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MTSI - Q2 2017 MACOM Technology Solutions Holdings Inc Earnings Call

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PRESENTATION

Operator

Good afternoon, and welcome to MACOM's Fiscal Second Quarter Financial Results Conference Call. (Operator Instructions) As a reminder, this conference call is being recorded today, Tuesday, April 25, 2017.

I will now turn the call over to Steve Ferranti, Vice President, Investor Relations, at MACOM. Steve, please go ahead.

Stephen Ferranti

Thank you, Nicole. Good afternoon, everyone, and welcome to MACOM's Fiscal Second Quarter 2017 Earnings Conference Call. Joining me today are MACOM's President and Chief Executive Officer, John Croteau; and Senior Vice President and Chief Financial Officer, Bob McMullan.

If you have not yet received a copy of the earnings press release, you can obtain a copy at MACOM's website at www.macom.com under the Investor Relations section.

Before I turn the call over to John, I would like to remind everyone that management's prepared remarks and answers to your questions contain forward-looking statements, which are subject to certain risks and uncertainties. Because actual results may differ materially from those discussed today, MACOM claims the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

For more detailed discussion of the risks and uncertainties that could result in those differences, we refer you to MACOM's filings with the Securities and Exchange Commission, including its current report on Form 8-K filed today, quarterly report on Form 10-Q filed on February 1, 2017, and Annual Report on Form 10-K filed on November 17, 2016. Any forward-looking statements represent management's views only as of today, April 25, 2017, and MACOM assumes no obligation to update these statements in the future.



The company's press release and management's statements during this conference call will include discussions of certain adjusted non-GAAP measures and financial information, including all income statement amounts and percentages other than revenue referred to on today's call, unless otherwise noted.

These financial measures and a reconciliation of GAAP to adjusted non-GAAP results are provided in the company's press release and related Form 8-K, which was filed with the SEC today and can be found on the Investor Relations section of MACOM's website.

For those of you unable to listen to the entire call at this time, a recording will be available via webcast for at least 30 days in the Investor Relations section of MACOM's website.

And with that, I'll turn over the call to John for his comments on the quarter.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Thank you, Steve. Welcome, everyone, and thanks for joining us today. I'll begin today's call with an overview of our fiscal second quarter results for 2017 and then turn the call over to Bob McMullan, our CFO, who will review our financial performance in further detail. I'll then conclude today's prepared comments by providing a summary of our execution and key highlights during the quarter, followed by an update on our 100-day integration plan for AppliedMicro and guidance for the fiscal third quarter of 2017.

Straight to the results. I'm pleased to report that for our fiscal second quarter of 2017, revenue came in at \$186.1 million, adjusted gross margin was 58.5%, with adjusted earnings coming in at \$0.63 per diluted share.

Looking at our end markets. Networks was up sequentially with and without the contribution of AppliedMicro, growing 46.3% year-on-year, inclusive of the acquisition. Multi-market grew sequentially and was up 19.3% year-on-year, while Aerospace and Defense was also up sequentially, growing 23.3% year-on-year.

Now let me turn it over to Bob to review our fiscal second quarter financials in further detail.

Robert J. McMullan - *MACOM Technology Solutions Holdings, Inc. - CFO and SVP*

Thank you, John, and good afternoon, everyone. I will review MACOM's fiscal second quarter results and financial position. But before, I would like to provide comments on our GAAP fiscal second quarter results and operating cash flow.

MACOM's fiscal second quarter generated a GAAP net loss of \$130.1 million and an EPS loss of \$2.14 per share, respectively. The results include expenses related to the acquisition of AppliedMicro closed on January 26, 2017, including the noncash amortization of inventories stepped up to the fair market value, transaction expenses, certain change in control, payments to former AppliedMicro employees and a noncash valuation reserve of \$88 million for MACOM's deferred tax asset recorded as the majority of the \$89.8 million income tax expense recorded during the second quarter.

Such step-up amortization, transaction expenses and change in control payments are common in acquisitions.

Prior to the AppliedMicro acquisition, MACOM had an \$88 million deferred tax asset balance, representing the estimated after-tax value of U.S. NOLs and other tax credit carryforwards primarily from MACOM's previous acquisitions. The current need for the deferred tax asset valuation reserve and the associated P&L expense during the fiscal second quarter was because of the AMCC acquisition and related expenses and the compute business will cause a MACOM U.S. tax loss in fiscal 2017, adding to other U.S. tax losses over the last few years.

AppliedMicro added an additional \$70 million to the deferred tax asset balance. MACOM, under GAAP rules, had to evaluate the realizability of the total \$158.6 million balance on an all-or-nothing basis with data that can change quarter-to-quarter and year-to-year.

Today, it is influenced by MACOM's previous U.S. tax losses over the past few fiscal years, which led us to record the valuation reserve, reducing the deferred tax asset carrying value to 0. This is an appropriate and diligent way to account for the changing tax environment.

It is important to note that this valuation reserve does not prevent MACOM from utilizing its U.S. NOLs or other tax credit carryforwards over the next decade.

The cash payments from the transaction and change in control expenses were recorded through GAAP operating cash flow, not as part of the investing section of the cash flow statement. These onetime payments totaled \$28.1 million. Adjusting cash flow from operations for the acquisition-related outflows increased the \$400,000 GAAP reported number to \$28.5 million.

Now to the operating results. Revenue in the fiscal second quarter was \$186.1 million, growing 39.3% year-over-year and up from \$151.8 million sequentially. Revenue, including AppliedMicro, Networks was \$140.9 million and 75.7% of total revenues, up 46.3% year-over-year; Multi-market, \$22.9 million and 12.3% of total revenues, up 19.3% year-over-year; and Aerospace and Defense, \$22.3 million and 12% of total revenue, up 23.3% year-over-year.

Of the total network revenue, Optical was \$67.9 million or 36.5% of total revenue and up 9.4% year-over-year. Data center was \$50.6 million or 27.2% and up 268% year-over-year. And other network revenue was \$22.4 million or 12.1% and up 6.8% year-over-year.

Non-GAAP gross profit and gross margin in the fiscal second quarter was \$108.9 million and 58.5% of revenues respectively, compared to \$77.6 million and 58.1% of revenues respectively year-over-year, and \$86.9 million and 57.2% respectively, on a sequential basis.

Adjusted gross margins increased sequentially to improve product mix.

In terms of operating expenses, total non-GAAP operating expenses was \$60.3 million compared to \$45.2 million year-over-year and \$45.9 million sequentially. Adjusted operating expenses were up 33.4% year-over-year and up 31.4% sequentially due to the inclusion of AppliedMicro's expenses for part of the quarter and higher investment levels.

Adjusted R&D and SG&A expenses were \$34.9 million and \$25.4 million respectively, in the fiscal second quarter.

Non-GAAP income from operations and operating margins were \$48.6 million and 26.1% of revenues, up 50% in dollars and 7.4% on a percentage basis respectively year-over-year, and up 18.7% in dollars and down 3.2% or 90 basis points respectively, on a sequential basis.

The operating expenses, including the partial quarter of AppliedMicro versus the timing of its quarterly revenues, caused non-GAAP operating margin to decline which we expect to be a 1-quarter event.

Net interest expense was \$6.7 million. Other income of \$1.9 million represent income from the consulting contract that continues through fiscal 2017, associated with our Automotive business divestment.

Our normalized non-GAAP income tax rate for the fiscal second quarter was 10%, down from the previous 12%, due to the expanding mix of international revenues managed by our offshore entities and lower or no-tax jurisdictions.

As to cash taxes, we had refunds and payments of \$200,000, which essentially netted to 0.

Our fiscal second quarter non-GAAP net income and EPS were \$39.4 million and \$0.63 per fully diluted share respectively, growing from \$25.7 million and \$0.46 year-over-year and \$31.8 million and \$0.57 sequentially.

Non-GAAP net income grew 53.6% year-over-year and 23.9% sequentially. Non-GAAP EPS grew 36.9% year-over-year and 10.5% sequentially.

The share count used to calculate non-GAAP EPS was 62.8 million fully diluted shares.



Adjusted EBITDA, or earnings before interest, taxes, depreciation and amortization was \$56.6 million, up 45.2% from \$39 million in our fiscal 2016 second quarter and up 17.1% from \$48.4 million sequentially.

GAAP cash flow from operations was \$400,000, which included acquisition-related cash payments of \$28.1 million. Cash flow from operations in the fiscal 2016 second quarter was \$19.6 million and \$20.4 million during the first fiscal quarter of 2017.

After deducting capital expenditures and excluding AMCC's acquisition-related payments, adjusted non-GAAP free cash flow was \$17.1 million and 43.7% of non-GAAP net income in the fiscal second quarter compared to \$8.6 million and 33% of non-GAAP net income in the fiscal second quarter of 2016, and \$15.5 million and 49% of non-GAAP net income sequentially.

Turning to the balance sheet. At the fiscal second quarter end, our cash, cash equivalents and short-term investments were \$144.2 million after using a net \$256.2 million to acquire AppliedMicro.

Accounts receivable were \$127.7 million, up from \$112.3 million sequentially. Days sales outstanding was 63 days compared to 67 days sequentially.

Inventories were up to \$139.6 million compared to \$115.2 million sequentially. Inventory turns were 2.2x compared to 2.3x sequentially.

Long-term debt was \$586.2 million, inclusive of capital leases. We also had \$160 million of availability in an undrawn credit line.

Capital expenditures in the fiscal second quarter, which included \$4.4 million of AMCC's related items, was \$11.4 million or 6.1% of revenue compared to \$4.9 million or 3.3% of revenue sequentially.

Depreciation expense for the fiscal second quarter was approximately \$6.2 million as compared to \$5.5 million sequentially. Our investment in capital expenditures exceeded our current levels of depreciation, reducing our free cash flow by \$5.2 million in the fiscal second quarter.

Back to you, John.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Thanks, Bob. Let's dive right into it. Last quarter was a watershed moment for MACOM. We saw a fascinating dichotomy between cyclical weakness in our carrier-based Optical businesses, which was more than offset by strong growth in cloud data centers. This underscored our previous realization that this is, in fact, a separate and distinct growth driver for MACOM in what is arguably the strongest area of secular growth in the electronics industry today, cloud data centers.

Based on that realization, we've made the decision to focus our resources, with top priority on fueling that breakout in what we believe is shaping up to be a predictable high-value growth driver for the company for many years to come.

With rapidly developing backlog, program awards and customer commitments, it's now clear that 100G and greater Optical connectivity in data centers is real and it's far bigger and far sooner than anyone in the industry has predicted, including us.

In aggregate, revenue from our network businesses grew sequentially as well as year-on-year, with and without the contribution of AppliedMicro. Global demand in metro and cloud data centers more than made up for very strong headwinds in Chinese carrier-based deployments in PON and provincial networks.

Once again, this highlights the virtue of our diversification strategy across regions, end markets, channels and products, which has once again delivered growth despite choppiness in notoriously cyclical carrier deployments.

Last month at OFC, we observed a distinct transition from a carrier-centric to a cloud-centric focus for the show. That included MACOM. For those who attended OFC, it was readily apparent from our announcements and our product demonstrations that MACOM is well positioned with a

portfolio spanning high-performance analog, lasers, silicon photonics, optical subassemblies and mixed-signal PHYs across all protocols and form factors. We're now being sponsored, actively pulled by top cloud data center customers, to provide various solutions through various customers and channels to fulfill what we expect will be insatiable demand for connectivity for many years to come.

Personally, I haven't seen such a breakout in our part of the industry since the advent of digital handsets and smartphones decades ago. It's shaping up, yes, to be that big.

Having now sat at the architectural table with these major cloud customers, thanks to the AppliedMicro acquisition, and having shared our vision for delivering requisite technology and economics, we believe MACOM is well positioned to meet the requisite capacity, supply chain flexibility and pace of innovation that carrier-centric optical players have not delivered to date.

It looks like we're facing an extremely supply-elastic market. Not price-elastic, supply-elastic. Unit demand in cloud data centers will outstrip carrier demand by orders of magnitude.

Assuming supply at the right capacity and economics, whatever we can produce, and for that matter, what everyone else in the industry can produce at the right costs, will be deployed post-haste.

Long-term share will be determined by short-term operational execution. Better yet, the cloud data center is a North American phenomenon that's governed by Moore's law and fuels hyper growth in cloud-based economies. By comparison, cyclical carrier budgets invest at a more deliberate pace and are governed by public policy, which has proven time and again to be unpredictable. A great example today is China. For that reason, we view cloud data centers as a long-term sustainable, high-value market that we are well positioned to service with high-performance analog, mixed signal and photonic semiconductors.

Given that this market is currently and perhaps perpetually insatiable in demand for greater bandwidth density, we've made the decision to focus operational resources on maximizing MACOM's short-term share capture in this market above all else, thereby maximizing short-, medium- and long-term value to our shareholders.

Operational execution and ramping MACOM production will be paramount over the coming months and quarters, so top-down focus and prioritization is key.

Diving deeper into data centers, we had another breakout quarter with 70.3% year-on-year growth, excluding any contribution from AppliedMicro. Including AppliedMicro, data centers is now 27% of total revenue. It's now the single-largest end market we service, and it's poised to be our strongest growth driver as well.

There were 3 major developments last quarter in the space. First, our high-performance analog products enabled more than 1.6 million ports in the first half of this year. That's up from 1 million for all of last year. This includes everything from laser and mixer drivers, to CDRs and TIAs, across all standards, from SR, PSM4, CWDM4, and LR4, servicing all major cloud service providers.

Second, we saw a meaningful revenue contribution from 25GB lasers into 100G transceivers. Given the supply elasticity in this market, we've made ramping 25G laser production our top priority from a factory qualification and operational standpoint.

The long-term economic potential of our Etched Facet lasers and self-aligned Etched Facet L-PICs cannot be overestimated. Short-term execution is therefore imperative.

Third, at OFC, we showcased production units of our quad L-PICs for CWDM and 400GB PAM4 as well as our full complement of 400GB PAM4 products spanning PHYs lasers, L-PICs, drivers and TIAs. We're now working across all customers and channels and delivering these leadership solutions for the major cloud service providers.

At this juncture, visibility is good into short-term growth in data centers, with strong backlog and order intake, which we believe will continue to drive growth for the foreseeable future.

We will prioritize operational resources on cloud data centers, which we expect can more than offset any weakness or cyclicity on the carrier side of the business.

So moving over to those Optical businesses. PON remained weak during the quarter, and market demand and inventory challenges persist as we enter Q3 with poor visibility. We remain cautious in our outlook for PON for next quarter.

Our value proposition and market position with Etched Facet lasers remains intact. Our goal at this juncture is to sustain unit share and maximize gross margin dollars and percentage until 10G PON ramps materially, which we expect to see in 2018.

Metro/Long-haul, revenue was up sequentially and up 80% year-on-year.

Strength in metro and additional share gains in other regions more than offset the decline in China.

Looking back, there was clearly an inventory build in the December quarter in anticipation of Chinese provincial deployments that have now pushed out. We began to see a correction last quarter, which we expect will become more pronounced in the June quarter.

To close out my comments on our Optical and data center businesses, last quarter was a great example of the benefits of our diversification strategy and not falling into the trap of servicing the captive needs of one standard, one region, one part of the network or one transceiver supplier. We're taking share aggressively, and we believe we're uniquely positioned in the highest growth segments of our end markets.

MACOM's ability to deliver the capacity, supply chain flexibility and pace of innovation that's necessary at the right cost structure is cementing our preeminent position as the supplier of choice across our target markets.

Now touching briefly on A&D and MMICs. Last quarter, MMIC revenue across all of our end markets was up sequentially and grew 76% year-on-year. We continue to fill a void in the marketplace that's been left as competitors undergo consolidation. Our A&D business in total grew sequentially last quarter and was up 23.2% year-on-year. While we have healthy nonperishable backlog to realize our full growth aspirations, qualifications of certain high-rel space products are taking longer than anticipated. Again, demand in backlog remains very healthy in this business, so we expect to fully deliver EPS and shareholder value as anticipated, albeit over a slightly longer period.

With that, let's touch on GaN. We're right on schedule and squarely fixated on completing qualifications for 900 megahertz and 1.8 gigahertz customer programs in the June time frame. Again, these are mainstream programs in frequency bands servicing the heart of macrocell base station production today.

Last quarter, we broadened those engagements and today have line of sight to more than 20 additional programs, from 900 megahertz to 3.5 gigahertz, at just our first 2 lead customers, with production scheduled in the December to February time frame.

At this juncture, our ability, and for that matter, our customers' ability to execute operationally will determine the magnitude and slope of the GaN revenue ramp at major base station customers over the coming quarters and years.

Before I close, I'd like to provide a quick update on the AppliedMicro integration. We're right on track with our 100-day plan, which has gone exceptionally well on all fronts, including we've retained all key people, we've integrated all key business and operational systems and we've consummated MACOM engagements with all of their top-tier customers, notably 5 of the 7 major cloud customers.

We also continue to move the ball forward with our process to divest the compute business and are working to bring it to a timely conclusion.

I've now had the opportunity to meet personally with AppliedMicro's top customers, and I can tell you that the combined MACOM-APM opportunity is more attractive than even we had imagined. The opportunities for MACsec and PAM4 are not only real, but the transaction has elevated MACOM to a strategic status at major accounts for products and opportunities across our entire portfolio.

To put this transaction in perspective though, AppliedMicro and PAM4 is the icing on the cake for MACOM in cloud data centers. The breakout I spoke about earlier has been in high-performance analog, lasers, and silicon photonics for standards well before and beyond single-lambda PAM4. AppliedMicro has accelerated and elevated MACOM's relevance and preeminence in everything we do, in what could be the most exciting secular growth driver in our space for many years to come.

So wrapping it all up. Last quarter was yet another testament to our diversified business strategy across several markets and several growth drivers. We continue to ride the Optical super cycle with our Long-haul and Metro portfolio. We continue to lead the technology transition to GaN in base stations. Our MMIC products continue to fill the void created by industry consolidation. And last, but not least, we're well positioned to service insatiable demand in arguably the biggest secular growth driver of them all, connectivity within cloud data centers.

For these reasons, you'll understand why we remain bullish on MACOM's ability to continue to outperform as we have over the past 3 years, through good times and bad.

With that, let's talk about next quarter guidance. For the fiscal third quarter ending June 30, 2017, we expect revenue to be in the range of \$194 million to \$198 million. Adjusted gross margin is expected to be between 58% and 61%. And adjusted earnings per share between \$0.67 and \$0.71 on an anticipated 66.3 million fully diluted shares outstanding.

Operator, you can now open the call to questions.

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) Our first question comes from the line of Harlan Sur of JPMorgan.

Harlan Sur - *JP Morgan Chase & Co, Research Division - Senior Analyst*

You delivered gross margins, they were good but they were nevertheless in the lower half of your guidance range. It seems like given the growth of the different segments, it was probably mix related but I wanted to get your views on the profile in March. And if you could just help us understand, what are the drivers that are going to take the gross margins 100 basis points higher in the June quarter?

Robert J. McMullan - *MACOM Technology Solutions Holdings, Inc. - CFO and SVP*

Harlan, thanks for that question. There is a mix influence to growth margin. We seized the opportunity, given the higher-margin data center business and the heavy demand in that marketplace, to really flush out more of the PowerPC-embedded revenue that was booked on a last-time buy when we acquired AMCC, and that margin brought it slightly down. So that has a backlog now that we're still working through towards the end of the year. But as that product continues to decline under the last-time buy situation, that's how we get the extra 100 basis points.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

100-plus.



Robert J. McMullan - *MACOM Technology Solutions Holdings, Inc. - CFO and SVP*

100-plus.

Harlan Sur - *JP Morgan Chase & Co, Research Division - Senior Analyst*

Okay. And then that's a good segue into my next question, which is as we think about the June quarter in your revenue guidance, at a high level, it would seem that the full quarter rev rec of AMCC's business is driving most of the incremental revenue growth because you still had 1/3 of the connectivity and embedded business to recognize, which would imply that core MACOM is essentially flat sequentially. Is that the way to think about it? If not, if could you just help us understand what's growing and what's not in the June quarter?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Yes. So parts of the portfolio that have nothing to do with AMCC, like A&D and Multi-market, are actually growing low single digits. So that's not entirely accurate, including the Networks business, is low single digits. So I would say the one thing that we want to be very clear about, and I think I was emphatic, is there's no question that there is a cyclical weakness on the carrier base side of the business. PON remains weak, visibility is low, and you've got the China correction happening with the Metro/Long-haul provincial deployments, so there's no question that there is some headwinds in demand. At the same time, we're more than offsetting those with the cloud growth and great backlog, great order intake. And so it's really a mixed bag. So if we didn't have those headwinds in China, I think things would be materially stronger.

Harlan Sur - *JP Morgan Chase & Co, Research Division - Senior Analyst*

Okay. Just my last question. As you talk about prioritization of the data center focus, maybe, John, if you could just help us understand, what segments or product areas or manufacturing capacity are you going to take resources from? Is it going to be your PON business, which is obviously kind of weak here, maybe over the near term, or your Metro/Long-haul business? Any color would be greatly appreciated.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

So I don't think it has any impact on the Metro/Long-haul, but one of the bottlenecks we have short-term is availability of material, epitaxial wafers for laser production. And actually, our revenue per wafer on the data center product, 25GB, is higher than that for the 2.5GB. So it's logical in every sense of the word, strategically as well as tactically, to allocate scarce materials to data centers. So there is -- it's kind of fortuitous, frankly, that the PON business is soft. We're certainly ramping epitaxial supply. But frankly, that data center demand is way faster and way bigger than we ever anticipated. If you asked us, and you probably did ask us 90 days ago, we did not anticipate it turning on as hard as it is. Another interesting tidbit there is we actually are hiring back all the people that we had let go in Ithaca. We had downsized Ithaca to a development fab. And we find that we just can't ramp Lowell fast enough, not equipment capacity, but product qualifications. So we're actually turning Ithaca back on as a production fab to service that short-term demand. I think the other place that we bottleneck is we have an awful lot of qualifications going on right now. Part of the stuff we talked about pushing out was qualifications on high-rel space products. We've got the GaN qualifications. We've got the 25GB laser qualifications. We've got the last of the Metelics qualifications in Lowell and there's just finite resources to complete all of these new product quals. So those are some of the trade-offs. And again, we talked last quarter about stickhandling mix, and that was -- that's what this is all about.

Operator

Our next question comes from the line of C.J. Muse of Evercore.



Christopher James Muse - Evercore ISI, Research Division - Senior MD, Senior Equity Research Analyst and Fundamental Research Analyst

I guess, first question, to revisit an earlier question, can you share with us what AMCC contributed revenue-wise? And here, I'd love to hear what was put in data center for the core business and where the PowerPC revenues resided, and then how we should think about the incremental growth in that business into June.

Robert J. McMullan - MACOM Technology Solutions Holdings, Inc. - CFO and SVP

C.J., we don't break out acquisitions after they're embedded. But generally, to answer the balance of the question, the majority of the connectivity business is in our network business, some of it's in data center, some of it is in other non-Optical businesses. There is a small insignificant portion that's also classified under the embedded PC business as Multi-market.

John R. Croteau - MACOM Technology Solutions Holdings, Inc. - CEO, President and Director

Yes, that's product that sells into printers. Clearly, not a network application.

Christopher James Muse - Evercore ISI, Research Division - Senior MD, Senior Equity Research Analyst and Fundamental Research Analyst

Okay. Well, I guess, maybe to help us model and understand the gross margin driver, could you help us understand what came through in low margin in March and how we should think of that falling off in the coming Qs?

Robert J. McMullan - MACOM Technology Solutions Holdings, Inc. - CFO and SVP

So the revenue will probably be about the same for the next couple of quarters. It's the -- that's not the -- it's not the headwind that it is this quarter because the mix of business in the other product areas are stronger for the higher-margin products. So what we set up is to keep it consistent over the balance of the fiscal year for the embedded PC products, yet the higher gross margin data center business products mix is going to push the margin higher.

John R. Croteau - MACOM Technology Solutions Holdings, Inc. - CEO, President and Director

Yes, actually, if I can provide a little more color. So there is very healthy growth in the underlying connectivity business quarter-on-quarter, which is the stuff that's long-term preserved, the reason why we did the acquisition. The issue of the embedded PowerPC business is an issue of how much we want to bleed and how much dilution we can afford on the gross margin line. So as we said last quarter, and we did last quarter, in the next quarter or 2, we're going to be stickhandling that mix so that we don't dilute things too much but we get that backlog behind us.

Christopher James Muse - Evercore ISI, Research Division - Senior MD, Senior Equity Research Analyst and Fundamental Research Analyst

Got you. And I guess as my follow-up, when you talked earlier about a supply-elastic market as you service the cloud data center, I'm curious how do you think about the gross margin profile there today and over time? And as you concentrate your time, energy, investments on that business, does that change the operating profile of the model near-term?

John R. Croteau - MACOM Technology Solutions Holdings, Inc. - CEO, President and Director

No. If it changed, it would actually be accretive. Data center business today, the high-performance analog stuff and the laser margins are at the upper end of our portfolio. And the reason is -- there's a subtle point here, but very important. We're talking about -- we have engineered solutions from the analog, especially the lasers and the L-PICs, which are really geared for scale, capacity and cost structure, and a lot of that is rooted in our Etched Facet Technology for the lasers. This is the same reason why we could take preeminent share in PON, arguably the most cost-sensitive

market, competing with localized Chinese competitors and have gross margins that are very attractive and very accretive to our corporate average. So because we have those things engineered for cost and designed for manufacture, we can supply what is shaping up. I mean, the market for connectivity is \$40 million, growing to \$50 million per year, year-on-year growing -- projected to be \$70 million a few years out. The real question is what's the mix of 10G versus 40 versus 100G. And my comment about supply elasticity is we're now hitting the cost per bit such that it seems like literally, every unit that we can manufacture will actually ship and drive that conversion from 10GB or 40GB up to 100GB. In fact, we are actively engaged with these customers for 400GB. So it's literally, right now, an insatiable demand. But I think one of the -- the strongest elements of MACOM is we engineer this stuff for cost. It's not repricing telecom products at low gross margins. It's a profound difference. A great question, though.

Operator

Our next question comes from the line of Blayne Curtis of Barclays.

Blayne Peter Curtis - *Barclays PLC, Research Division - Director and Senior Research Analyst*

Maybe just on the Optical business. John, you talked about PON being a little bit weaker. You had hoped that it would bottom. Just kind of curious, your updated thoughts as to is there still inventory, and have those other suppliers not backed out? And on the flip side, you saw strong growth in your data center business. I don't believe you're shipping 25G lasers yet, but you talked about having the fabs ramp back up. So can you just talk for the timing of bringing 25G lasers to revenue?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Oh, yes, 25G is in volume. It's several million dollars of revenue, both in the form of lasers and embedded in our Optical subassemblies, in our TOSAs. So that is in production. The task before us is scaling that from low millions to many millions, so it's -- and it's analogous, Blayne, to what we did with PON when we acquired BinOptics. We had to scale that in capacity to be able to take that share. That's exactly what we're facing this year, very much an analogous task and eminently doable. I think I missed the front end of your question.

Blayne Peter Curtis - *Barclays PLC, Research Division - Director and Senior Research Analyst*

Just the update on the PON market, why -- I think you had hoped that it would bottom. It sounds like it's getting worse.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

No, no, no. It's not just getting worse, just we haven't seen a clear recovery. And it behaves like a commodity market. So until the order intake is there and the demand is firm, I don't want to be in the business of declaring a recovery. But yes, there's no question, the inventories have been burning down. Where they burned down and how well the market -- the end market performs is where the ambiguity is. So the message I want to deliver is we're not -- we're not planning on some big recovery to be able to achieve our guidance.

Blayne Peter Curtis - *Barclays PLC, Research Division - Director and Senior Research Analyst*

Got you. And then I just wanted to ask on the A&D side, you had good 20% year-over-year growth. At one point, you were hoping for maybe even better. Just kind of maybe an update there, in terms of some of the trajectory in A&D.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Yes. So we have backlog to be able to achieve what I had previously said, which is 40% year-on-year growth. Frankly, as we face some of these trade-offs of priorities, specifically qualifications for high-rel space and some of the Metelics stuff, we -- that's nonperishable, fungible backlog. We

can push that out into subsequent quarter or quarters and focus the priorities instead on the 25GB lasers. Where the 25GB, it's the reason why I was emphasizing in the scripted remarks that short-term execution is imperative. It's going to be determining long-term shares, so pushing out some, what I would call, tactical A&D backlog that's nonperishable, is a very logical thing to do in the concept of stickhandling mix.

Blayne Peter Curtis - *Barclays PLC, Research Division - Director and Senior Research Analyst*

Got you. And then sorry for a third one, but just in that stickhandling mix, I just want to understand Bob's comment. You expect this embedded PowerPC business will shift through the fiscal year? Or when do you envision the shipments to stop?

Robert J. McMullan - *MACOM Technology Solutions Holdings, Inc. - CFO and SVP*

Blayne, the way the order book has come in, and remember, we noted in the last conference call that there was a last-time buy issue here, so we have backlog that we can stickhandle, that it will proceed through the end of the year, and thereafter, we don't expect any more business.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Yes, I think the comment last quarter was we're planning to get all of it behind us in this fiscal year. So we can exit the year -- we can exit the year clean. And this was again, this was a surprise to us, with the business coming in, they executed a last-time buy before closing, and there's nothing we can do about how they manage the business between signing and closing. But the quicker we can get through that, to be honest, the earlier question about gross margin dilution is a bit frustrating for us because the rest of the business is performing quite well in that respect. And this just optically blends down our gross margin so it's a little frustrating.

Operator

Our next question comes from the line of Quinn Bolton of Needham.

N. Quinn Bolton - *Needham & Company, LLC, Research Division - Senior Analyst of Communication ICs and Consumer Semiconductors*

John, I just wanted to come back to your comments about the China business. You talked about clearly seeing an inventory build in the December quarter and you're kind of working through that in March. And I think you said in your script that it might get worse in June. And I just wanted to clarify, was that comment specifically around China Long-haul and provincial network builds, or were you referring back to your PON business?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

No, that was specifically the provincial deployments, not PON.

N. Quinn Bolton - *Needham & Company, LLC, Research Division - Senior Analyst of Communication ICs and Consumer Semiconductors*

The 100GB . . . sorry, go ahead, John.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Yes, yes. It's not PON. We're not talking about PON getting worse. PON is definitely getting better. It was, specifically, we started to see some correction at the end of last quarter in the 100GB Long-haul Metro stuff, specifically in China. Chinese. That will be more pronounced in June.

N. Quinn Bolton - *Needham & Company, LLC, Research Division - Senior Analyst of Communication ICs and Consumer Semiconductors*

Okay. And sort of a follow-up question on that. I think you gave the splits for Optical at \$68 million and data center at \$57 million. In the March quarter, it sounds like the Optical bucket, because of that headwind in China, the Optical bucket probably down, but more than offset by growth in data center. Is that the right way to be thinking about growth in the June quarter?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Yes, I believe that's correct. I don't have those numbers in front of me, but that's -- the net is still positive, that's correct.

N. Quinn Bolton - *Needham & Company, LLC, Research Division - Senior Analyst of Communication ICs and Consumer Semiconductors*

Great. Second question, you talked about the GaN on silicon going through quals now and I think you said you expect first orders in the December to February time frame. Is that the right timing then for us to be thinking about the first production revenue in that December to February time frame?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

No. Actually, sorry for the confusion in my scripted remarks. So we have the initial programs, which would generate revenue, assuming we complete the customer quals as planned, prior to that. But those are just the first 2 programs, one 900 megahertz program and 1.8 gigahertz program. What I referred to in December to February what the 20 additional programs that we have line of sight to. We have products aligned and we're delivering on customer requirements for those programs. My comment was we've got to get through the gate for these first program quals before we can secure business on the subsequent ones. So it would begin to ramp earlier than that, but when you talk about really building material revenue, you're going to get beyond the first 2 programs, and that's December to February.

N. Quinn Bolton - *Needham & Company, LLC, Research Division - Senior Analyst of Communication ICs and Consumer Semiconductors*

Got it. And then lastly, just on the 25GB laser business. Obviously, a lot of the Datacom module vendors have internal laser production, but I think there are a number of players in the Optical module space, especially over in Asia, that don't have internal laser productions. So I'm just wondering if you can comment, are you seeing demand from both the captive modular houses that have internal laser production, or are your first shipments to some of the folks that don't have internal laser production?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

So it's both. We're obviously very sensitive to not be disclosing people who also have internal supply. But the reality is, and I think over time, it will become more obvious, our Etched Facet Technology is singularly and uniquely geared for the capacity supply chain flexibility and cost structure for data centers. Taking nothing away from their laser capability, our cost structure is something that we can thrive in a market like PON, with a value proposition closer to the 100GB, 400GB level. So I think even though those people with their own captive laser supply recognize that, I would expect a transition, but it would be inappropriate for us to comment further about those customers and their decisions.

Operator

Our next question comes from the line of Tore Svanberg of Stifel.



Tore Svanberg - *Stifel, Nicolaus & Company, Incorporated, Research Division - MD*

First question is on data center. So if you just look at your portfolio now, John, with the IP portfolio, I think you mentioned in your investor presentation that you want to be #1 in 5 per data center. Could you just update us where you stand there? And is there anything else you need to invest in at this point to kind of become #1 in PHYs?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

No. I think we're complete. To be clear, we're already #1 in the analog content, laser drivers, CDRs, TIAs and so on. I think based upon my comments I just made on the 25GB lasers, I think we're destined pretty quickly to be #1. You're talking about millions of units, not hundreds of thousands. To put in context, the 100GB Long-haul Metro data center market, even though it's growing 40% compound growth this year and next year, it's still only 250,000 growing to 500,000 units. We're talking about tens of millions of units, 2 orders of magnitude higher for these lasers. So we've got that economic advantage that's been parlayed into the L-PICs, which is the silicon photonics with the flip-chip laser so -- and the economics of that start attacking manufacturing costs, so we have that. For both CWDM4, so well before you need PAM4 or any PHY, and then you've got the icing on the cake, as I described it, which is the PAM4 single-lambda 100GB, but also the quad 400GB PAM4 and the 0 ambiguity, what the solution is for 400GB. So -- and by the way, the real subtlety is with the TOSA/ROSA capability that we picked up with FiBest, we're not just delivering spot components, we're providing components that are fully validated to people who can ramp those things in mass volume. So I would challenge people to find someone else with anything close to that portfolio and capability.

Tore Svanberg - *Stifel, Nicolaus & Company, Incorporated, Research Division - MD*

That's very helpful. And moving on to China, would you be able to share with us what percentage of MACOM's business is in China for Optical? And do you have any visibility at all sort of beyond the June quarter? Because obviously, we heard a lot about the near-term weakness, but there's also some suggestions that maybe second half is going to come back. So do you have any visibility at all beyond the June quarter?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Yes. So the 2 areas of weakness are PON, and there's that inventory correction. The overall market is not that ugly. It's modestly down for 2.5GB. Now 10GB is ramping, but it's just not material in 2017 compared to 2.5GB. And it's going to be a growth driver for 2018. We've got a great position there, but that's futures. But for PON, it's this inventory situation that was built up with these local Chinese competitors that are now out of business. So that will recover just as the inventory drains. The real salient issue are these provincial deployments, I mean looking back, the September and especially December quarters were like 80%, 90% year-on-year growth. In a market that's growing 40%, some would say 50%, but 40% port growth, just do the math. I mean, there was inventory build, and that's what started correcting. And I think June is the bottom of that. And if the provincial deployments move forward as expected, I think the back half of the year should be a strong recovery.

Tore Svanberg - *Stifel, Nicolaus & Company, Incorporated, Research Division - MD*

Very good. And just one last question on GaN. So you mentioned the 2 initial deployments and then 20 other engagements and the December to February time frame contribution potential from those. Were you referring to revenue contribution for those 20, or would that more kind of be the time frame when the quals will be completed with those 20?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

So the qual issue is much more the first customer qualifications of programs, where they qualify not just the GaN technology but the products in the Doherty designs and the whole thing. Once we get past that gate, being able to proliferate geometrically into these additional programs, you're through the gate and you're off. And we've got line of sight again. We have teams that have been servicing these base station guys for decades, literally. So we've got access, we've got all the -- customers have opened up all their requirements. We're delivering on those requirements. It's just



a giant gate to get through these first quals. The second designs, the second wave there, that 20 that I referred to, becomes infinitely easier once you get past that initial gate.

Operator

(Operator Instructions) Our next question comes from the line of Mark Delaney of Goldman Sachs.

Mark Trevor Delaney - *Goldman Sachs Group Inc., Research Division - Equity Analyst*

My first question is going to be, I was hoping you could help us better understand some of the new sub segment classifications within Networks. So I think you said \$50.6 million for data center. Can you help us understand how much of that is tied to some of these hyper-scale cloud customers, or is any of that on-premise type of data centers?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

It is -- that number, wait, does that include the...

Robert J. McMullan - *MACOM Technology Solutions Holdings, Inc. - CFO and SVP*

That's the revenue...

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

That includes the revenue on the OTN framers on -- and AppliedMicro as well, right?

Robert J. McMullan - *MACOM Technology Solutions Holdings, Inc. - CFO and SVP*

Yes, which is traditional standing data centers versus cloud.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Yes. So I have to apologize. I don't have it off the top of my head the, what I would call, the legacy OTN framer mapper revenue coming in from AppliedMicro, but a big chunk of that right now is the analog content going into the cloud guys. And a very healthy contribution from the 25GB lasers, those in the form of standalone and TOSAs. So it's really a combination of the 2, and I apologize, I just don't have the numbers in front of me to split the 2.

Mark Trevor Delaney - *Goldman Sachs Group Inc., Research Division - Equity Analyst*

I mean, I'm just trying to understand apples-to-apples the Optical piece, which I think was \$67.9 million this quarter, in the December quarter, was \$82.5 million. That decline from \$82.5 million to \$67.9 million, was any of that because of this new creation of the data center category? So apples-to-apples, the December quarter number would have been lower in Optical, or is that the -- on an apples-to-apples decline within Optical?



John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

It was not apples-to-apples. The previous number we quoted included data centers, and what we said this -- just starting this quarter, we'd separate the 2 to provide greater transparency. Next, pulling out data centers, apples-to-apples, we're actually up.

Mark Trevor Delaney - *Goldman Sachs Group Inc., Research Division - Equity Analyst*

Okay. And then I'm just trying to understand a little bit more on the provincial decline that the company has seen in China. I think last quarter, the commentary was the only issue of the company we're seeing was in PON, as I recall, and it spread. And I know forecasting is very difficult. We understand that in our side of the business. But I mean, could you just help us understand a bit more about what was surprising to you guys, what had you been expecting or what had your customers been telling you and why did that not materialize as you had been anticipating 90 days ago?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Specifically, in PON, you mean or...

Mark Trevor Delaney - *Goldman Sachs Group Inc., Research Division - Equity Analyst*

The provincial metric, which is now weaker than, I think, the company had expected 90 days ago.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Yes, I think while we knew during the exuberance of the September and December quarters, I think if you go back, we were trying to provide some cautionary stuff about diversification because there was clearly an inventory build. The market was not growing at 80%, 90% year-on-year. So that is not a surprise. I think some of the timing of the provincial deployments pushing out and some of the behavior of the customers very recently, in recent weeks, that's a little bit of a surprise. And that's the -- that was -- and that's what's behind my comment about things being a little more pronounced in the June quarter. But until that provincial deployments start moving forward, we're going to be dealing with customers who are kind of locked up.

Robert J. McMullan - *MACOM Technology Solutions Holdings, Inc. - CFO and SVP*

Yes, Mark, the Long-haul Metro on an apples-to-apple basis did grow this quarter. It's -- so -- but we've had such substantial growth in prior quarters that it just didn't live up to the past growth expectations.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Hey, Mark, you know what, I was just looking through the spreadsheet I have in front of me here. It looks like the legacy part of the AppliedMicro portfolio is about 20% of that 27% total. So about 5% of our total would be legacy enterprise.

Operator

Our next question comes from the line of Harsh Kumar of Stephens.

Harsh V. Kumar - *Stephens Inc., Research Division - MD*

I was wondering if you could, John or Bob, give us a sense of how big PON and maybe Metro was in this quarter for you? You gave us good data on the data center piece because I was wondering, get the other part?

Robert J. McMullan - *MACOM Technology Solutions Holdings, Inc. - CFO and SVP*

Yes. So PON is probably at its low level, is under 10%, down from a few points under 10% of where it was in Q1. And the second part of the question?

Harsh V. Kumar - *Stephens Inc., Research Division - MD*

Was Metro the same thing?

Robert J. McMullan - *MACOM Technology Solutions Holdings, Inc. - CFO and SVP*

Well, we don't break out Metro.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Actually, Metro/Long-haul was up.

Robert J. McMullan - *MACOM Technology Solutions Holdings, Inc. - CFO and SVP*

It was up.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Like up. So there was the beginning in the correction in China, but our share gains outside of China actually more than offset what's going on in China.

Harsh V. Kumar - *Stephens Inc., Research Division - MD*

Okay. But I was wondering if I'd get a percentage so we can get a good idea of like what -- how the Optical piece is made up of? Is that possible?

Robert J. McMullan - *MACOM Technology Solutions Holdings, Inc. - CFO and SVP*

It's not a PAM, though.

Harsh V. Kumar - *Stephens Inc., Research Division - MD*

Okay. I can get it later, Bob.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Yes, yes.



Harsh V. Kumar - *Stephens Inc., Research Division - MD*

Would you say that -- maybe I think, in some of the earlier calls, you had said that maybe you were expecting some initial revenues on GaN on silicon in this particular quarter, at least, the first part of the ramp. I know you said that, that's coming later, and then there's an additional piece coming in, in December and February. Is there a reason why it's getting pushed out, or is it just kind of the standard stuff that happens with this early sort of qualification stuff?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Well, certainly, in the last 90 days, I apologize if I miscommunicated 90 days ago, but been very consistent that the qualifications for these initial customer programs are early June. And we're still on track with those dates. So if I created a different perception, I apologize. But I mean, they're certainly delayed from what we had hoped a year or 2 ago. And it's just a long arduous process of getting locked down on these programs and completing all the intensive qualification issues. And to put a little color on that, you've got to realize for base stations, you're talking about product that spends decades in the field so reliability and qualifications are a much bigger deal than, for instance, a consumer product in a handset. But those schedules have been locked for over 90 days now.

Harsh V. Kumar - *Stephens Inc., Research Division - MD*

I got you. And for a last one, I know there was a compute piece that was up for sale and I know you are working on your 100-day plan. Do you, John and Bob, feel reasonably comfortable about the potential for maybe possibly selling that business?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Oh, jeez, yes. I mean, the real more salient issue is to whom, with what structure of transaction, right? We're really stuck that we really can't make public comments at this time because we've got a process going and telegraphing the type of interest and who and at what valuation would be so inappropriate. But we are -- we've had our heads down working that process from the day it closed. We're right on track from the schedules that were locked down there. We just reviewed options with our Board, and now we're moving to the next phase, the next round. And those who were still in the process are being informed.

Robert J. McMullan - *MACOM Technology Solutions Holdings, Inc. - CFO and SVP*

Harsh, I have your answer. So Long-haul Optical-data center interconnect this quarter was 26% compared to 28% last quarter.

Operator

Our next question comes from the line of Richard Shannon of Craig-Hallum.

Richard Cutts Shannon - *Craig-Hallum Capital Group LLC, Research Division - Senior Research Analyst*

I guess a few for me, and I'll start in the data center space. For the June quarter, John, are you expecting material growth in L-PIC, or is that coming after June?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

So it will be after June. So we have production units and we're completing the designs. I think in the December quarter would be where we would start seeing the first volume of production, but we have the production devices completing qualification. Qualification is not a big issue as it is with GaN. But the customer designs and ramping into production is just the phase that we're in right now.

Richard Cutts Shannon - *Craig-Hallum Capital Group LLC, Research Division - Senior Research Analyst*

Okay. And when you talk about imperative in the short term to execute on the data center side, is that specific to L-PIC or more broadly across data center customers? And I'm curious why that's the case. Is there some specific window you're trying to hit here, or were you just shifting your strategic focus to that area?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Yes, we are absolutely shifting strategic focus. I mean, let me give you the context and you can do the math. So in the Long-haul Metro market, which is fantastic, it's growing 40% compound growth from around 250,000, 255,000 units in '16, up to around 350,000 to on the path towards close to 500,000 over the 2-year period. It's great and wonderful. To put in context, the unit port market, the number of ports in data centers, is 40 million going to 50 million, going to 70 million. That's the TAM. Currently, it's 10G, and we're converting 10G and 40G up to 100G. And so you do the math on the content, and it is a multibillion-dollar opportunity for us. It's analogous to the magnitude of handsets and smartphones in the compound semi space. It is a big opportunity. We're very well-positioned. And the first thing that comes to mind, it's execution on everything, including by the way, the PAM4 platform that AppliedMicro comes in with. But the first thing that is paramount is ramping 25GB laser production. It is in production. There was very material multiple millions of dollars of revenue in 25GB lasers, enabled revenue in TOSAs. But ramping to the tens of millions of units as we did for PON, I mean, we're shipping, at peak, 5 million to 8 million units per month of 2.5G PON. We need to do the same thing with 25GB. And we're right on track to do that, and it's right within our wheelhouse. It's just there's a lot of execution to be able to ramp that and get the yields up to where they need to be, to be able to deliver -- when we do that, we uniquely have the capacity, supply chain flexibility, and we are -- play a very strategic focus then -- role then in the industry for those cloud data center guys. The optical industry is not geared to supply that magnitude of units, that magnitude of ports. We have the HPA business, the previous Mindspeed business in Newport Beach that's been -- that has done that. They are in a lead position in the industry as we roll out the lasers and then layer the lasers literally on top of the L-PICs. That's when we stand alone. And then the PAM4 stuff layers in, there's just a lot of operational execution to be able to ramp from what we've done today with analog, which is 1.6 million units in the first half of the year, to tens of billions of units across these products. There's a lot of execution. But if you do the math, you'll see the reason why it is -- unquestionably, it dwarfs all else that we do.

Richard Cutts Shannon - *Craig-Hallum Capital Group LLC, Research Division - Senior Research Analyst*

Okay. I appreciate that perspective, John. That makes a lot of sense. Last quick question for me. You talked about, within the Optical carrier business, some share gains in China offsetting a little bit of weakness there. Can you characterize where those share gains are coming from?

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Actually, the share gain is outside of China. Yes. And it's North America and Japan. From day 1, we've had a very strong position with certain Japanese customers. And there's an insatiable demand that they have servicing Metro and DCI. This is DCI-data center interconnect, not within data centers but still coherent. And I mean, we're supply-constrained in that space as bizarre as it sounds because some of the product is different than that for China.

Operator

That is all the time we have for questions today. I'd like to hand the call back over to Mr. Croteau for any closing remarks.

John R. Croteau - *MACOM Technology Solutions Holdings, Inc. - CEO, President and Director*

Very good. So before closing out today's call, I want to mention that we're going to be hosting a number of investor events over the coming months, including analyst forums in Boston and New York, where we will be focused on our cloud data center opportunity in more detail. That will be during the week of May 15. Stay tuned for additional details. We'll also be attending a number of investor conferences during the quarter, including the JPMorgan Conference in Boston, May 23; the Craig-Hallum Conference in Minneapolis, May 31; and then 2 events in San Francisco, the Stifel Tech Internet and Media Conference on June 5; and the Bank of America Merrill Lynch Global Tech Conference on June 6; followed by 2 events in New York, the Stephens Spring Conference on June 7; and the Citi Conference on June 8. If you'd like to request a meeting at one of these upcoming events, please email us at ir@macom.com or contact your sales representative directly. We look forward to providing an update and reporting on our continued progress on next quarter's call. That concludes today's remarks. Operator, you may now disconnect the call.

Operator

Ladies and gentlemen, thank you for participating in today's conference. That does conclude today's program. You may all disconnect. Everyone, have a great day.

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