

TTM Technologies, Inc. (TTMI) Q2 2024 Earnings Call Transcript

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Q2: 2024-07-31 Earnings Summary

EPS of \$0.39 [beats by \\$0.05](#) | Revenue of \$605.14M (10.73% Y/Y) [beats by \\$25.36M](#)

TTM Technologies, Inc. ([NASDAQ:TTMI](#)) Q2 2024 Earnings Conference Call July 31, 2024 1:00 PM ET

Company Participants

Sameer Desai - IR
Thomas Edman - CEO
Daniel Boehle - CFO

Conference Call Participants

Jim Ricchiuti - Needham & Co
Matt Sheerin - Stifel
Mike Crawford - B. Riley Securities
William Stein - Truist Securities

Operator

Good afternoon, thank you for standing by. Welcome to the TTM Technologies Inc. Second Quarter 2024 Financial Results Conference Call. During today's presentation, all parties will be in a listen-only mode. Following the presentation the conference will be open for questions. [Operator Instructions]. As a reminder, this conference is being recorded today July 31, 2024.

Sameer Desai, TTM's Vice President of Corporate Development and Investor Relations will now review TTM'S disclosure statement.

Sameer Desai

Thank you. Before we get started, I would like to remind everyone that today's call contains forward-looking statements, including statements related to TTM's future business outlook. Actual results could differ materially from these forward-looking statements due to one or more risk and uncertainties, including the risk factors that we provide in our filings with the Securities and Exchange Commission, which we encourage you to review.

These forward-looking statements represent management's expectations and assumptions based on currently available information. TTM does not undertake any obligation to publicly update or revise any of these forward-looking statements whether

as a result of new information, future events or other circumstances, except as required by law.

We will also discuss on this call certain non-GAAP financial measures such as adjusted EBITDA. Such measures should not be considered as a substitute for measures prepared and presented in accordance with GAAP and we direct you to the reconciliation between GAAP and non-GAAP measures included in the company's earnings release, which is available on the Investor Relations section of TTM's website at investors.ttm.com. We've also posted on that website a slide deck that we will refer to during our call.

I will now turn the call over to Tom Edman, TTM's Chief Executive Officer. Please go ahead, Tom.

Thomas Edman

Thank you, Sameer. Good afternoon and thank you for joining us for our second quarter 2024 conference call. I'll begin with a review of our business highlights from the quarter and a discussion of our second quarter results, followed by a summary of our business strategy. Dan Boehle, our CFO will follow with an overview of our Q2 2024 financial performance and our Q3 2024 guidance. We will then open the call to your questions.

Highlights of the quarter's financial results are summarized on Slide 3 of the earnings presentation posted on TTM's website. We delivered a strong quarter and I would like to thank our employees for their hard work and contributions in support of these results.

In the second quarter of 2024, non-GAAP earnings per share were above the guided range and demonstrated solid year-on-year growth due to higher revenues and improved operating execution. Revenues were above the guided range, representing the second consecutive quarter of year-on-year growth due to demand strength from our aerospace and defense and data center computing end markets, the latter being driven by generative AI.

The growth in revenues was partially offset by year-over-year declines from our medical, industrial and instrumentation, automotive and networking end markets. Though these markets did see sequential improvements. Overall, the company book-to-bill was 1.11 with the A&D book to bill at 1.26. Demand in our aerospace and defense market, which was 45% of revenues for the quarter continues to be strong, and we now have a record program backlog of approximately \$1.45 billion.

I would now like to provide a strategic update. TTM is on a journey to transform our business to be less cyclical and more differentiated. Over the past several years, TTM has consistently demonstrated that a key part of our strategy is to add value to the product solutions that we deliver to our customers, particularly in the aerospace and defense market. As a result of strategic transactions in the aerospace and defense end market through the acquisitions of Anaren and Telephonics. Over 50% of our revenues in aerospace and defense are now generated from engineered and integrated electronic products, with PCBs contributing less than 50% overall.

Another important element of our differentiation strategy is our investment in a new state-of-the-art, highly automated PCB manufacturing facility in Penang, Malaysia to service customers in our commercial end markets. This new facility in Malaysia is supporting customers in markets such as data center computing, networking and medical industrial and instrumentation. We continue to make progress ramping volume production as we manage through ongoing customer audits and qualifications. In several cases, customer qualifications are taking longer than originally expected, though we are making steady progress. We expect our Malaysia facility to register limited revenues in the third quarter, as we continue our production ramp.

I'd also like to update you on the consolidation of our manufacturing footprint. We previously announced our plan to close three small manufacturing facilities in order to improve total plant utilization, operational performance, customer focus and profitability. During the course of 2023, PCB manufacturing operations in Anaheim and Santa Clara, California and Hong Kong were closed and consolidated into TTMs remaining facilities. During the second quarter, we sold the Anaheim facility and one of the small buildings we owned in Santa Clara, and we continued to ramp production for the transferred parts at receiving facilities.

Finally, I would like to update you on the previous announcement of our intent to expand our advanced technology capability for the aerospace and defense market through the construction of a new facility immediately adjacent to our existing Syracuse New York campus. This new facility will focus on specialized high technology PCB production, providing customers with reduced lead times and a significant increase in domestic capacity for ultra-high HDI PCBs in support of increasing national security requirements for high technology PCBs. We have broken ground for the new building and expect initial low-rate production within 18 to 24 months.

As previously announced, we expect the investment for Phase 1 of the proposed project, including capital for campus wide improvements to be in the range of between \$100 million to \$130 million. Final capital investment commitments will be determined after finalizing terms with various stakeholders.

Now, I'd like to review our end markets which are referenced on Page 4 of the earnings presentation on our website. The aerospace and defense end market represented 45% of total second quarter sales compared to 47% of Q2 2023 sales and 46% of sales in Q1 2024. The solid demand in the defense market is a result of a positive tailwind in previous defense budgets, including supplemental funding related to conflicts in Ukraine and Israel. Our strong strategic program alignment and key bookings for ongoing franchise programs. We had a strong booking score with a book-to-bill ratio of 1.26 leading to a record A&D program backlog of approximately \$1.45 billion at the end of the second quarter.

During the quarter, we saw significant bookings for TPS-80 G/ATOR, MH-60R and a key restricted program. We expect sales in Q3 from this end market to represent about 45% of our total sales. Bookings in the aerospace and defense market ship over a

longer period of time than in our commercial markets, and provide good visibility into future revenue growth.

Sales in the data center computing end market represented 21% of total sales in the second quarter compared to 12% in Q2 of 2023 and 21% and the first quarter of 2024. This end market performed better than expected, and saw 93% year-on-year growth to reach an all-time high due to strength from our data center customers, building products for generative AI applications. We expect revenues in this end market to represent 21% of third quarter sales.

The medical industrial instrumentation end market contributed 14% of our total sales in the second quarter compared to 16% in the year ago quarter, and 14% in the first quarter of 2024. The year-over-year decline was generally the result of lower demand and ongoing inventory normalization, particularly in the industrial area. However, the industrial market did improve sequentially. In addition, the medical market remained stable and we saw pockets of improved demand from our semiconductor testing customers as generative AI drove growth in the DRAM market, leading to increased purchases of automated test equipment.

For the third quarter, we expect the medical industrial instrumentation end market to be 14% of revenues. Automotive sales represented 14% of total sales during the second quarter of 2024 compared to 17% in the year ago quarter, and 13% during the first quarter of 2024. The year-over-year decline for automotive was due primarily to continued inventory adjustments and soft demand at several customers. However, we experienced solid sequential growth in Q2 tied to inventory normalization and improved demand for internal combustion engine and ADAS applications. We expect our automotive business to contribute 14% of total sales in Q3.

Networking accounted for 6% of revenue during the second quarter of 2024. This compares to 8% in the second quarter of 2023 and 6% of revenue in the first quarter of 2024. We saw sequential growth due to recovering demand from certain networking customers. On a year-on-year basis, demand was softer as customers continue to focus on inventory digestion and experience weak end market demand. In Q3, we expect this end market to be 6% of revenues.

Next, I'll cover some details from the second quarter. This information is also available on Page 5 of our earnings presentation. During the quarter, our advanced technology and engineered products business, which includes HDI, Rigid-Flex, RF Subsystems and Components and engineered systems, accounted for approximately 45% of our revenue. This compares to approximately 43% in the year ago quarter, and 48% in Q1. We are continuing to pursue new business opportunities and increase customer design engagement activities that will leverage our advanced technology and engineered products capabilities in new programs and new markets.

PCV capacity utilization in Asia Pacific was 64% in Q2 compared to 46% in the year ago quarter, and 52% in Q1. Utilization rates improved as data center demand continues to be strong and other commercial markets started to rebound. Our overall PCV capacity

utilization in North America was 39% in Q2 compared to 38% in the year ago quarter and 38% in Q1.

As a reminder, North America utilization figures are not as meaningful as Asia Pacific, because bottlenecks in these high mix low volume facilities tend to occur in areas outside of plating, which is the core process that we use for calculating utilization rates. Our top five customers contributed 42% of total sales in the second quarter of 2024 compared to 40% in the second quarter of 2023. We had one customer with over 10% of our total sales in the quarter.

At the end of Q2, our 90-day backlog which is subject to cancellations was \$633.5 million compared to \$556.2 million at the end of the second quarter last year. And as I mentioned earlier, our aerospace and defense backlog increased from \$1.39 billion at the end of Q2 last year to a record of \$1.45 billion at the end of Q2 this year. Our overall book-to-bill ratio was 1.11 for the three months ended July 1st.

Now, Dan will review our financial performance for the second quarter. Dan?

Daniel Boehle

Thanks, Tom, and good afternoon, everyone. I will review our financial results for the second quarter that were included in the press release distributed today and are summarize on Slide 6 of the earnings presentation posted on our website. For the second quarter, net sales were \$605.1 million compared to \$546.5 million in the second quarter of 2023. The year-over-year increase was due to growth in our data center computing and aerospace and defense end markets, partially offset by declines in our automotive, medical, industrial, and instrumentation and networking end markets.

GAAP operating income for the second quarter of 2024 was \$39 million as compared with GAAP operating income of \$21.4 million for the second quarter of 2023. On a GAAP basis, net income in the second quarter of 2024 was \$26.4 million or \$0.25 per loaded share. This compares to GAAP net income of \$6.8 million or \$0.07 per diluted share in the second quarter of last year. The remainder of my comments will focus on our non-GAAP financial performance.

Our non-GAAP performance excludes M&A related costs, restructuring costs, certain non-cash expense items such as amortization of intangibles, impairment of goodwill, and stock compensation, gains on the sale of property and other, other usual or infrequent items. We present non-GAAP financial information to enable investors to see the company through the eyes of management and to facilitate comparisons with expectations and prior periods.

Gross margin in the second quarter was 20% and compares to 19.2% in the second quarter of 2023. The year-on-year increase was due to higher sales volume, particularly in the data center computing end market and improved operational execution. Selling and marketing expense was \$19 million in the second quarter or 3.1% of net sales versus \$17.5 million or 3.2% of net sales a year ago.

Second quarter G&A expense was \$39.4 million or 6.5% of net sales compared to \$35.1 million or 6.4% of net sales in the same quarter a year ago. In the second quarter of 2024, research and development was \$8.2 million or 1.4% of net sales compared with the \$6.2 million or 1.1% of net sales in the same quarter last year. Our operating margin in the second quarter of 2024 was 9% or 60 basis points increase from 8.4% in the same quarter of last year. Interest expense was \$11.7 million in the second quarter of 2024 compared to \$11.3 million in the same quarter last year.

During the current year quarter, there was a positive \$0.5 million foreign exchange impact below the operating income line. Government incentives and interest income totaling \$3.4 million resulted in a net \$3.9 million gain or a \$0.03 positive impact to EPS. This compares to a net gain of \$5.1 million or a \$0.04 positive impact on EPS in the same quarter of last year. Our effective tax rate was 14% in the second quarter, resulting in tax expense of \$6.5 million. This compares to a rate of 17% or a tax expense of \$6.8 million in this end quarter last year.

Second quarter 2024 net income was \$40.1 million or \$0.39 per share. This compares to second quarter 2023 net income of \$33 million or \$0.32 per diluted share. Adjusted EBITDA for the second quarter of 2024 was \$84.6 million or 14% of net sales compared with second quarter 2023 adjusted EBITDA of \$74.7 million or 13.7% of net sales. Depreciation for the quarter was \$26.2 million. Net capital spending for the quarter was \$10 million, reflecting cash inflows of \$29.3 million from the sale of two buildings vacated by the closure of our Anaheim and Santa Clara facilities in 2023.

Cash flow from operations in the second quarter of 2024 was \$41.9 million. We purchased 1.39 million shares of common stock for \$25.1 million at an average price of \$18.09 per share. Cash and cash equivalents at the end of the second quarter of 2024 total \$446.2 million. Our net debt divided by last 12 months EBITDA was 1.4x, below the low end of our targeted range of 1.5x to 2x.

Finally, we anticipate that tomorrow, August 1st, we will close the refinancing of \$346.5 million of a new term loan facility at an interest rate of SOFR plus 2.25%, 50 basis points lower than our previous Term B loans issued in May, 2023.

Upon closing, the new Term B loans will be issued at par and maintain the same maturity of May, 2030. We anticipate using the proceeds from the new term loan Facility to refinance \$346.5 million of such outstanding indebtedness. We have used cash on hand to pay fees and expenses of approximately \$1 million related to the refinancing activity. Once finalized, the new financing is expected to generate annual interest savings of approximately \$1.7 million.

And now I will turn to our guidance for the third quarter. We project next sales for the third quarter of 2024 to be in the range of \$580 million to \$620 million and non-GAAP earnings to be in the range of \$0.37, \$0.43 per diluted share, which is inclusive of operating costs associated with starting up our Penang facility. The EPS forecast is based on a diluted share count of approximately 103 million shares, which includes the dilutive effect of outstanding stock options and other stock awards. We expect SG&A

expense to be about 9.8% of net sales in the third quarter, and R&D to be about 1.4% of net sales. We expect interest expense of approximately 11.3 million and interest income of approximately 2.6 million. We estimate our effective tax rate to be between 10% and 14%.

Further, we expect to record depreciation of approximately \$26.2 million, amortization of intangibles of approximately \$9.3 million, stock base compensation expense of approximately \$8.4 million, a non-cash interest expense of approximately \$0.4 million. And finally, I'd like to announce that we'll be participating in the Needham Virtual Industrial Technology Conference August 19 through 20, the Jefferies Semiconductor IT Hardware and Communications Technology Conference in Chicago on August 27, and the Jefferies Industrials Conference in New York on September 4th. That concludes our prepared remarks.

Now, we'd like to open the line for questions. Operator?

Question-and-Answer Session

Operator

[Operator Instructions] Our first question will come from the line of Jim Ricchiuti with Needham & Co.

Jim Ricchiuti

I wanted to go back to the commentary around the utilization in APAC, which it increased fairly meaningfully at least from Q1. And I was hoping you could elaborate on what drove that, how much the contributor that was to the margin improvement, or to the extent it offsets some of the headwinds from Penang. Maybe if you could just give a little bit more color on what you're seeing there.

Thomas Edman

Sure, Jim. You are absolutely right. If you look at the sequential growth in our commercial end markets that was really what was driving the utilization up. And we had pretty much across the board, sequential improvement, but particularly automotive MII and networking. So, whereas last quarter, most of the facilities were really outside of the data center facility. Most our other facilities were relatively low on utilization. We saw the utilization rates climb a bit this last quarter. Certainly, contributor or operating margin in a positive way and helped versus Penang. But Dan any further comments?

Daniel Boehle

Yes, I agree with those comments. Penang was still consistent with last quarter about 180 basis points headwinds to the operating profit this quarter. So to Tom's point, that utilization did offset that which is what we'd expected. But yes, we'll continue to have that headwind, and it's just nice to be able to have the other business offsetting that.

Jim Ricchiuti

And follow up question, I know you guys don't typically guide beyond the quarter, but I wanted to ask about the two areas of the business where I think you have a line of sight,

and that's the A&D business and the data center computing business. As you think about Q4, is there any reason are there, that you wouldn't see continued strength in those areas and on data center, how much customer concentration is there in that sector?

Thomas Edman

Sure. The A&D side, as you said, Jim that that's where we have the best visibility and that program backlog number is a good indicator of the kind of support out there from a booking standpoint. So we have, certainly a good confidence in terms of strength and in defense as we go into the Q4 and really into next year given the program backlog.

When it comes to our commercial markets, a little less so, we have -- we book programs in. I'd say that the second most visibility we usually get is out of auto where we have at least a six month strong forecast that we're working from, and that's supplemented by purchase orders that are placed within the quarter.

Data center computing comes after that. Certainly, program visibility, but programs do shift around. And so in that market, as we look into Q4, I think if you look at certainly the momentum behind generative AI that is a strong indicator for the balance of the year certainly what we hear from our customer base is positive around their expectations. So, I think we remain optimistic in terms of certainly through the course of this year.

I would just to comment on the other end markets, MII networking expected a bit more of an uptick to occur in Q3 heading into the back half of the year that hasn't happened to the extent we expected. So Q4 we'll see certainly inventory situations have improved. That's a positive indicator that we'll at least be seeing real demand there. So that's what we're seeing out there in the markets.

Jim Ricchiuti

Tom, just customer concentration data center, has it changed?

Thomas Edman

Thank you for the reminder on that. The customer concentration does in AI and data center overall remains fairly high. I mean, you really have the hyperscalers and direct chip folks that are driving that demand. So it is a relatively concentrated market remains. So, we have seen a better spread there in terms of customers, but you do still have three, four major customers driving the demand there.

Operator

And now will come from the line of Matt Sheerin with Stifel.

Matt Sheerin

Question regarding a gross margin, you've had two quarters in a row of sequential margin improvement, and it looks like backing into that for a Q3, you're going to have another up quarter. And I know one headwind is the ramping of the production in Penang. And it sounds like that might be pushed out a little bit because of the you're saying qualifications are taking a bit longer. But is that still -- I think you said it was 150

basis point headwind to gross margin. So I'm just trying to figure out, how should we think about gross margins heading into Q4 and next year, once this starts to ramp this starts to ramp or is fully ramped?

Thomas Edman

So this is Tom. Let me start on the Penang status, and then I'll hand over to Dan to talk about the gross margin. In terms of Penang, there are a few things going on there. The facility continues to ramp steadily ramp. We will have revenue in the third quarter. What's happened there in terms of the delay and you're right we are seeing a delay in terms of our breakeven point. We thought that that would come in early Q1. Next year, we're probably going to see about a two quarter delay to get to breakeven there. What is happening is that a couple things our customers' audits are taking longer than expected, particularly the anchor customer audits. That's just a -- that's sort of a outcome of customers now dealing, seeing a greenfield facility.

They are not too familiar with greenfield facilities for high layer count production, and so audit requirements have shifted a bit there. So that's one piece. The other is related to sample qualification and then sample qualification intersection with program ramp. So, always tricky to get that timing right, and so we're working with our customers to synchronize that timing. So that's what's really going on there overall in Penang, good steady progress though in terms of the facility preparation and ramp.

Dan, gross margin.

Daniel Boehle

Thanks, Tom. You mentioned the headwind from Penang. Currently, at the gross profit margin level, it's about 170 basis points in this period. Going forward in the next quarter, we do start seeing some revenue, so it'll decrease to about 160 basis points headwind to gross margin in the third quarter. But yes, we do see still some sequential improvements or at least staying at the level that we're at right now in gross margin in Q3. And that's as we discussed on Jim's question, increased utilization throughout Asia Pacific on the commercial side of the business as well as North America factories have been running at very good utilization rates as well.

As Tom mentioned in his prepared remarks, the way that we measure utilization North America is not as meaningful as it is in Asia Pacific, because it's lower mix or lower volume, higher mix. However, we are doing quite well in our North America factories as far as utilization and efficiency rates. So that's more than offsetting the Penang headwind right now.

Matt Sheerin

And then another question on the data center. One, in terms of visibility there, I know some of the EMS players in that space say they have about six months of visibility, but beyond that is tough. And I know you have multiple customers, so love to get your take there, because we've had several, like strong quarters or are we going to be entering sort of a digestion period at some point?

And then second, if you could talk about the competitive landscape. I know there are just a handful of players with the global abilities to do big volume PCBs for customers. I'm just wondering if you can maybe give us a little bit more color on that competitive environment

Thomas Edman

Sure. On data center, what we're seeing right now, and as you know, when we talk about data center computing, it really is semiconductor demand and data center demand. But what we're seeing right now driven by generative AI is the data center demand, which historically has been about 60% or so of that demand right now is upwards of 87%. So we really are seeing momentum there on the generative AI side.

I think your comment about visibility is very good, Matt, that's approximately what we see as well, is that we can look into Q4, what we're hearing from EMS partners as well as from the OEM. So similar kind of visibility into the six months. Hard to say when and if there'll be a digestive period there. Right now, it is still a really nice demand environment.

In terms of competition, not a lot of changes. We're still seeing major competition out of Taiwan and Korea. A few of the players there whose gold circuits out of Taiwan Unimicron out of Taiwan and then in Korea, [Isoo] continues to be a competitor out of Korea. So those are just some representative names of folks that have the same kind of high layer count and HDI position that that we have in the marketplace.

Operator

One moment for our next question and that will come from the line of Mike Crawford with B. Riley Securities.

Mike Crawford

Now, correct me if I'm wrong, but I believe most of that data center business now is coming out of China, and you don't necessarily expect much of that to move to Panang or is that something that could drive further growth in Panang from what you initially envisioned with that facility?

Thomas Edman

So, a slight distinction there, Mike. You're right. The generative AI demand, which really looks at higher layer count demand, that remains out of our China -- principle China facility in Dongguan, where we have been cross qualifying another facility in China, our Guangzhou facility as well. When it comes to Penang, particularly in the first stages of ramp, the primary customer demand will be coming out of data center computing. But it'll be more of the traditional data center requirements. So you'll be looking at layer counts in the 16 to 18 kind of layer count as the sweet spot that tends towards what we think of as more standard technology versus the advanced technology that's required for the generative AI applications.

So at least in this initial stage, that's going to be the case. Of course, as we look longer term at the Penang facility, and particularly as we get into Phase 2 expansion plans,

we'll be planning to continue that grading capacity there that would allow efficient production of that higher layer count and HDI production as well.

Mike Crawford

And then just shifting gears, I know that last year, at least for the first three quarters, you had extremely high automotive program. Lifetime value wins slowed down a little bit in Q4, really slow in March. And that overall vertical does not seem to have improved very much. Does that still remain weak? And what was the win number in 2Q?

Thomas Edman

Yes, so our win number did improve. We were up to about \$61 million in this most recent quarter that compares to about \$95 million last year. So we are seeing low a lower program win number there. And what's really happening is the customers are not releasing programs. And much of this is related to the shift that we're seeing in that market from EV and a strong emphasis in terms of programs being let for EV. And now customers recalibrating, as they're starting to see more demand for traditional internal combustion engine, less demand than expected -- less demand growth than expected coming out of EV. And so they're looking at their own portfolios, their own designs and sort of taking a step back to reevaluate, as they look at what designs to go forward with. So that's what's been going on there. Mike, I think you're right to call it out as a relatively weak environment in terms of program lease.

Mike Crawford

And then final questions on capital allocation. So you're below targeted leverage. You have \$41 million remaining on your buyback. You have these investments in Malaysia and Syracuse, yet still excess capital deploy. What are the priorities without excess?

Thomas Edman

Sure. We will continue to look at the share buyback. As you mentioned, we have \$41 million remaining there. We did do quite a bit of buy back in Q2 to offset the dilution from our insider vestings of stock. And then we'll continue as well, always looking at the market at opportunities for M&A, as well as whether there's an opportunity to buy back some of our debt. Now we did just as I mentioned in my prepared remarks, we are hoping to close tomorrow on a repricing to decrease the interest expense on that current debt. But as you've mentioned before, there is some benefit to potentially paying net down, but that's not a priority. As you mentioned, we're at the low end of our leverage range, so really we're keeping the powder dry for potential. If there's an opportunity in the M&A market, we're continuing to look at that opportunistically.

Operator

One moment for our next question and that will come from the line of William Stein with Truist Securities.

William Stein

Tom, can you hear me?

Thomas Edman

Sure, can Will.

William Stein

I thought it might be appropriate to take a second and recognize what a great job you guys did in the quarter. It was a very good result both revenue and margins. And we deserve some recognition for that. I wanted to ask about two topics. First, can you remind us with Penang, which end markets are ramping there and whether it still sort of have a vague memory of whether or not this is revenue that's going to transition from another geo that you already have, or whether this is more going to be new incremental revenue. Can you refresh my memory on that, please?

Thomas Edman

Sure can, Will. And thank you for your comment. So when it comes to Penang, our anchor customers there come from, as I mentioned earlier, data center computing. That's one critical end market. The other is medical industrial instrumentation and really the industrial and instrumentation space. And so that's where the end market mix is predominantly coming from. And again, that's 16 to 18 layer sweet spot in terms of layer count.

From a geographic standpoint in the first phase looking at approximately 20% coming out of China that's standard technology that we would be moving out of our predominantly the facility that is extremely busy right now with higher layer count requirements for generative AI. That's been the plan. Will, it's about 20% coming out of China on the balance in new programs. And that balance where you really need to you have a number of programs that are starting up. Customers need to make sure that the intersection between our approval for a program and the program ramp make sure that that timing works. And so that's a very delicate situation for our customers and trying to make sure that they can get the forecast right for these programs as they ramp. And so, a little bit of a moving target there. But again, a lot of really good cooperation with our customers as we look at programs.

William Stein

But Tom, the 80% that's new that's worth lingering on from moment, is that new in the sense of new customers or new programs that you never had? Or should we instead be more conservative when we think about modeling and think, well, this is new, but displacing something that you had in the past, like a new program version, but maybe something that you are already building? Or is this truly new like growth revenue team?

Thomas Edman

The bulk of that 80% is new program positioning coming from our customers and these are existing customers. And what's happening there Will, is, in agreement particularly again with our anchor customers. We didn't do much standard technology, if you will in China. So, this is for us, a market share gain opportunity. As they look at standard technology requirements and looking at non-China sourcing for those. So that's where that 80% is coming from. We are working, by the way on new customers as well. And so

I don't want to neglect that, but in terms of the base business plan and as it's associated with anchor customers, it's predominantly that standard technology opportunity and really a market share gain opportunity for TTM.

William Stein

And one other topic I'd like to hit on. In the past, the aerospace and defense business has been challenged by supply chain issues, labor shortages in, I think, upstate New York, if I recall, maybe supply shortages from semis, there've been a bunch of challenges. Can you remind me where we are in terms of addressing those?

Thomas Edman

Sure. You are absolutely right. If you step back to, let's just say early last year, we were in the midst of some tremendous supply chain challenges over \$20 million in terms of revenue impact from those supply chain challenges to TTM and causing real customer pain. And that was a real critical area of focus for us. We stood up a supply chain organization for our non PCV area, what we call integrated electronics. That was a critical step for us. It's a different supply chain entirely from the printed circuit board area. Really helped those folks have been tremendous working with our vendors. We've also seen, of course, an overall improvement in the supply chain.

So we're most recent quarter, we still have issues but we're down to about \$5 million. And our most prior quarter Q1, we were at about \$8 million to give you a feel for that. So good improvement there. We're still like everyone challenged by labor shortages and that's particularly when we look at incremental labor. Not a huge issue. We're able to source labor, it takes a little while, but we're able to source labor when we're ramping. That's a bit more of a challenge. And if you think about these receiving facilities from our shutdowns, last year as we're bringing labor now into those receiving facilities, that's been more of a challenge with facilities are ramping. So still making progress there. But when you're looking at hiring of let's just say more than 20 operators in a facility, that's when it takes a little bit more time than I'd like to see. But we are making progress there and supply chain. Certainly, still an area of focus but good solid improvements.

Operator

Thank you. I'm showing no further questions in the queue at this time. I would now like to turn the call back over to Mr. Thomas Edman for any closing remarks.

Thomas Edman

Yes, I just wanted to thank everyone, again for joining the call. I wanted to summarize a few of the critical points that we made. First, we delivered non-GAAP EPS and revenues above the guided range. We had solid growth and improved operational performance on a year-on-year basis. We generated healthy cash flow from operations of \$41.9 million. We continued to repurchase stock and maintain a solid balance sheet with a net debt to EBITDA ratio of 1.4, which is below our target range. Finally, we refinanced our term loan resulting and that will close as Dan mentioned, hopefully in the next few days, and will result in a lower interest rate expense for the company going forward.

In closing, I would really like to thank our employees' significant efforts in the quarter there. I also want to thank our customers and certainly all of you, our investors for supporting TTM. Thank you very much for joining this call. Goodbye.

Operator

This concludes today's program. Thank you all for participating. You may now disconnect.