# Applied Optoelectronics (AAOI) / 9 May 24 / 2024 Q1 Earnings call transcript

Company Profile

Transcript menu

Lindsay Savarese executive
Chih-Hsiang Lin executive
Stefan Murry executive
Simon Leopold analyst
Michael Genovese analyst
Timothy Savageaux analyst
Dave Kang analyst

Print

Operator

Good day, and welcome to the Applied Optoelectronics First Quarter 2024 Financial Results Conference Call. [Operator Instructions] Please note this event is being recorded.

I would now like to turn the conference over to Ms. Lindsay Savarese, Investor Relations for AOI. Please go ahead.

#### Lindsay Savarese

Thank you. I'm Lindsay Savarese, Investor Relations for Applied Optoelectronics. I'm pleased to welcome you to AOI's First Quarter 2024 Financial Results Conference Call. After the market closed today, AOI issued a press release announcing its first quarter 2024 financial results and provided its outlook for the second quarter of 2024. The release is also available on the company's website at ao-inc.com. This call is being recorded and webcast live. A link to the recording can be found on the Investor Relations section of the AOI website and will be archived for 1 year.

Joining us on today's call is Dr. Thompson Lin, AOI's Founder, Chairman and CEO; and Dr. Stefan Murry, AOI's Chief Financial Officer and Chief Strategy Officer. Thompson will give an overview of AOI's Q1 results, and Stefan will provide financial details and the outlook for the second quarter of 2024. A question-and-answer session will follow our prepared remarks.

Before we begin, I would like to remind you to review AOI's safe harbor statement. On today's call, management will make forward-looking statements. These forward-looking statements involve risks and uncertainties as well as assumptions and current expectations, which could cause the company's actual results, levels of activity, performance or achievements of the company or its industry to differ materially from those expressed or implied in such forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as believe, forecast, anticipates, estimates, suggest, intends, predicts, expects, plans, may, should, could, would, will, potential or things or by the negative of those terms or other similar expressions that convey uncertainty of future events or outcomes.

The company has based these forward-looking statements on its current expectations, assumptions, estimates and projections.

While the company believes these expectations, assumptions, estimates and projections are reasonable, such forward-looking statements are only predictions and involve known and unknown risks and uncertainties, many of which are beyond the company's control.

Forward-looking statements also include statements regarding management's beliefs and expectations related to the expansion of the reach of our products into new markets and customer responses to our innovations as well as statements regarding the company's outlook for the second quarter of 2024.

Except as required by law, we assume no obligation to update forward-looking statements for any reason after the date of this earnings call to conform these statements to actual results or to changes in the company's expectations. More information about other risks that may impact the company's business are set forth in the Risk Factors section of the company's reports on file with the SEC, including the company's annual report on Form 10-K and the company's quarterly reports on Form 10-Q.

Also, all financial results and other financial measures discussed today are on a non-GAAP basis, unless specifically noted otherwise. Non-GAAP financial measures are not intended to be considered in isolation or as a substitute for results prepared in accordance with GAAP. A reconciliation between our GAAP and non-GAAP measures as well as a discussion of why we present non-GAAP financial measures are included in our earnings press release that is available on our website.

Before moving to the financial results, I'd like to announce that AOI management will virtually participate at the Needham Technology Media and Consumer Conference on May 16. And I'd like to note that the date of our second quarter 2024 earnings call is currently scheduled for August 8, 2024.

Now I would like to turn the call over to Dr. Thompson Lin, Applied Optoelectronics' Founder, Chairman and CEO. Thompson?

## Chih-Hsiang Lin

Thank you, Lindsay. Thank you for joining our call today.

Our revenue and net gross margin for the fourth quarter came in below our expectations, and along EPS was in line with our expectations despite the slow start to the year. Based on our current forecast and very constructive customer interactions, we remain very positive on improvement in the second half of the year.

During the fourth quarter, we delivered revenue of \$40.7 million, which was just below our guidance range of \$41 million to \$46 million. We delivered non-GAAP gross margin of 18.9%, which was below our balance range of 21% to 23%, mainly driven by difference in product mix.

Our non-GAAP loss per share was \$0.31 per share, which was within our guidance range of a loss of \$0.20 to a loss of \$0.33 per share. Total revenue for our data center product of \$29 million was up 42% year-over-year and was down 35% sequentially. Revenue for our products increased 33% year-over-year and revenue for our finished products more than doubled in the same period. Total revenue in our CATV segment was \$8.7 million, which was down 69% year-over-year and down 30% sequentially, largely driven by continuing generally slow sales of doses 3.1 equipment as the industry prepares to transition to DOCSIS 4.0.

With that, I'll turn the call over to Stefan to review the details of our Q1 performance and outlook for Stefan? Stefan Murry

Thank you, Thompson.

As Thompson mentioned, our first quarter revenue and non-GAAP gross margin came in below our expectations, while our non-GAAP EPS was in line with our expectations. Based on our current forecast and very constructive customer interactions, we remain very positive on improvements in the second half of the year. We believe that the long-term demand drivers remain strong for both our data center and CATV businesses, and we believe we are well positioned to capitalize on these opportunities.

Looking to the back half of the year, there are a few key items to note that give us a basis for our optimistic outlook despite the slow start to the year.

The first is that we have begun to receive forecasted orders for the VCSEL-based 400G active optical cables for which Microsoft provided development funding last year.

While the pace of product adoption has been somewhat slower than we anticipated, we believe that the fact that we are now receiving forecast for these products for delivery in Q3 is a significant step in seeing meaningful business improvement.

The second is that follow-on projects to our 400G AOC program, specifically for our 800G and 1.6 terabit products have been fast tracked with our customers as they address an acceleration in demand for infrastructure around AI.

We are being asked to compress the time from development to scale production as much as possible in order to meet this accelerated demand.

The third is that we have continued to experience significant traction and continue to have meaningful discussions with multiple large data center customers, some of which are new customers to AOI are customers that we have not worked with in many years, specifically for our 400G, 800G and 1.6 terabit products.

We expect one or more of these customers will begin to contribute meaningfully to revenue starting in Q3.

And lastly, we believe that the transition to DOCSIS 4.0 will begin to take place in Q3 and that our products are apply designed for the deployment of amplifiers and other network elements required for DOCSIS 4.0. We shipped our first fully production-ready DOCSIS 4.0 amplifier samples to a major customer last week, and the feedback while early has been exceedingly positive.

With the improvement we expect in the second half, we continue to believe that 2024 can be our first full year of non-GAAP profitability since 2018.

Turning to the quarter.

Our total revenue for the first quarter was \$40.7 million, which was down 23% year-over-year and 33% sequentially, and which was just below our guidance range of \$41 million to \$46 million.

As we had discussed on our prior earnings call, the softness in Q1 was largely due to the combined effects of the Lunar New Year holiday in our Asian factories along with some price reductions, which took effect in the quarter.

During the first quarter, 71% of our revenue was from our data center products, 22% was from our CATV products with the remaining 7% from FTTH telecom and other.

Turning to our data center business.

Our Q1 data center revenue came in at \$29 million, which increased 42% year-over-year and was down 35% sequentially. In the first quarter, 73% of our data center revenue was from our 100G products, 17% was from our 200G and 400G transceiver products and 3% was from our 40G transceiver products.

As we have discussed on several prior earnings calls, we signed 2 agreements with Microsoft in 2023 for the development of 400G products and beyond. This included a development program to make next-generation lasers for its data center and for the development of its 400G and next-generation active optical cables.

While not guaranteed, we continue to believe that the revenue opportunity for our 400G and 800G products could be greater and a longer duration than the revenue contribution we saw for this customer during the peak of the 40G product cycle, which suggests that revenue from these products may exceed \$300 million over the several years of these build-outs. We began shipments late last year and have begun to receive new forecasted orders, which we expect to contribute to revenue later in Q2, and we believe will continue to ramp strongly in Q3 and Q4.

Also as a reminder, in 2023, we shipped samples of our 800G products to 3 different data center customers and have received initial positive feedback.

As we discussed above, we are in detailed discussions with several hyperscale data center operators about reaping production for our 800G and 1.6 terabit products starting in Q3 for 800G and early Q1 of 2025 for the 1.6 terabit products. These dates are several months earlier than we had previously been requested to deliver, and we believe the acceleration in the schedule is being driven by faster deployment of technology needed by AI workflows.

Turning to our CATV business. CATV revenue in the first quarter was \$8.7 million, which was down 69% year-over-year and down 30% sequentially, largely driven by generally slow sales of DOCSIS 3.1 equipment as the industry prepares to transition to DOCSIS 4.0.

Looking forward, we continue to expect that our near-term CATV business will be down compared to the historic highs we saw in 2021 and 2022 as the MSOs transition to next-generation architecture. We anticipate this transition to DOCSIS 4.0 will begin to take place in Q3, and we are optimistic about the second half of the year and 2025.

As a reminder, we shipped initial test samples of our 1.8 gigahertz amplifier products to 2 major MSOs in Q4 of last year, and we received encouraging feedback on their performance and pricing.

We are pleased to report that we shipped final qualification units of various amplifiers last week, and we would expect revenue to begin as early as the end of Q2 with significant ramp in the second half as we increase manufacturing capacity for these new products.

As Thompson mentioned, we will continue to carefully monitor MSO plans to upgrade to DOCSIS 4.0 networks, and we continue to believe AOI is a leader in technologies that will enable DOCSIS 4.0 and that we have the right portfolio in place to address our customers' needs.

Now turning to our telecom segment. Revenue from our telecom products of \$2.3 million was down 39% year-over-year and down 19% sequentially, largely driven by ongoing softness in 5G demand, particularly in China.

Looking ahead, we continue to expect telecom sales to fluctuate from quarter-to-quarter.

For the first quarter, our top 10 customers represented 92% of revenue, down from 93% in Q1 of last year. We had 2 greater than 10% customers, one in the data center market and one in the CATV market, which contributed 62% and 21% of our total revenue, respectively.

In Q1, we generated non-GAAP gross margin of 18.9%, which was below our guidance range of 21% to 23% and was down from 36.4% in Q4 of 2023 and down from 23.2% in Q1 of 2023. The decrease in gross margin was driven mainly by product mix and some price reductions, which took effect during the quarter.

Looking ahead, we expect improving gross margins throughout the year as product mix improves in our data center business and CATV revenue begins to ramp. We remain committed to the long-term goal of returning gross margin to around 40% and believe that this goal is achievable.

Total non-GAAP operating expenses in the first quarter were \$24.8 million or 61% of revenue, which compared to \$19.6 million or 36.9% of revenue in Q1 of the prior year due to higher R&D spend.

Looking ahead, we continue to expect non-GAAP operating expenses to range from \$24 million to \$26 million per quarter to account for the acceleration of R&D expenses to improve time to market for our 800G and 1.6 terabit data center products.

Non-GAAP operating loss in the first quarter was \$17.1 million compared to an operating loss of \$7.2 million in Q1 in the prior year. GAAP net loss for Q1 was \$23.2 million or a loss of \$0.60 per basic share compared with a GAAP net loss of \$16.3 million or a loss of \$0.56 per basic share in Q1 of 2023. On a non-GAAP basis, net loss for Q1 was \$12 million or \$0.31 per share, which was within our guidance range of a loss of \$10.9 million to a loss of \$12.6 million and in line with our guidance range of a loss per share in the range of \$0.28 to a loss of \$0.33 per basic share. This compares to a net loss of \$7.1 million or a loss of \$0.25 per basic share in Q1 of the prior year. The fully diluted shares outstanding used for computing the earnings per share in Q1 were 38.4 million.

Turning now to the balance sheet. We ended the first quarter with \$17.4 million in total cash, cash equivalents, short-term investments and restricted cash. This compares with \$55.1 million at the end of the fourth quarter. This cash balance reflects a few slow-paying AR receipts totaling about \$11 million, which were subsequently received in the first 2 weeks of Q2. Also note that we used almost \$4 million in cash to reduce debt during the quarter. We ended the quarter with total debt, excluding convertible debt of \$34.8 million compared to \$38.7 million at the end of last quarter.

As of March 31, we had \$54.3 million in inventory compared to \$63.9 million at the end of Q4. We made a total of \$7.8 million in capital investments in the first quarter, which was mainly used for production and R&D equipment.

Moving now to our Q2 outlook.

We expect Q2 revenue to be between \$41.5 million and \$46.5 million and non-GAAP gross margin to be in the range of 25.5% to 27.5%. Non-GAAP net loss is expected to be in the range of \$11.6 million to \$13.5 million and non-GAAP loss per share between \$0.29 per basic share and \$0.34 per basic share, using a weighted average basic share count of approximately 39.2 million shares.

Looking ahead, as the widespread adoption of generative AI continues to place increased demands on our customer data centers, we believe that these customers will ultimately need to deploy more infrastructure to meet these needs, which will provide a long tailwind of demand for the optical industry.

Our U.S.-based production ability, combined with our automated manufacturing capabilities and experience puts us in a unique competitive position to address these needs. Further, as our CATV customers transition to next-generation architecture and implement new technologies like DOCSIS 4.0, we believe that we have positioned ourselves as a leader in technologies that will enable DOCSIS 4.0, and we are confident that we have the right product portfolio, team and strategy in place to capitalize on this upcoming transition.

We have spent several years developing these products, and we expect that they will go to market in the next few months.

In sum, we believe that the long-term demand drivers remain strong for both our data center and CATV businesses, and we believe we are well positioned to benefit from these growing long-term trends.

With that, I will turn it back over to the operator for a Q&A session. Operator?

Operator

[Operator Instructions] And the first question will come from Simon Leopold with Raymond James.

Simon Leopold

A couple of quick ones maybe.

I think on the prior conference call, you had given us some indication that you thought the full year revenue could exceed \$300 million.

Given the slower start to the year, it does sound like you still expect a much stronger second half, but how do you feel about that full year \$300 million target?

Stefan Murry

Well, what we've said is that we think we can be profitable for the year.

So if you can run the numbers on that, we don't give guidance -- annual guidance really.

So I wouldn't say we're falling back on anything. It's obviously going to be a little more challenging considering where we started the year, but I think it's still very achievable, let's say that.

Simon Leopold

Okay. And then you did give us some indication of the operating expense expectations for the year at that \$24 million to \$26 million per quarter. And I think we were anticipating more of a \$22 million to \$24 million per quarter, and that may simply be just extrapolating too much from the first quarter forecast. Did something change in terms of your expectation of what you need to spend on sales and marketing and R&D?

Stefan Murry

As we noted in our prepared remarks, we've increased our R&D spend a little bit to because we're kidding -- as I talked about, we're getting customers that are pulling in their request for product development months ahead of schedule.

And so we need to spend additional R&D. I wouldn't say it's additional overall, but we're spending it quicker than we otherwise would.

So it does represent a slight increase to our R&D. Sales and marketing, not too much increase in sales and marketing.

Simon Leopold

And then I remember at our meeting at OFC, you had talked about sort of a product road map going from the VCSEL-based solutions to VCSELs and EMLs and ramping up to higher per channel speeds. Could you give us an overview of the road map you expect in terms of launches over the next year plus?

Stefan Murry

Right.

So the VCSEL-based products are already in production, and we'll likely add higher-speed lane VCSELs to that portfolio next year. With respect to the EML based products, we have some products in production now. The higher speed data center products with EMLs will go into production in late Q3, early Q4.

Simon Leopold

And your -- what was your 400 gig in the quarter? I missed that?

Stefan Murry

400 gig -- 17% of the data center revenue.

So \$29 million, 17% of that.

Simon Leopold

Okay. And that was just 400 gig, not 400...

Stefan Murry

Correct.

Simon Leopold

Say that again?

Stefan Murry

That's a little over doubling compared -- that almost -- well, it was slightly over doubling from same period last year.

Operator

The next question will come from Michael Genovese with Rosenblatt Securities.

Michael Genovese

I guess I can just start with, I wanted to ask some questions about Microsoft. Like, if you had any more color on why you think that it's going slower than initially expected. But then secondly, how do you expect orders to trend in the second quarter? Do you see orders in the month of June being above the month of May? Is there any visibility to that? And then finally, it sounds like your comments on the overall size of this \$300 million plus have maybe gotten a little bit more bullish, but maybe that's because you've added 800G to it.

So if you could help us understand that as well.

Sorry, I just reminding the first one was why the delay.

### Stefan Murry

Yes, I wouldn't really say it's an overall delay. If my prepared remarks sounded that way, that's not what I was trying to say. There was a slight delay in one particular program, which really just reflects the fact that it's a new product and sometimes new product launches just take a little longer than expected. There's nothing particular that I can point to with respect to that. It is positive that we're getting new updated forecasts now that would indicate shipments beginning later in Q2 and then ramping quickly in Q3 and Q4.

So that's all positive. I wouldn't read much into the delay itself. Overall, the revenue in our data center business is about where we expected it to be in Q2.

So there's not really a significant change from our earlier thinking. That small delay in the business for Microsoft is being more than compensated by other data center customers.

So it's not anything overall that I'm trying to point to there, just that one particular product that's got some one of the delay.

Your second question had to do with the \$300 million target and whether that represents a change. No, fundamentally, other than that you mentioned that we're having to flowing 800-gig and 1.6 terabits faster.

Now, 1.6 terabits won't be a factor this year, but it will be early next year. But the acceleration in 800 gig is certainly helpful to try to meet that goal. And then -- sorry, I forgot your third question there. What was it?

### Michael Genovese

I'll tie that in with my next and last question.

So -- but it was about the orders. If for instance, you think that if there's a reason to think as you're seeing these forecasts that for since June would be up from May, which is up from April, if you're seeing that kind of trend at this customer. But I might just ask, I mean you said 1Q data center revenues were about where you expected them to be. How do you see them trending in 2Q and 3Q, if you could address that? And then I...

#### Stefan Murry

I want to be clear -- Yes. Well, first of all, maybe I misspoke earlier, Q1 and Q2 data center numbers are about what we expected them to be. Cable TV in Q2 is coming in a little lighter than what we had expected. And that explains to the extent that -- I mean, we didn't give guidance until now in Q2, but to the extent that there was some change in our thinking it had to do with cable TV, not data center. Data center overall is doing almost -- actually slightly ahead of plan compared to where we thought it was going to be. I mentioned earlier, Microsoft had a delay in one product, but the rest of them are going fine, and that slightly in that one product was more than compensated for in Q2 by growth in other customers.

So with respect to...

## Chih-Hsiang Lin

So the on let me say that overall for data center, I think the -- we feel more positive right now compared to a few months ago. The main reason is Right now, I think the we can see several big customers, especially to hyperscale data customers approving in the schedule for 800G.

Our cable TV, cable TV is quite slow because it's all customers working for 1.0 products.

So usually the delay in cable TV is not surprising.

I think you can see from other costs from other companies.

# Stefan Murry

Michael, I just want to touch on your last question there, I'll try to answer it directly. Yes. Are we seeing a trend of more orders kind of month by month. And the answer is yes.

As I mentioned earlier, that one program, for example, from Microsoft that's somewhat delayed. We do expect it to pick up towards the end of this quarter.

So that would mean June months would be bigger than May, and that was certainly bigger than April.

So we are seeing that trend with that product. But overall, we expect to see that trend somewhat throughout the quarter.

Although, again, I would say, for the most part, the data center business outside some of these new programs and especially the 800-gig products later in the year, it's a relatively consistent business at this point.

# Operator

The next question will come from Tim Savageaux with Northland Capital Markets.

## **Timothy Savageaux**

Yes, I'd say with the new OpEx forecast, it seems like maybe something reasonably over \$300 million is what you would need to get you there.

And so that's a pretty significant ramp in the second half, almost 3x over the first, although we've seen that recently, a couple of different places, most recently at coherent.

So I guess as you look at that ramp and the 800-gig opportunities, in particular, I'm hoping you might be able to size those for us in a fashion may be similar or analogous to how you've been talking about the Microsoft 400-gig opportunity. That's one question. And you've talked about new data center customers or some old data center customers coming back. Should we assume this discussion around 800 gig and 1.60 also applies to Microsoft? Or is it more focused on the new players?

Stefan Murry

No. I mean, we specifically -- maybe it wasn't totally clear from the prepared remarks, but it's -- our existing customers that we have now, plus the new customers for those 800 gig and 1.6 terabit products.

So Microsoft clearly would be included in the category of existing customers. And as far as the size of the market, what we're seeing right now is that 800 gig is several times as large as the 400-gig opportunity.

So it represents a dramatic expansion. And that's within the same customer.

If you add on the new customers that we're referring to, the market size there gets commensurately larger.

### **Timothy Savageaux**

Great.

So as you look at that data center ramp into the second half, I mean, would you imagine between your current 400 gig -- would you imagine that to be, I don't know, half, 800 gig? Or how are you looking at it now? And to what extent are you looking at a material cable TV networking contribution in the second half as part of that ramp?

### Stefan Murry

Yes.

I think that's the key point really is the Cable TV has been kind of -- to the extent that there's been a disappointment in Q2, it's mainly that cable TV is ramping slower than we expected. And that's just, as Thompson mentioned, some of that's par for the course. I mean we were optimistic that the MSOs would move a little faster in the 1.8, but it's taken a little longer to get through the qualification and get all the necessary training and what have you done. But we do expect them to ramp in the second half of the year, and that will contribute meaningfully towards the revenue ramp, but it will also help us improve the gross margin, which is significantly higher in the Cable TV segment than it is in data center.

#### Chih-Hsiang Lin

I can add something for the 800G business, we can see -- or I think we are discussing with at least since 3, 4 customers, for sure, including Microsoft, as seen this I would say more than \$500 million, \$600 million for AOI...

## Timothy Savageaux

Sorry. Thompson, is that in the aggregate or what kind of time period? Or maybe we can -- or can we put some more brackets around that 500, 600, I think I heard you say.

# Chih-Hsiang Lin

I think we are doing quite a case.

I think we should get some volume order by late Q3, so for auto next year, Q1 to Q4 next year. I would say just 1 only is more than \$500 million or even \$600 million -- based on this current...

# Timothy Savageaux

That was going to be my last question actually in terms of your -- the nature of these detailed discussions and kind of is that around qualification or where do we stand on that front. Or are we talking about putting the dotting the eyes and crossing the ties on contracts, a little more color there?

## Stefan Murry

Well, I'm not sure to what extent the contracts really come into play there. What we're talking about now is total planning around deployment scenarios, when they're going to need products, how much product they're going to need, pricing, that sort of thing.

Commentary from the customers is how fast can you deliver some amount of product for us, right? It's about how fast can we be ready to deploy or to manufacture the products that they need to deploy.

## Chih-Hsiang Lin

And the very important key, as I say, is AOI has been invest a few hundred million dollars in the test is more than 10 years for automation, we develop a lot of equipment automations.

So I think now we are doing a Phase II. Maybe I will say we will do Phase II line or Phase III line beyond this year and the dual Phase III fully mentioned in Q1. Q2 next year.

So we can do 800G manufacturer in Houston with, I would say, similar or bit higher cost than in Taiwan and China.

I think that's very attractive to the customer, including the big cost that we used to have several years ago when they are coming back.

Number two, the key is the laser is a key component, key technologies. The 100G, 200G, the VCSEL, the EML, and I think we can lean Houston. That's also a very -- I think the key factor for the customer.

I think for sure, is not only the cost, the keys, the risk management.

### Operator

[Operator Instructions] Our next question will come from Dave Kang with B. Riley FBR.

### Dave Kang

So regarding that 800 gig, first question is, do you have 200 gig per lane VCSELs and EML? So what's the status on that?

### Chih-Hsiang Lin

We will have the volume effect will be more like Q1 next year. Right now is you go through the whole special and customers very concerned about the quality. But that's \$1.60 or I don't know for 800G and is still the plan. And I'm talking about the -- I'm talking about the opportunity for next year is \$500 million to \$600 million higher. The single mall, okay? It's like 2 kilometer higher. It's not a share, it's not AOC.

So it's a the IASB high-gross margin product, okay? The \$1.60 as early next year, it's more like will be the multimodal and single model together for shorter distance, maybe 5 meter and below. But we will have all that pretty soon.

### Dave Kang

Got it. And then on sticking with 800 gig.

I think you said something like maybe 2 customers that will ramp third quarter.

Just wondering if you've been qualified? Or is that already?

### Chih-Hsiang Lin

The role more than late Q3, early Q4.

We are doing a quite vacation.

So it's the single mall, 2 kilometer and higher, including the DIA and TubaFR4O.

So just I would say more than 2 customers. Hyperscale, we say maybe 3 customers, including just some other smaller customers. The volume for sure to push in Q3, so we are trying our best to catch up the volume.

Now with Q4 for Q3 schedule is a bit tight, maybe September.

## Dave Kang

Got it. And then you -- regarding your press release at the beginning of OFC about that 800-gig AOC that you jointly developed with Creo. Can you just give more color exactly what they provide and what you guys provide? And where are we as far as sampling or even going to production?

# Stefan Murry

So create makes the DSP, and we make active optical cable around it. And we haven't commented on any production schedules for.

# Operator

This concludes our question-and-answer session. I would like to turn the conference back over to Dr. Thompson Lin. Please go ahead, sir.

# Chih-Hsiang Lin

Again, thank you for joining us today.

As always, we want to extend a thank you to all investors, customers and employees.

We will continue to fall as we discussed today, we believe the long-term demand driver remains strong for both our data center and CATV business, and we believe we are well positioned to capitalize on these opportunities. Thank you.

# Operator

The conference has now concluded. Thank you for attending today's presentation.

You may now disconnect.