CORPORATE PARTICIPANTS

Giel Rutten  Amkor Technology, Inc. - President, CEO & Director
Jennifer Jue  Amkor Technology, Inc. - Senior Director, Finance and Investor Relations
Megan Faust  Amkor Technology, Inc. - Executive VP & CFO

CONFERENCE CALL PARTICIPANTS

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

PRESENTATION

Operator

Good day, ladies and gentlemen, and welcome to the Amkor Technology First Quarter 2021 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, Finance and Investor Relations

Thank you, operator. Good afternoon, everyone, and thank you for joining us for Amkor’s First Quarter 2021 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 other 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

Thanks, Jennifer. Good afternoon, everyone, and thank you for joining the call today. Today, I will review our first quarter performance and will provide the outlook for the second quarter. I will also make a few comments on dynamics in markets and technologies where Amkor is well positioned for future growth.

With continued strong demand in our advanced technology and steady progress in our mainstream business, we delivered solid financial results in the first quarter. Revenue of $1.33 billion was a Q1 record, increasing 15% year-over-year and declining only 3% sequentially over an all-time record Q4 2020. Continued momentum exiting the year resulted in sequential increases in all end markets with the exception of communications where we saw a moderate seasonal decline. Profitability for the quarter was above the high end of guidance with a record Q1 EPS of $0.49.
Within communications, the first quarter sequential decline of 15% was in line with expectations and was less than the past few years. Typically, we expect seasonal Q1 decline in the range of 25% to 30%. Year-on-year, our communications business grew 22%, representing 40% of total quarterly revenue. For full year 2021, we expect continued growth in our communications business, driven by strength in the smartphone market and a further proliferation of 5G technology. Market data forecasts smartphone volumes to increase 9% year-on-year and the 5G penetration rate increasing to around 40% or 540 million units in 2021.

First quarter revenue in the automotive and industrial end market was strong, recovering to pre-pandemic levels and setting a new quarterly record. We had sequential growth of 9% and year-on-year growth of 11% in the quarter, representing 22% of total revenue. We have continued strength in advanced products as well as continued growth in our mainstream and automotive portfolio, most notably in Japan.

For the second quarter, we anticipate that supply chain constraints, especially in the wafer and substrate supply chain, will hold back further growth, and we expect the second quarter automotive revenue to be relatively flat versus Q1. For the second half of the year, we anticipate the automotive supply chain will gradually recover, resulting in further growth. Going forward, we believe the growth drivers in this market remain in place and the semiconductor content per car will further increase due to accelerated proliferation of driver assistance electronics and the electrification of more car models.

The consumer market returned to quarter-on-quarter growth, with an 8% sequential increase in line with expectations. IoT wearables continued to be an important driver for growth. Although some supply chain constraints and expected product pipeline changes continue to be dynamic in this emerging product category. Our overall product and customer pipeline for devices and advanced SiP solutions in the consumer market remains strong. We are confident that the end market for IoT devices will continue to be a growth area for Amkor.

Revenue in the computing end market set a new all-time quarterly record with sequential growth of 2% and a year-on-year growth of 30%. We experienced good performance in all computing applications and a strengthening of our project pipeline. We expect the computing market to drive further growth for outsourced assembly and test services, and we anticipate growth in multiple applications, ranging from personal computing to infrastructure and data centers.

Over recent years, we have established a proven technology portfolio with a required manufacturing scale. And Amkor continues to invest in capacity and technology for this market. With a technology base ranging from large body size flip chip, multichip modules, 2.5D and high-density fan-out, we are able to offer customers a complete solution in this domain. With growing demand for high-performance package technology, we strengthened our engineering teams to develop specific solutions together with lead customers.

These engagements allow us to introduce key enabling technologies, for example, laser assisted bonding and high-conductive thermal materials to resolve technical challenges. The new technologies enable us to capitalize on opportunities not only in the computing domain, but also to extend these capabilities in other areas like automotive. Finally, our test business grew 15% year-over-year in Q1 as we increase the scope of our test services for 5G communication and system-level testing and continue our focus on expanding test attach rate.

Strong demand in the quarter resulted in good factory utilization, and we saw utilization improvement, especially in our Japan factories. Our wafer-level and flip chip production lines were highly utilized, and utilization rates in our leadframe and wire bond factories further improved with the recovery in the automotive and industrial markets. The high factory utilization contributed to a solid 20% gross margin for Q1.

To prepare for future growth, our manufacturing organization is expanding clean room space in our facilities in Korea, China and the Philippines, and we are further ramping our new T6 factory in Taiwan. We also have been watching closely the growing interest and activity in U.S. semiconductor manufacturing and the new U.S. forward-looking investment policies. We are encouraged by efforts to fund the CHIPS for America initiatives and are actively exploring to be part of the U.S. semiconductor manufacturing supply chain.

CapEx for the year is expected to be around $700 million, the capital intensity in the low teens. Major investments in 2021 are planned for wafer-level and flip chip technology, SiP capacity -- test capacity and the facility expansions I mentioned previously. We also plan specific investments to support our Industry 4.0 program, enabling an intelligent factory framework to improve quality, decision-making speed and asset utilization.
Now let me turn to our second quarter outlook. We are expecting another solid quarter with revenue of $1.34 billion at the midpoint of guidance. This represents a year-on-year increase in Q2 of 14%. Short-term capacity constraints for wafers and substrates are expected to impact parts of the semiconductor supply chain, especially in the automotive market, limiting further growth in Q2. For the full year 2021, we expect continued strength in all growth areas, particularly 5G communication and computing. We remain confident in our strong market position and the overall demand environment, and expect to outgrow the semiconductor market in 2021.

Megan will now provide more detailed financial information.

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

Thank you, Giel, and good afternoon, everyone. Today, I will review our first quarter results and then provide some comments about our second quarter outlook.

As Giel noted, first quarter sales of $1.33 billion was a quarterly record, up 15% year-on-year and a modest 3% sequential decline from an all-time record in the fourth quarter of 2020.

In our memory business, we see an accelerating trend towards advanced SiP solutions, in addition to multilayer die stacking. Memory is now more dependent on advanced technology and therefore, starting this quarter, we are reporting memory in our advanced products category. Previously, it was in mainstream. For comparability purposes, we have recast prior periods.

Advanced products have grown 16% year-on-year in the first quarter and represent approximately 70% of our business. Our mainstream products have recovered to pre-pandemic levels of over $400 million in the first quarter and now represent around 30% of our business. Strong demand throughout end markets resulted in continued high utilization across our factories and product lines. This had a positive impact on our profitability. Year-on-year gross margin expanded 360 basis points, reaching 20% for Q1 and demonstrating the leverage in our model of 40% to 50% incremental margin.

Operating expenses for the quarter came in as expected at $121 million, resulting in operating income margin of 10.9%. Research and development costs increased over 35% or $12 million year-on-year, reflecting the strength in our project pipeline for advanced products, most notably for advanced SiP. Several projects are planned for high-volume ramps in the second half of 2021. In addition, multiyear growth catalysts are anchored in advanced packaging technologies, and we are committed to investing in key R&D programs to meet our customers’ needs.

Net income for the quarter was $120 million, resulting in record Q1 EPS of $0.49. Q1 EBITDA increased over 30% year-on-year to $280 million, and EBITDA margin was 21%. We ended the quarter with over $800 million of cash and short-term investments and total liquidity of $1.2 billion. Our total debt as of March 31, 2021, is $1.1 billion, the lowest in over 20 years.

We also continue to optimize our cost of debt and have reduced our quarterly interest expense by 25% year-on-year. Our strong balance sheet positions us well to continue to invest in growth opportunities.

Moving on to our second quarter outlook. We expect revenue to be between $1.29 billion and $1.39 billion. Our guidance considers an estimate for supply chain constraints that are expected to temper growth. We anticipate these constraints to ease in the second half of the year. Gross margin is expected to be between 17% and 20%. Gross margin in Q2 is modestly constrained by factory preparations for second half growth. We expect Q2 operating expenses of around $120 million, flat with Q1. We expect our full year effective tax rate to be around 18%.

Q2 net income is expected to be between $77 million and $127 million, resulting in EPS of $0.32 to $0.52. Our forecast for capital expenditures for the year remains at $700 million to support strong demand expected in 2021 and beyond.

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

Okay. A good result. I wanted to ask the first question about the supply constraints for the 2 areas. First on substrate, is it mostly on the auto and leadframe? Or are you also seeing the substrate constraint extend to some of the high-end ABS substrate?

And on the wafer constraint, is that more an issue of the foundry side? Or is it somewhat related to IDMs where we had like one of the Japan companies had an incident? And there’s also been constrained in IDM capacity. So I’m curious the area on both of those constraints.

And then just the outlook or implication for second half. Normally, you have a good seasonal ramp-up, and so just wanted to see how much the constraint may impact the seasonal growth you normally have into third quarter.

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

Okay. Randy, this is Giel. Let me start with the first question on supply constraints, supply chain constraints. Starting with the wafer supply chain, your question was related, is it only IDM factories? Or does it go deeper into the supply chain? Actually, it is both. Of course, it started very much with IDM factories, both in Japan as well as in the U.S. that got constrained either through incidents like fire or the storm in Texas. But of course, most of these customers are also relying on the same technology, which are generally all the technology nodes on supply from foundries.

So while the internal factories are ramping down, you see also constraints happening on the foundry side. So we see that that’s definitely happening in the second and third quarter, but we see clear improvements going into the third quarter for the wafer supply.

With respect to the substrates, it is indeed on the lead frame and the lower-end part of the substrate side that we see constraints. But also there on the same elements, we see also pockets of constraints on the higher-end substrates impacting some of the compute segments. So there are selective areas where we see constraints happening also on the higher-end substrates. 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, that does. And maybe just to follow up on the second half implication. I guess it sounds like the wafer substrate better. I’m not sure on the leadframe. But if you expect it could be a limiter or the normal ramp-up where you see it actually better -- or good enough in both areas.

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

Yes, we consider it being improved in both areas, Randy. Also on the leadframe area, we see some improvement. It has to do with the special metal supply chain, and we see that these companies are actually getting their volumes up for the second half of the year. So we see improvements across the board, definitely will start impacting the third quarter, and we hope that we see a more normalized supply chain in the fourth quarter.

Now going back to your outlook for the second half of the year, normal seasonality -- let me first comment on the second quarter outlook. I mean normal seasonality typically for us is a 5% increase over the first quarter. Currently, we see a 1% increase, and about more than 50% of that is attributable to direct impact of customers’ supply chain. The other half may be, let’s say, build volumes impacted indirectly. So overall, we see an impact of about 3% to 4%.
For the second half, across the board, we see a strong demand environment both on the mobile side as well as on the automotive side with improvement in the supply chain. So we’re confident that there is strength in the second half of the year.

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

Okay. And it’s also a higher base in first quarter for the seasonal for Q1 to Q2. On the second question I have on the system and package, you talked a bit about this pipeline transition. Is there any headwind in the first quarter to second quarter seasonality or transition of products? And if you could give a view just on how the SiP overall is tracking for the full year or what you kind of see filling it in the pipeline mix that could come through later this year on the system and package.

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

Yes. In the consumer domain, let’s say, more broadly, system and package is driven by 2 market segments. I mean one is consumer. The other one is communication. In the consumer domain, we see a changeover one -- from one product generation into other product generation, meaning one is ramping down, the other is ramping up. We also see our customer base extending, and that shows, let’s say, a dynamic environment in the second quarter, but also going into the second half of the year.

Keep in mind that this product category is also, to some extent, impacted by the substrate and wafer supply. If you look to the wafer supply, it’s all the nodes, and that heavily impacts power management products. So actually, all areas in the industry are impacted by that. On the communications side, for the second half of the year, we see a strong ramp with multiple products in line with the second half for the -- in the mobile market.

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

Okay. And a question on actually 2 sides. One is on equipment, if there’s any constraints for equipment. On your capacity, is there a limitation either on the advanced or on wire bonding where some of the stretching lead time and equipment is having much impact?

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

Yes. I think on the equipment lead time, that’s your question, lead times generally extending for all equipment, whether it’s wire bonders or wafer source or other equipment. We started to observe that actually in the latter part of 2020 and proactively, let’s say, orders the anticipated capacity that at that point in time, we foresaw to need in this year. I mean, most notably, the lead time expansions are in wire bonders, for example.

I think we are currently able to get the numbers that we need. But they definitely are delayed into, let’s say, into the second and third quarter when it comes to delivery. So far, I would say it’s not a bottleneck. The bottleneck in the industry is currently definitely on the material supply. And we don’t expect that for Q3 and even Q4 that equipment availability will be the bottleneck for further ramps.

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

Okay. And just last question, if you could talk on the pricing outlook, where the Asian peers, I think, have been opportunistic to raise pricing, if -- how you’re seeing the pricing. And also given the tightness in the industry, if any customers are doing any kind of contracts, looking at further out locked-in supply, and if they are, if that’s firming up pricing or raising pricing?

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

Yes. Let me start with the first part of your question with respect to the pricing environment. In general, we see cost of our products going up. I mean cost of material is going up, and that’s partly, let’s say, the result of the shortage of some of the materials, specifically on the substrate and...
lead frame side. But also, for example, on gold wire and even copper wire prices are significantly increasing. So if we see cost increases, we work with our customers to adjust pricing versus these cost increases. I think that’s a constructive dialogue with our customers.

Now in our part of the supply chain where, for example, on the wire bond business, we work mostly with automotive customers. We have longer-term contracts, and we don’t work on technical pricing with our customers. So on very rare occasions, we will do that. But in general, we don’t technically use price increases, other than increases -- raw material price increases.

With respect to your second part of your question, longer-term contracts, yes, I think we see that. We see longer-term contracts in different parts of the business to secure capacity and to secure supplies. We also see different business models occurring there, like co-investments in specific parts of the share of the business. And that happened before, but clearly, it intensifies this part of the year.

Operator

(Operator Instructions) Ladies and gentlemen, there appears to be no additional requests for questions at this time. I would now like to turn the call back over to Giel for closing remarks. Thank you.

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

Okay. Thank you, operator. Well, before closing the call, I would like to recap a few key messages.

First, the first quarter of 2021, we delivered record Q1 revenue of $1.33 billion and EPS of $0.49. For Q2 2021, we expect another solid quarter with revenue of $1.34 billion, a 14% year-on-year growth. Supply chain constraints will limit second quarter growth, especially in the automotive market. We expect the supply chain to gradually recover in the second half of 2021.

We believe that the main growth drivers remain in place, and with Amkor’s position in key growth markets, we expect to outgrow the semiconductor market in 2021.

And last but not least, I would like to thank the global Amkor team for delivering another great quarter. Special thanks for the team’s resilience to overcome the challenges we continue to face as a result of the ongoing pandemic.

And thank you for joining the call today.

Operator

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