NASDAQ:MXL Q2 2025 Earnings Call Transcript

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Julian | Conference Operator:

Greetings, and welcome to the MaxLinear Q2 2025 Earnings Conference Call. At this time, all participants are in a listen-only mode. A question-and-answer session will follow the formal presentation. If anyone requires operator assistance, please press star zero on your telephone keypad. As a reminder, this conference is being recorded. It is now my pleasure to introduce Leslie Green, Investor Relations. Thank you, Leslie. You may begin.

Leslie Green | Investor Relations:

Thank you, Julian. Good afternoon, everyone, and thank you for joining us on today's conference call to discuss Max Lanier's second quarter 2025 financial results. Today's call is being hosted by Dr. Kishore Sindripu, CEO, and Steve Litchfield, Chief Financial Officer and Chief Corporate Strategy Officer. After our prepared comments, we will take questions. Our comments today include forward-looking statements within the meaning of applicable securities laws, including statements relating to our guidance for the third quarter of 2025. including revenue, GAAP and non-GAAP gross margin, GAAP and non-GAAP operating expenses, GAAP and non-GAAP interest and other expense, GAAP and non-GAAP income taxes, and GAAP and non-GAAP diluted share count. In addition, we will make forward looking statements relating to trends, opportunities, execution of our business plan, and potential growth and uncertainties in various product and geographic markets, including, without limitation, statements concerning future financial and operating results, opportunities for revenue and market share across our target markets, new products, including the timing and production of launches of products, demand for and adoption of certain technologies, and our total addressable market. These forward-looking statements involve risks and uncertainties, including risks outlined in our risk factor section of our recent SEC filings, including our Form 10-Q for the quarter ended June 30, 2025, which we filed today. Any forward-looking statements are made as of today, and MaxLinear has no obligation to update or revise any forward-looking statements. The second quarter 2025 earnings release is available in the investor relations section of our website at maxlinear.com. In addition, we report certain historical financial metrics, including but not limited to gross margin, income from operations, operating expenses, and interest and other expense on both a GAAP and non-GAAP basis. We encourage investors to review the detailed reconciliation of our GAAP and non-GAAP presentations in the press release available on our website. We do not provide a reconciliation of non-GAAP guidance for future periods because of the inherent uncertainty associated with our ability to project certain future changes, including stock-based compensation and its related tax effects, as well as potential impairments. Non-GAAP financial measures discussed today are not meant to be considered in isolation or as a substitute for comparable GAAP financial measures. We are providing this information because management believes it is useful to investors as it reflects how management measures our business. Lastly, this call is also being webcast, and the replay will be available on our website for two weeks. And now let me turn the call over to Dr. Kishore Sindhripu, CEO of MaxLinear. Kishore?

Dr. Kishore Sindripu | Chief Executive Officer:

Thank you, Leslie, and good afternoon, everyone. Our Q2 results not only reflect 13% sequential performance, and 18% year-over-year growth in our business, but also point to a strong positive inflection in our business recovery and growth trajectory. Our revenue of $109 million approximately exceeded the midpoint of our guidance. Non-GAAP gross margin was 59.1%, and we delivered a meaningful reduction in our operating expenses. With solid execution in Q2, we returned to profitability on a non-GAAP basis and generated positive free cash flow. We continue to drive strong customer and product traction in high-speed data center optical interconnects, on broadband access, Wi-Fi, and Ethernet. Our growing success in the strategic markets, robust customer order rates and backlog, coupled with increasing telco cap expanding, reinforce our confidence in the strength of our growth for 2025 and 2026. In our infrastructure end market, we're excited by the sustained growth trajectory in 2025, and expect revenue acceleration in 2026 as new design wins begin to ramp across our portfolio. In high-speed data center optical interconnects, we are on track to deliver $60 to $70 million in revenue this year, primarily from our 800-gigabit 5-nanometer keystone PAM4DSP product family. We anticipate additional 800-gigabit PAM4DSP customer calls and production rollout throughout 2025, which will drive incremental revenue growth in 26. further customer interest and design in activity for our rushmore 200 gigabit per lane 1.64 terabit pam4 dsp has been robust since our live demonstration at the optical fiber conference 2025 this year in san francisco like keystone our rushmore family of pam4 TIAs and 200 gigabit per lane DSPs for 1.6 terabit interconnects offer superior low power and performance advantages. This continues to be the basis of our competitive differentiation and expectations of design wind momentum. In wireless infrastructure, the market continues to recover with expected increases in carrier cap expending driving demand for the second half of 25 as well as 26. Our Sierra 5G wireless access, single-chip radio SOC, and our millimeter wave and microwave backhaul transceivers and modems are essential for supporting increasing mobile usage and data rates as well as new functionality such as Edge AI. We have new design wings with our Sierra-based product with two major North American telecom providers launching Sierra-based macro base station RU products in Q3. We expect to see sustained growth in 5G wireless access and backhaul, and the needs for cloud and edge AI functionality continue to increase in 2026 and beyond. Also, within our infrastructure category, we continue to see strong design and success for our Panther family of hardware storage accelerators, SOCs across Tier 1 network appliance and cloud service providers. In August, we will showcase our next generation Panther 5 storage accelerator at the Future of Memory and Storage FMS 2025 conference in Santa Clara. Also at FMS 2025, we will have a joint keynote address with Advanced Micro Devices on the Transformation of Enterprise Data Storage. Panther delivers significant advantages over traditional software-based compression including more than afford X improvement in power savings and much more efficient usage of CPUs and CPU cores and AI accelerators. Panther 5 is PCIe Gen 5 capable, and at 500 gigabits per second throughput speeds, it delivers more than two times the performance of Panther 3 to enable ultra-low latency data processing across file, block, and object storage. Moving to broadband and connectivity, we continue to see steady growth and are excited by the market outlook for meaningful increases in service provider capex spending. For example, both major North American carriers have announced plans to increase the scope and pace of their fiber pond access buildouts. These increased infrastructure investments by carriers and operators are driving continued booking strength and incremental demand for our fiber pawn cable docks and wi-fi solutions later this year we will ramp our single chip integrated fiber pawn and 10 gigabit processor gateway soc plus tri-band wi-fi 7 single chip platform solution with a second major tier 1 north american carrier this new gateway soc platform represents an exciting growth opportunity and is also a significant validation of our technology on competitive positioning in the growing fiber pawn market. In the Ethernet market, we continue to expand our 2.5 gigabit Ethernet switch and FI portfolio into commercial, enterprise, and industrial applications. MaxLinia has one of the broadest and most competitive offerings to enable the upgrade from 1 gigabit per second to Ethernet legacy data rates to 2.5 gigabit per second using existing Cat5 cabling. This upgrade is driven by edge cloud expansion, IoT gateways, and enterprise access point transition to Wi-Fi 6 and Wi-Fi 7. It represents a significant opportunity size for MaxLinear of approximately $100 million per year in revenues by 2028. In Q2, we were pleased to announce 2.5 gigabit Ethernet-based multi-port PHY and switch adoption by several notable partners, including ASUS, Hisource, and others. We look forward to closing the additional Tier 1 names in our DesignWin pipeline. In conclusion, we are proud of our strong growth, return to profitability, and positive cash flow generation in Q2. Our success in the strategic areas of our product portfolio includes and the incremental tailwind from the ongoing recovery in our core markets has enabled us to turn an important corner in our business. Our investments in high-value categories, such as high-speed interconnect for the data center, multi-gigabit PON access, Wi-Fi connectivity, Ethernet, storage accelerators, and wireless infrastructure are all driving strong product traction with Tier 1 customers and partners. We believe these positions as well for accelerated growth in 26 and beyond. With that, let me now turn the call over to Steve Litchfield, our Chief Financial Officer and Chief Corporate Strategy Officer. Steve?

Steve Litchfield | Chief Financial Officer and Chief Corporate Strategy Officer:

Thanks, Kishore. Total revenue for the second quarter was $108.8 million, up 13% from $95.9 million in the previous quarter and up 18% from the $92 million in second quarter of 2024. Infrastructure revenue for the second quarter was approximately $35 million. Broadband revenue was approximately $48 million. Connectivity revenue was approximately $21 million. And industrial multi-market revenue was approximately $6 million. Gap and non-gap gross margin for the second quarter were approximately 56.5% and 59.1% of revenue. The delta between GAAP and non-GAAP gross margin in the second quarter was primarily driven by 2.6 million of acquisition-related intangible asset amortization. Second quarter GAAP operating expenses were 86.1 million, and non-GAAP operating expenses were 56.6 million. The delta between GAAP and non-GAAP operating expenses were primarily due to stock-based compensation and performance-based equity accruals of $19.3 million combined, restructuring costs of $5.6 million, and acquisition-related costs of $4.1 million. GAAP loss from operations for Q2 2025 was 22%, and non-GAAP income from operations in Q2 was 7% of net revenue. GAAP and non-GAAP interest and other expense during the quarter was 6.1 million and 5.9 million respectively. The increase over prior quarter was primarily due to 4 million in foreign exchange costs. In Q2, net cash flow provided in operating activities was approximately 10.5 million, We exited Q2 of 2025 with approximately $110 million in cash, cash equivalents, and restricted cash ahead of our 2025 plan. Our day sales outstanding was down in Q2 to approximately 89 days. Our gross inventory was approximately flat versus the previous quarter with inventory turns improving to 1.5 times. This concludes the discussion of our Q2 financial results. With that, let's turn to the guidance for Q3 of 2025. We currently expect revenue in the third quarter of 2025 to be between $115 million and $135 million. Looking at Q3 by end market, we expect all end markets, infrastructure, broadband, connectivity, and industrial multi-market to be up in the quarter. We expect third quarter gap gross margin to be approximately 55% to 58%. and non-GAAP gross margin to be in the range of 57.5% and 60.5% of revenue. We expect Q3 2025 GAAP operating expenses to be in the range of 84 to 90 million. We expect Q3 2025 non-GAAP operating expenses to be in the range of 55 million to 61 million. We expect our Q3 gap and non-gap interest and other expense each to be in the range of approximately $3.5 million to $4.5 million. We expect a $0.6 million tax benefit on gap basis and a non-gap tax of $1.3 million or 11%. We expect our Q3 basic and diluted share count to be approximately 87.1 and 87.5, respectively. In closing, we're pleased to report another quarter of solid progress marked by continued improvement in customer orders and growing traction across our product portfolio. Our focused investments in strategic high-growth areas such as optical high-speed interconnects, wireless infrastructure, storage, Ethernet, Wi-Fi and FiberPond gateways are beginning to generate exciting business opportunities that we expect to accelerate revenues in 2026. This reinforces our confidence in our sustainable growth and profitability through 2025 and beyond. With that, I'd like to open up the call for questions. Jillian?

Julian | Conference Operator:

Thank you. We will now be conducting a question and answer session. If you would like to ask a question, please press star 1 on your telephone keypad. A confirmation tone will indicate that your line is in the question queue. You may press star 2 to remove yourself from the queue. For participants using speaker equipment, it may be necessary to pick up the handset before pressing the star keys. One moment while we poll for questions. And our first question comes from the line of Torrey Sponberg with Stifel. Please proceed with your question.

Torrey Sponberg | Analyst, Stifel:

Yes, thank you and congratulations on the continuous recovery here. I guess my first question is on the Q3 outlook. I do appreciate that all segments are going to be up sequentially, but I mean, they have been quite volatile, right? So, can you maybe give us a little bit more granularity on how the segments are going to perform in the quarter or at least maybe, you know, which segments could potentially be stronger than the others?

Steve Litchfield | Chief Financial Officer and Chief Corporate Strategy Officer:

Hey, Tori, this is Steve. Yeah, I mean, look, I think you can see, I mean, one of the biggest commitments that we've had here is infrastructure. I think that's the one that, you know, we continue to see nice performance, particularly in the back half of the year. So I think that should continue. I mean, clearly you're seeing continued recovery in the broadband and connectivity in markets. And so those are two other ones that are getting good traction with some of the newer products. as well as a recovery. And then probably industrial multi-market would be the third one there, which has clearly been a struggle. But, you know, we do expect to see a recovery there.

Torrey Sponberg | Analyst, Stifel:

Very good. And specifically on broadband, it was, you know, very, very strong this quarter. I know this can be a little bit difficult for you to assess, but Any sense for how much of that is growth is driven by inventory replenishment versus some of the newer products that you have there, you know, especially when I start thinking about some of the, you know, newer gateways that your end customers are launching?

Steve Litchfield | Chief Financial Officer and Chief Corporate Strategy Officer:

Well, Tori, I mean, as you know, I mean, there has been a recovery underway, but I think what you're seeing in the market, and I think this is reflected in our numbers and our guidance and outlook, I guess, is is kind of beyond that recovery. I mean, we're seeing CapEx dollars being deployed. You're hearing a lot about that in the market right now about people reinvested. The service providers in particular cares are being a lot more aggressive. You're also seeing the cable folks, you know, start to upgrade as well. So, For all those reasons, we're seeing, you know, excitement around our business. I would also add that, you know, we're continuing to gain market share and really win in the market, and I think that speaks to the value of our products themselves, the support that we're giving these customers, and our commitment to these customers.

Torrey Sponberg | Analyst, Stifel:

Very good. I'll go back in line. Thank you.

Julian | Conference Operator:

Thanks, Tori. Thank you. And our next question comes from the line of Christopher Rowland with Susquehanna International Group. Please proceed with your question.

Christopher Rowland | Analyst, Susquehanna International Group:

Thanks for the question, guys, and congrats on the results. I'd love to kind of dig a little bit deeper into Rushmore and Keystone kind of design wins you're seeing in terms of like the makeup of those design wins or qualifications? Are they module makers? Has anything shifted? Do you have any anchor hyperscale customers? Just yeah, and any more details around optical DSP in particular would be great.

Dr. Kishore Sindripu | Chief Executive Officer:

Hello, Chris, this is Kishore. Yes, thank you. I'm also feeling pretty encouraged that we've finally turned the corner on the business here, and we see very strong, robust growth continuing moving forward, not just second half, 25 into 2026 and beyond, and with all the new products that are going to add to the mix here. Coming back to the optical, you know, like we said, we're going to double our revenue compared to last year, $60 to $70 million range, we feel. There is obviously some expected ramps towards the end of the year that will follow through into 2026 growth. And almost all of it is at the strength of on the back of Keystone. And I just want to point out that our Keystone design wins are not inside. We have never participated in the NVIDIA ramps. So it's really more on the front side of the network, if you will. So, yes, we have a number of, we have designs with all the major module makers. In fact, I would like to say 100%, but I don't want to say that because I don't know what I'm missing, so to speak. So, we are really, in some sense, are sort of dragged along in terms of the wait times where something takes to call at the various data centers. So, we really don't dictate the acceleration of it sometimes. The interop is related to the DSP issues, sometimes really optics issues, but we work them together. And having said that, we are in multiple qual interop stages with your data centers. With some, we are already shipping. And some, we are in the pilot ramp phase, various phases. So I hope that answers your question. That's why we have never disclosed who the end customers are. And we have been very careful because we don't want to mislead you either. But the revenues are high. And with the lead times expanding, threatening to move, increasing as well, we should start seeing more order pick up as we move into 2026. So that's one side of the story on Keystone. Moving to Rushmore, we really feel that Rushmore may be the tipping point for us from a technology incumbency point of view, now really building on what Keystone has offered as the number three guy. And maybe, maybe, hopefully move into the top two players, right? All our competitors are in very nascent phases. They originally came out with a five-nanometer solution. Now they're scrambling to offer a three-nanometer solution. But we feel we made the right bet as the first guys to move into a more advanced note. Our power, low-power offering, and our superior performance we are focused on. And we're getting a lot of product filters from all the vendors who have tried the competitive solutions. So, I think it's going to be a long game because 1.6 terabit is still starting innings. Why do you not see much discussions about AECs and such yet on 1.6 terabit? You know, technically, I feel that if there's a play for copper, AECs will be real as we move towards 1.6 terabit and beyond. So to that extent, they're very heavily engaged with both optical module makers and with what you call the copper dies. And you're also seeing the module makers also trying to now get into copper cables as well. And our track record on Keystone is what gives them confidence that they're going to be a pretty viable and a differentiating supplier and with a long-term roadmap. With all the hoopla surroundings that Pam forced up, I can still claim, legitimately, there are only three vendors with credible solution for optical transceivers and the quality of the offering that is required in an AI network where grouplessness is even more important than in the interrupt scenario. I hope that answers your question.

Christopher Rowland | Analyst, Susquehanna International Group:

That does. Thank you, Kishore. Maybe a second. question for Steve. I think OpEx was a little bit higher than we were expecting, just wondering what that was about and where the investment was. Also, interest and other expense was higher. And then lastly, the FIMO arbitration still expected, I think, for the end of the year, if I remember correctly.

Steve Litchfield | Chief Financial Officer and Chief Corporate Strategy Officer:

There's a real savvy way to get three questions into one, but I'm going to roll with it. So, real quick, a really important one, OpEx. OpEx is actually below our midpoint of our guide, and honestly, I think what you're referring to is the guidance was probably a little bit higher than your expectation. So, we did have some expenses that were pushed into Q3, and that kind of moves that number up a little bit more than we expected. I do expect it to come back down in Q4. But we're making great progress. I mean, if you look at the improvement that we made year over year on OPEX, it's been exceptional. And I think we'll continue to make improvements there. I mean, we are making big investments as well. We're seeing nice growth. And so we've got some good commitment to some of the newer products that Kishore spoke about earlier. So we're definitely spending on that front. Interest in other was a little higher. Yes, I called out in my prepared remarks about the $4 million of FX impact that we had in the quarter. That rolls up in that interest in other line. I mean, I think the whole world has seen what's gone on with the weakness of the dollar, and so that did impact us. I think it really speaks to the strength to the rest of the business because we've been able to overcome that. You know, we'll see where the dollar goes. Still feels like there might be a little more headwind in the back half of the year. But regardless, I think we're really focused on our core business and executing there.

Dr. Kishore Sindripu | Chief Executive Officer:

I think bringing back to where the investments are, our absolute strategic focus is on investing on the, you know, what's the future of the AI world. data center related and the other important thing we are focused on is cost down improvements of our products you know uh i think i don't think they're the only ones but the way the foundry business has evolved that we got tremendous cost pressures coming from the foundry suppliers and uh we have to take steps now to invest for cost reduction so that we maintain and improve our gross margin as we move forward so i think The second answer may be a little bit of a surprise for you, but I think that's absolutely a prudent thing to do to shore up our profitability and bring back more leverage in our business model.

Steve Litchfield | Chief Financial Officer and Chief Corporate Strategy Officer:

Understood. I think Chris probably dropped off, but I'll answer that last part you did ask about, Silicon Motion. So, no change on that front. We do expect arbitration in Q4 of this year. And then hopefully we kind of get some resolution in the first half of next year. And then I think the ultimate finalization probably comes somewhere in 27 or 28. If there was any, you know, cash to transact, I mean, it probably wouldn't push, it would probably push until 2027 or 2028.

Christopher Rowland | Analyst, Susquehanna International Group:

Thanks, guys. You can still hear me.

Julian | Conference Operator:

Thank you. And our next question comes from the line of Ananda Baru with Loop Capital Markets. Please proceed with your question.

Ananda Baru | Analyst, Loop Capital Markets:

Hey, thanks, guys, for taking the question. Yeah, Kishore, just a little bit more on Panford DSP. You mentioned, you know, great accelerating growth in 2026, RevRamp. Do you think that comes from the current, from the wins you have going into 2026? primarily, or can you see a big impact from the new qualifications as well from Rushmore? And I have a quick follow-up as well. Thanks.

Dr. Kishore Sindripu | Chief Executive Officer:

So, good question. I just want to be very clear that the revenues in 2026 will still be 800 gigabit dominated. I don't see 1.6 terabit Rushmore shipping It's all at the end of next year leading into 2027, honestly. And what has come as a huge surprise or shouldn't be anymore after these years is that the qualification is indeed pretty vigorous. Everybody has their own timeline, and they go in phases from small volumes to bigger volumes and larger volumes after that. And from a deployment point of view, I don't think anybody outside of the AI back-end network guys are really, really in a position to deploy 1.6 terabit yet on the front-end networks. So, and the AI, even from an NVIDIA point of view, they don't expect, this is my hearsay story, they don't expect revenues of 1.6 terabit to pick up until the second half of next year. That is peaking today. And I would dare say that 800 gigabit will be the dominant shipment node for the next a few years to come.

Ananda Baru | Analyst, Loop Capital Markets:

That's helpful. Yeah, they're thinking it's the Rubin thing. It sounds like you guys are thinking along the same lines as well. And then just given your remarks that as of right now, it's really the module makers where the calls are, does that position you well for the growing NeoCloud opportunity and the Sovereign opportunity if Sovereign can get the licenses signed as you go through 26th?

Dr. Kishore Sindripu | Chief Executive Officer:

We hope so. One of the things you really want to keep this account is that this market has been starving for a third supplier. Yeah. Whichever way you look at it. And we have been a steady 80 in terms of not being there and doing the stuff and really putting an effort in differentiation, enabling our module customers rather than dragging along the module guys with us, right? Right. And I think that really helps us in favor. And they have opportunities where they're not beholden to using the incumbents. They give us a chance every time. And I think that really helps us in all the other opportunities you're referring to.

Ananda Baru | Analyst, Loop Capital Markets:

Yeah, that's great. I'll leave it there, guys. I appreciate it. Thanks. Thanks, Ananda.

Julian | Conference Operator:

Thank you. And our next question comes from the line of Quinn Bolton with Needham & Company. Please proceed with your question.

Quinn Bolton | Analyst, Needham & Company:

Hey, guys. I guess I have a couple of questions, and congratulations on the nice outlook. First, I hate to ask, but since some other analog signal guys have talked about starting to see some pull-in activity or inventory builds given tariff uncertainty, especially ahead of August 1st, wondering if you think any of the orders you've seen I know you've seen orders strengthening now for several quarters if any of that you might be able to distinguish a sort of tariff or pulling related or do you think it's been pretty steady and then I've got a follow-up it's so the orders have been very steady and strengthening I think I referred to that at the last quarter itself when you asked the same question and I said

Dr. Kishore Sindripu | Chief Executive Officer:

You know, I cannot speak for the future orders, but I can definitely speak for the orders that we already have that they've preceded these will try to fresh. Now, look, from my point of view, we have been, you know, post-pandemic peak ordering and all the things that you're dealt with, we were not in a hurry to order or acknowledge orders, so to speak. But I think we will start seeing accelerating orders now related to sort of, you know, late reaction from some of our And, however, we are not in a position to respond to them because the lead time has already stretched very, very rapidly. So I don't think it's going to benefit us all in terms of the revenues that we expect to generate in the next, at least the next couple of quarters to come because right now, the lead times of the OSAT, the S&P houses, now is as long as the foundries now. So you can assume that you're looking at six months of lead time now, right? Okay, maybe thereabouts. So I don't think you can respond to that. I think the orders don't make a difference as to what the bean store revenue is moving forward. Got it.

Quinn Bolton | Analyst, Needham & Company:

No, that was, I think, consistent with how you addressed that last quarter. And then you guys, I think, in the prepared script, talked about seeing, you know, strength in the second half of 25 and accelerating growth in 2026. And I just want to make sure I'm not, you know, misinterpreting your comments. Are you sort of suggesting you think annual growth in 26 is even higher than what you're growing here or appear to be growing in 2025? Or just should we be thinking about the acceleration comment is specifically talking about you know, year-over-year growth, 26 versus 25, or are you just sort of talking about orders or other parts of the business and it's not sort of a comment per se about the revenue?

Dr. Kishore Sindripu | Chief Executive Officer:

So, when we talk about accelerating revenues, I was talking about certain design wins within categories. So, I think you want to parse through the script and section by section. We have this great design team with the major new North America operator, tier one operator, And we expect that to ramp in pretty serious heavy volume at the end of this year. So that clearly is an acceleration, my view. We talked about all these quals that are going on the optical in the infrastructure, so then that will result in such an outcome. We also talked of access customers of our 5G product that are just beginning to ship in the second half for 5G applications to major North America operators. So I think it is the context of sort of new design means with major players that will start ramping, and obviously that's a great outcome for those product categories.

Quinn Bolton | Analyst, Needham & Company:

Can I squeeze in one quick one for Steve? I don't think you guys have ever sort of called out significant FX effects in past quarters. So the $4 million kind of FX charge this or charge expense kind of caught me by surprise. Can you just sort of say where is that FX – coming from, I assume you're pricing most stuff in dollars, but you maybe have employees or fixed costs located overseas. Is that the origin of the FX?

Steve Litchfield | Chief Financial Officer and Chief Corporate Strategy Officer:

Yeah. So, I mean, as you know, I mean, these are kind of historical moves in the dollar. I mean, it's been over 30 years since you've seen this much, but we, I mean, we transact in dollars. And so this is really just employees that we have is where it gets impacted. And it's, You know, a few of the regions that were impacted, the euro is probably the biggest is where we saw the worst. Shekel as well. I mean, we're exposed in Israel. And in some of these places, you know, we do hold some cash. I mean, yeah, it ended up being bigger than expected in the quarter. We've had it from time to time in the past. And, you know, we've been able to overcome it with the strength of the business. Got it. Okay. Thank you.

Julian | Conference Operator:

Thank you. And our next question comes from the line of David Williams with the Benchmark Company. Please proceed with your question.

David Williams | Analyst, Benchmark Company:

Hey, Dylan. Thanks for taking the question, and let me also give you my congrats on the solid progress here. So maybe first, Kishore, maybe from a geographic standpoint and in China specifically, can you talk about any of the dynamics you're seeing there in terms of the strength that's building or where there are still areas that are not quite up to where you would hope they would be in terms of demand?

Dr. Kishore Sindripu | Chief Executive Officer:

So, hi, David. Thank you. Look from a geographic point of view, the strength areas for us are U.S. and Europe, but China, we're seeing different parts of the market behave very differently. I mean, Steve talked about an industrial multi-market segment being down, and there's really two parts to that. One is there's a strong push for made-in-China product, and at the same time, that alone creates surprising pressure. And we are taking a very disciplined approach where we are walking away from businesses and revenues where the margins are not accretive to what we feel is the right benchmark for max linear. And some cases we are taking the business because strategically positioned as far for holding out right now with the pressures, but later it'll strengthen our offering and therefore we can build back. So those are puts and takes in how we go about it. But in China, there's a big push now developing for them deploying their data center networks. So there's going to be a lot of spend in data center in China. In fact, if you look at today's data center volumes for transceivers, they are maybe less than 20% of the market. But if you just forecast it three years out, China will be 40% of the transceiver volumes in the world. So that's a significant acceleration more than on a unit basis than what the U.S. sees. Yes, they are lagging by a generation or so, the U.S. technology. And their incumbency is not very well established yet, right, because we are not behind in our offering timings. And so that gives us a very great position to work and see how we can build and grab more market share. And likewise, we are seeing strengthening in other infrastructure areas in where there's some spend going on, related spend, but just generally seeing a certain weakness in industrial sort of areas besides the pressure from internal made in China stories. So, I hope that gives you some cover. If you, when you think broadband and connectivity, please think North America, Europe, and some Latin America. When you think data centers, please think U.S.-China. And then when you think about our other infrastructure that's Ethernet or storage accelerators, it's across-the-board geographies where there are enterprise providers. So I think that would give you a good sense of where the product mix is playing out. Okay?

David Williams | Analyst, Benchmark Company:

Yes, very good color there. Thank you for that. And maybe just from a technology progression, we're clearly in the early stages. with Keystone Rushmore, but as you think further out in the silicon photonics and co-packaged optics, do you have a roadmap to get there? And how do you think Max Linear plays into that trend as we move that direction? Thank you.

Dr. Kishore Sindripu | Chief Executive Officer:

Yeah, very, very good question. I was really looking forward to that question, actually. If you just look at the offering of any PAM4 DSP and TIA companies, They have all the product technology platform to offer CPO-related products. Whether it is, you know, we can get into the details of that. So, for us, it's about filling out our portfolio through derivatives and some level of customization with working with customers. So, the most important thing is to work with optics companies to develop our CPO offerings and get engaged with optics companies. to really customize your offerings related to CPU solutions. Having talked about CPUs, it's going to be a very mixed world. CPU is going to be a very, very, what I call contained offering, whereas much of the network is going to be pretty much a pluggable offering with more sophisticated DSP transceivers or LROs, you know, that sort of mixed mode offering. So I think that CPO is one thing we're definitely beginning to engage in to fill out our portfolio, but there's time yet to come. But there's no scenario in the world where CPO is sort of a broad base across the network. It's very much more sort of, I don't want to use the word be cheap, but a containerized solution offering where everything is predetermined, okay? So when you talk of CPOs, you generally talk about an NVIDIA or a Broadcom switch offering, but it's really not a broad across-the-network offering. And all hyperscale network providers will readily acknowledge, if not even some of them even completely dismissing it.

Julian | Conference Operator:

Okay?

Dr. Kishore Sindripu | Chief Executive Officer:

But we as a silicon company, we are working with all these companies to offer a CPO, CPO silicon solution. The offering is much more analog intensive when you go CPOs and less on the mixed signal side, less digital intensive.

David Williams | Analyst, Benchmark Company:

Okay? Great color. Thanks again. Yep.

Julian | Conference Operator:

Thank you. And our next question comes from the line of Carl Ackerman with BNP Paribas. Please proceed with your question.

Carl Ackerman | Analyst, BNP Paribas:

Yes, thank you. I was hoping you could discuss which areas you've seen the most improvement in order visibility, just given the fact of the beat and raise this quarter. And in particular, with the second major Tier 1, you know, U.S. carrier ramping your integrated pond and Wi-Fi gateway SOC, is this where you have the strongest visibility and confidence in order recovery or other areas as well? Can I have a follow-up, please?

Dr. Kishore Sindripu | Chief Executive Officer:

You know, across the board, really, if the uncertainty is there, it's really about the call timings or optical when we get through each call. But that really is sometimes like a whiplash. It goes, you know, and that's where the uncertainty is in the forecasting. But having said that, we put a stake in the ground saying we feel good that we'll get to that $60 to $70 million revenue for the year in our data center revenues. Otherwise, across the board, we have very good visibility. And I would say that's got nothing to do with the new design lean that we have in broadband.

Carl Ackerman | Analyst, BNP Paribas:

Yep. Understood. Thank you. And for my follow-up, you know, you mentioned again just some of the opportunities you've seen in front of you with regard to your Panther family of hardware SOCs, storage hardware SOCs. I was hoping you could discuss the breadth of WINS. and the visibility that you see there because it does appear to be picking up. So, if you could discuss that, that would be helpful. Thank you.

Dr. Kishore Sindripu | Chief Executive Officer:

So, you know, we have been investing in this Panther storage compression and hardware accelerators for both storage compression, decryption, and security. for a while now, and, you know, it's again one of those heavy duty, you know, like a lot of validation drops, just like any high-end infrastructure product is going to be. But we got a number of proof of concept design means complete, a number of major players in enterprise who are now incorporating, and the only one we have talked about publicly is the Dell PowerMax platform, but it's proliferating across various competitors in the storage appliance market. Having said that, we have just started initial forays and proof of concept at cloud compute hyperscale data center companies as well, and I'm very pleased with the receptions having the dose, so I hope to break into one of those as well. So, and then, obviously, this product was, you know, the cloud data center is evolving very, very rapidly, and the specification requirements also evolve very rapidly. So we're really engaged in making sure the next generation offering has got all the bells and whistles that is perfectly and beautifully tuned for the cloud data centers. Having said that, it's a strong pipeline. And I say that again, next year, we're going to maybe triple the revenue of this year, range 2x to 3x. And I said the product line definitely in two or three years will be 75 to $100 million based on the offerings we know now. But with the proof of concept traction we have, could it be double that? I really hope so. But I just want to save the verdict for a little bit more time. Okay?

Carl Ackerman | Analyst, BNP Paribas:

Thank you.

Julian | Conference Operator:

Thank you. And our next question comes from the line of Suji Da Silva with Roth Capital Partners. Please proceed with your question.

Suji Da Silva | Analyst, Roth Capital Partners:

Hi, Kishore. Hi, Steve. Thanks for the progress here. In the high-speed interconnect, if I heard you correctly, I think you talked about your optical module customers exploring AEC opportunities. I'm wondering if you have a roadmap to support any effort they're doing in terms of moving to either copper or from the front end to the back end, or any thoughts there as to your roadmap and how that could play?

Dr. Kishore Sindripu | Chief Executive Officer:

So, gee, yes, absolutely. I mean, all our products – are designed to handle now the AAC requirements, and they've always been. However, so far, AACs have been super niche-y, so it's like a watch-and-go sort of environment. However, by the time you, but now, you know, it is really, it really remains to be seen, you know, who are the ones who adopt AACs beyond. I believe that even though optical transceiver companies are looking at it and try to keep their options open, so they're now working towards creating their own AECs and ACCs and so on. So we are readily able to support them. And remember that power is incredibly important. You can imagine an end-to-end copper cable. And, you know, you don't have all the fancy coolings and everything that others can do in an optical transceiver module. This is really, really power-consumption-sensitive product. And we always say Max Vigna's reason for existence is low power, low power, low power, and high speed. And I think it's a perfect application. Hopefully, it becomes a big application. But right now, we are just doing the cockroach thing, laying eggs that will become cockroaches later, so to speak, you know, the survivor of the longest time. Sorry, I got carried away. But, yes, we are engaged in this product line. Okay?

Suji Da Silva | Analyst, Roth Capital Partners:

Yeah. And then a quick question on Panther. I figured you mentioned enterprise quite a bit there. I'm just curious if there's an application for Panther as well to AI infrastructure. Sure.

Dr. Kishore Sindripu | Chief Executive Officer:

Absolutely. Very, very, very, very much so. Look, if you think of Panther, what are the biggest drivers for AI scenarios right now? Power, power, power is one part. Memory, memory, memory. We talk of high bandwidth throughput memories. How do you get more out of the HBMs? How do you relieve the bottlenecks that happens in the connection to these memories, right? And all of these are incredibly important. And latency is super important. So, an audio offload, some level of inline compute, right? These are all very, very important factors. And I don't think there is a more sweeter place for storage accelerators and smart storage accelerators than AI, actually. So, however, it will require some level of futuristic sort of engagements and repositioning of the product features. So I think that this is going to be very, very important and for AI is very, very valuable. Having said that, small cloud service providers right now are actually, one of them is already using it. There's one more is about to use it. And there's some big guys are looking at it as well. So I think it's very, very, very, very conceivable that it's going to become a pretty AI-centric product as well. And I will not be surprised if the biggest AI system solution providers, are not doing one of these things themselves as well, internally. I don't see why they won't be doing it, really, frankly. That's my own conjecture. So we feel very good that we will be in a leadership position in this project.

Julian | Conference Operator:

Thanks, Kishore. And our final question comes from the line of Tore Svanberg with Stifel. Please proceed with your question.

Torrey Sponberg | Analyst, Stifel:

Yeah, sure. I just had two follow-ups. The first one, and it's kind of related to the last question there, you know, your infrastructure, especially on the data center side, your two main competitors are building more and more custom silicon. And, you know, as we think about rack-level infrastructure, I'm just curious, you know, are you sort of getting pulled into, you know, potentially developing any sort of custom technology at this point, or are you, you know, still very much focused on shipping infrastructure? commercial products.

Dr. Kishore Sindripu | Chief Executive Officer:

Okay. I guess your second question will come later. Let me answer the first question here. Look, one of the most important, what does our incumbents have as an advantage? They're already suppliers to these guys, and they have these qualifications that are beyond interconnects, right? So for us, too, it's the same credit path we are right now. establishing credibility with our interconnects, and we are showing various colors of all the technologies we bring. Nobody can dispute the breadth of our technology platform in depth, but I think that's the dazzle, right? We are engaged with them, but right now from a scale positioning point of view, we are not doing any custom silicon like one of our competitors is doing. However, we are customizing or offering to the differentiation requirements that these guys are looking forward to. I think it's very, very different. We do not have an internal custom AC business yet. We are still a standard product offering. However, the standard – product offering comes with some custom features for certain customers. And so I would differentiate that customization from the custom basic business that you are asking. Having said that, we have recently loaded up on some, you know, leadership here to do business development work to get business beyond the interconnect. Because if you really think about it, interconnect is a bookended solution. And the interest having a third player in the system cannot just be for the bookended solution. It has to be for something even more of a strategic vendor, and I think that's what we are working towards right now is to be really a broad-based strategic partner for these hyperscale data centers so that buying interconnect is just a fait accompli. It's not really the be-all, end-all for the company. That makes sense. Thank you. Thanks, Trey.

Julian | Conference Operator:

Thank you.

Dr. Kishore Sindripu | Chief Executive Officer:

With that, I want to thank everyone for this call today. As you have seen, we are really excited about where things are headed now, the recovery in our business, generating strong positive cash flow now moving forward. And further, in this quarter, we're presenting a number of financial conferences, virtual events. I'm sure we're We'll meet again, and the details of these events will be on our investor relations page with that. Thank you very much, and look forward to the next meeting. Thank you. Bye.

Julian | Conference Operator:

Thank you. And with that, this does conclude today's teleconference. We thank you for your participation. You may now disconnect your lines.