Al that AI algorithms drive the latest silicon technology nodes, and that adoption then is creating a significant increase in 2.5D volumes. So we have a certain capacity installed base. Going into next year, we're going to ramp that up. Actually, we -- our current plan is to triple our current volume for 2.5D going into next year.

We do end-to-end processing. So we have a full turnkey process flow, so both the high-bandwidth memories and as we see on interposers and then the share on substrate part combined. We have a pipeline with multiple customers, and we expect that with the adoption of AI in data centers that this technology will become more a broadly adopted assembly technology going forward.

Randy Abrams - Crédit Suisse AG, Research Division - MD and Head of Taiwan Research in the Equity Research Department

And for the tripling into next year, if you could give a sense like percent contribution and how the profitability is -- profitability or return is versus the corporate average. And just the other follow-up I had is that you are actually reducing overall CapEx. So with the CapEx, is there incremental CapEx that you have this year or next year for this investment? And then -- you're cutting -- or a few questions...

Giel Rutten - Amkor Technology, Inc. - President, CEO & Director

Yes. I mean let me start commenting with respect to the profitability. I mean the profitability like in many other areas for the company is very much dependent on our utilization. If we take the value-adds, then we see that the number of process steps for 2.5D is well above average of our normal process flow. So in that sense, the value-add revenue as well as the value-add margins that we generate there is above average.

Then when it comes to the investment level, yes, I think there are some incremental investments for this year and also next year. We have to keep in mind that the investments that we're making in this technology is what we call fungible so the equipment can be applied for multiple technology domains. It's 2.5D, but a lot of the technology is also related to bumping technology and next-generation technology areas that we're launching.
But yes, we're investing in that incremental capacity this year and also next year. Overall, for Amkor, given the bit muted second half when it comes to normal seasonality, we decreased our CapEx spending $50 million versus our earlier target of $800 million. We brought it back to $750 million. But within that bucket, we are still able to manage that increase.

Operator

(Operator Instructions) Our next question comes from Tom Diffely with D.A. Davidson.

Thomas Robert Diffely - D.A. Davidson & Co., Research Division - MD & Director of Research

So Megan, first, just going back to the incremental gross margin question. I always assume that there wasn't a big difference in the margin structure between your low-end products and your high-end products. It was much more of a factor of utilization at the different stages. So I'm curious, you talked about the slightly lower incremental margins for the out quarter. Is that because items like consumer or some of the lower-end stuff are still at fairly poor utilization rates?

Megan Faust - Amkor Technology, Inc. - Executive VP, CFO & Treasurer

Tom, yes. So really, what we're looking at for Q3 is there are still significant underutilization amongst other product lines. So our target utilization for Q3 is still going to be sub-70% compared to, let's say, Q3 last year, which we were on in the aggregate about 85%. So that is what's causing -- part of that profitability strain is continued underutilization during the cycle.

Thomas Robert Diffely - D.A. Davidson & Co., Research Division - MD & Director of Research

Okay. And what's the most recent trend in that? Is it still going down? Is it starting to recover?

Megan Faust - Amkor Technology, Inc. - Executive VP, CFO & Treasurer

Q2, we saw a slight decrease in utilization compared to Q1 and then seeing a nice increase, as I mentioned, the sub-70% in Q3. So we do think that, that hit the bottom.

Thomas Robert Diffely - D.A. Davidson & Co., Research Division - MD & Director of Research

Okay. Great. And then I think you made a comment earlier that your interest expense was going down. I'm wondering if you could just add a little more color around that.

Megan Faust - Amkor Technology, Inc. - Executive VP, CFO & Treasurer

Yes, Tom. So really, that's a function of combined net interest expense has decreased. We've actually seen quite a nice increase in our interest income on our cash and investment balances.

Thomas Robert Diffely - D.A. Davidson & Co., Research Division - MD & Director of Research

Okay. And then on the silicon carbide, you mentioned -- you talked about expanding from Japan maybe into Portugal. What does that require? Does that require additional equipment for you? Or is it just process know-how? How do you expand that to different locations?
Giel Rutten - Amkor Technology, Inc. - President, CEO & Director

Tom, let me comment to that. Yes, I think for silicon carbide, there are 2 flavors to our silicon carbide manufacturing services. One is discrete devices and the other is silicon carbide module -- power modules. So the technology that we’re transferring from Japan into Portugal is actually twofold, both technology areas and it requires, indeed, incremental investments in specific equipment and specific technology.

So of course, the technology we transfer, we transfer people that go on site. And that -- transfer that technology to a different factory, there we have standard procedures in place how to do it. And for the capacity installation, we have dedicated equipment that we purchase and that we install. Silicon carbide in general, both on the discrete side as well as on the module side, is a growing area, not only in automotive, but also in the overall energy transition. We see silicon nitride and silicon carbide as definitely a growing business area for Amkor.

Thomas Robert Diffely - D.A. Davidson & Co., Research Division - MD & Director of Research

Okay. Are you seeing a pretty nice shift from discrete to the modules?

Giel Rutten - Amkor Technology, Inc. - President, CEO & Director

Yes. Although both flavors will coexist for a significant time, but modules is definitely the future. And these modules, they come in multiple shapes and forms from fairly miniaturized form factors to fairly large packaged modules.

Thomas Robert Diffely - D.A. Davidson & Co., Research Division - MD & Director of Research

Great. And then final question, when you look at your compute segment, how concentrated are the customers there? And how big an impact could the doubling of a customer inside of that space be for your overall business?

Giel Rutten - Amkor Technology, Inc. - President, CEO & Director

It’s a good question, Tom. I mean customer concentration in the compute segment, specifically in the deployment of AI applications and algorithms, is fairly concentrated. I would say I think it’s fair to say that there is broad public knowledge on who are the players there. We have a product pipeline and a customer pipeline that would cater for, I would say, all the key players.

Megan Faust - Amkor Technology, Inc. - Executive VP, CFO & Treasurer

I think, Tom, just to offer another data point. As far as the contribution, we’re starting from a fairly low base. So with respect to our Q2 performance, this would amount to, I would say, mid-single digits of our compute segment.

Operator

Thank you. At this time, I’m showing no further questions. I would like to turn the call back over to Giel for closing remarks.

Giel Rutten - Amkor Technology, Inc. - President, CEO & Director

Okay. Thank you. Let me recap the key messages. Amkor delivered second quarter results in line with our expectations with revenue of $1.46 billion and EPS of $0.26. We are expecting third quarter performance to improve significantly with revenue of $1.775 billion at the midpoint of guidance, a 22% sequential increase.
We are confident that the secular growth drivers in the industry remain in place and will drive growth beyond the current cycle. With our leadership in advanced packaging, our broad geographic footprint and exposure to industry mega trend, we are poised to outperform the semiconductor market and accelerate out of this cycle. Thank you for joining the call today.

Operator

Thank you. And ladies and gentlemen, this concludes today’s conference call. You may disconnect.