25 July 2024

2024 | Q2 EARNINGS CALL

TERADYNE

Thank you. Good morning everyone and welcome to our discussion of Teradyne's most recent financial results. I'm joined this morning by our CEO Greg Smith, and our CFO Sanjay Mehta. Following our opening remarks, we'll provide details of our performance for the second quarter of 2024 and our outlook for the third quarter of 2024. The press release containing our second quarter results was issued last evening. We are providing slides, as well as a copy of this earnings script, on the investor page of the Teradyne website that may be helpful in following the discussion. Replays of this call will be available via the same page after the call ends.

The matters we discuss today will include forward-looking statements that involve risk factors that could cause Teradyne's results to differ materially from management's current expectations. We caution listeners not to place undue reliance on any forward-looking statements included in this presentation. We encourage you to review the Safe Harbor statement contained in slides accompanying this presentation, as well as the risk factors described in our Annual Report on Form 10-K filed with the SEC. Additionally, these forward-looking statements are made only as of today.

During today's call, we will refer to non-GAAP financial measures. We have posted additional information concerning these non-GAAP financial measures, including reconciliation, to the most directly comparable GAAP financial measures, where available, on the investor page of our website. Looking ahead, between now and our next earnings call, Teradyne expects to participate in technology- and industrial-focused investor conferences hosted by KeyBanc, Evercore, Jefferies, Citi Group, and Goldman Sachs.

Following Greg and Sanjay's comments this morning, we'll open up the call for questions. This call is scheduled for one hour. Greg.

Greg Smith, CEO

Thank you, Traci. Good morning everyone and thanks for joining us. Today I will summarize our second quarter results and discuss the trends we are seeing in the semiconductor and advanced robotics industries, then Sanjay will go into more depth about our second quarter results and forward-looking guidance.

At a high level, the market dynamics that we identified in our April earnings call have continued through the second quarter. Cloud AI is driving strong demand across the SOC and memory test markets. We have accelerated engineering and sales investments to continue to improve our market position, drive share, and increase our ability to deliver long-term sustainable growth. Outside of compute and memory, all other major test markets, including mobile, continue to be soft.

Robotics has delivered on-plan results in a weak macro environment and we continue to expect incremental growth each quarter of this year.

Focusing in on Q2. We delivered second quarter financial results above our revenue, gross margin, and earnings guidance ranges. Memory and SOC delivered above our plan and showed strong performance in the quarter, primarily driven by AI applications.

Continuing the trend we noted in the first quarter, cloud AI demand drove compute revenue, with considerable strength in networking devices. AI-enabled data centers have a very high number of network connection points to support training large language models, which is changing the mix in this segment to include more networking silicon. Our historic strength in networking combined with shipments to support a Vertically Integrated Producer, or VIP, resulted in compute revenue in the first half of 2024 exceeding all of our compute revenue in 2023.

We currently expect that Teradyne's SOC revenue from the compute end market will be on par with mobile revenue this year.

In memory, AI-driven HBM DRAM demand remains strong. We are now seeing AI-driven servers pulling demand across a broader range of memory, including enterprise SSD NAND flash. We are also seeing memory demand for the mobile market, with strength in LP DDR and continuing retooling to support the latest protocol-based mobile flash memory technologies. As a result, our memory business has grown nearly 30% in the first half of 2024 compared to the first half of 2023. While we are not changing our estimated memory TAM expectation for the year, we expect that the market is trending towards the upper end of our $1.2 to $1.3B forecast.

Moving on to Q3. The positive impact of AI on test is expected to continue into the third quarter. However, a meaningful uptick in other end markets, including legacy auto and industrial may not occur until the 2025 timeframe. As a result, at the company level, for the full year, we continue to expect low single-digit revenue growth from 2023. As a reminder, excluding the impact of the sale of DIS to Technoprobe, our 2024 revenue growth would have been a couple percentage points higher.

Now turning to robotics. Despite a weak macro environment, our advanced robotics business grew sequentially from Q1 to Q2. Looking at the first half of 2024, we grew 11% compared to the first half of 2023. We estimate that traditional players in the automation space have seen sales actually decline in the range of 5-7% over the same period.

We are executing a three-pronged growth strategy for our advanced robotics business: SAM expansion, channel transformation, and recurring services & software. In the second quarter, we have made progress in all three areas.

First, SAM expansion. Our new, high-payload cobots, the UR20 and UR30, began shipping late last year. In Q2 of 2024, these products represented over 20% of UR sales. The new, AI-powered MiR1200 Pallet Jack was announced in the first quarter and will begin shipments in Q4 of this year. This product includes a market-leading pallet detection solution developed in collaboration with NVIDIA and has been well-received by target manufacturing and logistics customers, resulting in significant backlog for Q4 shipment.

Our highest priority in our robotics go-to-market transformation is the development of an OEM solutions channel for UR. We have seen that customers purchasing cobot-based solutions from these partners get into production more quickly and have fewer problems than customers that build their own solutions or rely upon an integration partner. There are two aspects to the OEM channel strategy. The first is signing up new OEM solution partners. In the first half of 2024, we have increased the total number of OEM solutions partners by 8%. Second, we work with these partners to get them to scale, which we define as having an annual revenue run rate above $1M. Midway through the year, we have nearly as many OEM solution partners that have reached that revenue level as we had in all of 2023. One of our largest revenue OEM partners in the first half of 2024 uses our cobots in an AI-based logistics solution. Overall, the OEM solutions channel has shown over 70% growth from the first half of 2023 to the first half of 2024. In the second quarter, the OEM channel represented over 30% of UR's revenue.

Finally, because of the criticality of the processes that our robotics are being used to automate, we saw an opportunity to build a strong service business. In the first half of 2024, we launched managed service offerings at UR and MiR and are beginning to see customer uptake.

On balance, the positive effect of these growth vectors and the challenging demand environment, we are expecting growth towards the low-end of this year's target 10-20% range.

Last quarter, I shared the idea that AI would be a transformational secular growth driver across Teradyne's businesses.

In the first half of 2024, we saw the considerable AI-driven growth in memory, networking, and ramps of Vertically Integrated Producers, but we think that this is just the beginning. We believe that a larger opportunity lies ahead as inference applications and edge AI begins to permeate the mobile and industrial end markets, markets where Teradyne is traditionally strong.

We are also already seeing the impact of AI on our robotics business with AI-powered OEM solutions for UR and a strong backlog for our AI-enabled pallet jack. We believe that we are well-positioned as a leading platform for the development of AI-based solutions for manufacturing and logistics.

We are seeing AI-driven growth now, and we expect AI to be an overarching growth driver for years to come: in test and in robotics. With that, I'll turn the call over to Sanjay. Sanjay.

Sanjay Mehta, CFO

Thank you, Greg. Good morning, everyone. Today I'll cover the financial summary of Q2, provide our Q3 outlook and planning assumptions for the full year.

Now to Q2. Second quarter sales were $730M, which was $5M above the high end of our guidance with non-GAAP EPS of $0.86, which was above our high-end guide of $0.84. Non-GAAP gross margins were 58.3%. This was above our guidance due to higher volumes and product mix. Non-GAAP operating profit was approximately 22%.

Turning to our revenue breakdown in Q2. Semi Test revenue for the quarter was $543M with SOC revenue contributing $414M and memory $129M. Strength in SOC was driven by both compute and mobile. Memory test shipments were driven by technology tooling for the new UFS 4.0 standard in mobility. While the broader auto industry remains sluggish, we benefitted from a VIP with a large purchase in this segment reflecting edge AI's impact on the auto market. In memory, we continue to expect DRAM to dominate the memory mix. We have significant backlog for HBM, enabling strength in the memory market driven by AI.

We closed the sale of our Device Interface Solutions business – or DIS – to Technoprobe on May 27th. DIS contributed $16M to our revenue in the quarter, consistent with our expectations.

In system test group, Q2 revenue was $61M with $17M in storage test on low SLT and HDD demand. Recall, SLT has high exposure to the smartphone market, and even as HDD end markets begin to recover, tester utilization remain low.

In wireless test, revenue was $36M in Q2, improving as expected, due to gaming and the initial ramp of Wi-Fi 7.

Now to Robotics. For the 4th quarter in a row, we executed to our revenue plan in Robotics. Revenue was $90M, up sequentially and increased 26% year-over-year. In the quarter, UR contributed $75M and MiR contributed $16M.

Given the potential changes in the regulatory environment involving China, we thought it would be helpful to provide some insight into our revenue exposure in that region. Year to date, approximately 10% of our total company sales were shipped to China. This includes shipments to indigenous and multinational customers. Total sales to indigenous customers were less than 5% in the first half of 2024. This is consistent with the full year of 2023. Our team continues to service our customers in this market while complying with all regulations.

Shifting to some cash metrics. At a company level, our free cash flow was $171M in the quarter. Strong free cash flow in the quarter was primarily driven by earnings and net working capital improvements. We repurchased $8M of shares in the quarter and paid $19M in dividends. We ended the quarter with $584M in cash and marketable securities. The completion of the Technoprobe transactions resulted in a net cash outlay of $434 million and resulted in a 10% equity stake in Technoprobe.

Some other financial information in Q2. We had two 10% customers in the quarter. The tax rate excluding discrete items for the quarter was 14.25% on a GAAP basis and 15.0% on a non-GAAP basis.

Now to our outlook for Q3. Q3 sales are expected to be between $680M and $740M with non-GAAP EPS in the range of $0.66 to $0.86 on 164 million diluted shares. GAAP EPS is expected to be in the range of $0.62 to $0.82.

Some color on our Q3 revenue expectation. In our April call, our mid-guide for Q2 was $695 million, and we noted that the third quarter would be flattish. Our second quarter revenue came in higher than we forecasted on the heels of strong demand in our Semi Test business. Our third quarter revenue forecast of $710 million at the mid-point, is now higher than it was 90 days ago.

Third quarter gross margins are estimated at 58.5-59.5%, and OPEX is expected to run at 38-40% of third quarter sales, up from Q2. As Greg discussed, we are acting on opportunities to accelerate investments that we believe will drive share and long-term sustainable growth. The non-GAAP operating profit rate at the mid-point of our third quarter guidance is 20%.

Our total semiconductor ATE TAM estimates remain unchanged from our view in April. However, we made some slight adjustments within the segments. We have included a slide in the appendix of our earnings deck with this information. Recall our SOC TAM range is $3.6 to $4.2 billion, with a midpoint of $3.9 billion. This is comprised of compute, which we now estimate to be $1.6 billion, up $100 million from our prior estimate. The increase in compute is offset by a reduction in our estimate for mobile, which is down $100 million to $800 million. We estimate auto/MCU at $500 million, industrial at $300 million, and services at $700 million, each at the midpoint of our range. Our estimated memory TAM range of $1.2 to $1.3 billion appears to be tracking towards the high end.

Back to revenue. With our outperformance in the first half of the year, our expectation for revenue distribution for the full year is now less back-half weighted than our view in April. We currently expect around 48% of the company's revenue to be in the first half and 52% in the second half. We expect full year revenue to grow in the low single-digit range compared to 2023. Note that excluding the impact of the DIS divestiture, our full year revenue growth expectation would be nearly 3 points higher.

Now to gross margins. Gross margins have improved through the course of the year and are expected to be at our full target gross margin model by the fourth quarter. Full year gross margins will likely be in the 58-59% range, unchanged from our prior outlook.

Regarding OpEx for the full year. We expect full year 2024 OpEx to grow approximately 8%, which is above our prior guidance of 5-7% as we accelerate investment in opportunities to continue to strengthen our position and gain share.

Turning to Robotics profitability. As Greg noted, we expect to grow revenue towards the low end of our 10-20% range. We expect Robotics will be roughly breakeven in 2024.

Our GAAP and non-GAAP tax rate, excluding discrete items, are forecasted to be 14.25% and 15.0%, respectively, in 2024.

With regard to capital allocation, we will continue to target our share buybacks in 2024 to an amount necessary to offset dilution from equity compensation and our employee share purchase program in order to build cash back up to $800M.

Summing up, we delivered sales and earnings above the high-end of our guidance range as memory and compute revenue exceeded our plan in Semi Test. The mobile, industrial, and legacy auto markets remain soft. Our Robotics team delivered sequential and year-over-year growth, as we continue to execute our new product development and go-to-market strategies. Our company's first half performance gives us confidence that we are on track for the year. Our mid-term fundamentals remain strong and we are investing to capture the opportunities beyond 2024.

With that I'll turn the call back to the operator to open the line up for questions.

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