

Ciena Corp (Q2 2024 Results)

June 6, 2024

Corporate Speakers:

- Gregg Lampf; Ciena Corporation; Vice President of Investor Relations
- Gary Smith; Ciena Corporation; President, Chief Executive Officer
- James Moylan; Ciena Corporation; Chief Financial Officer
- Scott McFeely; Ciena Corporation; Executive Adviser

Participants:

- Timothy Long; Barclays; Analyst
- Karl Ackerman; PNB Paribas; Analyst
- Tal Liani; BofA; Analyst
- Ruben Roy; Stifel; Analyst
- George Notter; Jefferies; Analyst
- Amit Daryanani; Evercore; Analyst
- Simon Leopold; Raymond James; Analyst
- Samik Chatterjee; JPMorgan; Analyst
- Ryan Koontz; Needham & Co.; Analyst

PRESENTATION

Operator^ Ladies and gentlemen, welcome to the Ciena's Fiscal Second Quarter 2024 Financial Results Conference Call. (Operator Instructions)
Please note that this event is being recorded.

I would like now to turn the conference over to Gregg Lampf, Vice President of Investor Relations.

Please go ahead.

Gregg Lampf^ Thank you, George. Good morning. And welcome to Ciena's 2024 fiscal second quarter conference call.

On the call today is Gary Smith, President and CEO; and Jim Moylan, CFO.

Scott McFeely, Executive Adviser, is also with us for Q&A.

In addition to this call and the press release, we have posted to the investors section of our website an accompanying investor presentation that reflects this discussion as well as certain highlighted items from the quarter.

Our comments today speak to our recent performance, our view on current market dynamics and drivers of our business as well as a discussion of our financial outlook.

Today's discussion includes certain adjusted or non-GAAP measures of Ciena's results of operations.

A reconciliation of these non-GAAP measures to our GAAP results is included in today's press release.

Before turning the call over to Gary, I'll remind you that during this call we'll be making certain forward-looking statements.

Such statements including our quarterly and annual guidance, commentary on market dynamics, and discussion of opportunities and strategy are based on current expectations, forecasts and assumptions regarding the company and its markets, which include risks and uncertainties that could cause actual results to differ materially from the statements discussed today.

Assumptions relating to our outlook, whether mentioned on this call or included in the investor presentation that we will post shortly after, are an important part of such forward-looking statements, and we encourage you to consider them.

Our forward-looking statements should also be viewed in the context of the risk factors detailed in our most recent 10-K and our 10-Q, which we expect to file with the SEC later today.

Ciena assumes no obligation to update the information discussed in this conference call whether as a result of new information, future events or otherwise.

As always, will allow for as much Q&A as possible today, to ask that you limit yourselves to one question and one follow-up.

With that, I'll turn the call over to Gary.

Gary Smith^ Thanks, Gregg. And good morning, everyone.

As you've seen from the press release, today, we reported fiscal second quarter revenue of \$911 million and adjusted gross margin of [43%].

Our Q2 performance also included quarterly adjusted operating margin of 6.8% and quarterly adjusted EPS of \$0.27 and we generated \$42 million in free cash flow in the quarter. Later in the call Jim will provide additional details about our Q2 financial performance as well as highlights from the quarter with respect to our portfolio and business outlook.

Since we spoke with you about 90 days ago, industry dynamics and therefore, our current operating environment are largely unchanged.

Specifically, the drivers of bandwidth demand remains strong and durable.

Increasing cloud adoption and a growing number of AI use cases are accelerating global data generation.

As a result, network traffic is increasing and forecast to continue growing at a strong rate. This all really means that demand for bandwidth will continue to grow at 30% CAGR, if not more.

But despite this positive secular demand, as we all know it is taking longer than we and others in our industry initially expected for service providers to absorb and deploy the large amount of inventory they have accumulated over the last year or so. And we are still seeing some caution related to macroeconomic concerns, particularly internationally.

Importantly, we continue to believe these dynamics are temporary. And we are seeing some encouraging signs of recovery beginning to emerge including with respect to order volumes.

In fact, there were several highlights from Q2 that I think illustrate not only an improving service provider environment overall, also accelerating cloud provider dynamics and the overall momentum in our business.

Specifically, with respect to our service provider customers.

Orders in Q2 increased from the prior quarter, and service provider revenue was up sequentially in Q2.

Our 10% customer in the quarter was a service provider. Very importantly, service provider inventory levels are starting to decline and service provider engagement and RFP activity levels are higher than in the past several quarters resulting in several recent new wins and a growing pipeline of opportunities.

For example, we secured a significant design win in Q2 with a leading North American Tier one service provider for a multiyear network evolution project that includes both our line systems as well as our transponders. Based on these data points, we believe that order flows from our service provider customers will continue to improve from here. Turning to our cloud provider customers in Q2.

We secured important new design wins in this customer segment across terrestrial, submarine and coherent pluggable applications as we leverage the opportunities presented by strategic investments to build out their data center infrastructures. Two of these wins include long-term awards for deployment of our optical systems across their global network infrastructure.

We are also starting to build meaningful momentum with cloud providers for our coherent pluggables.

In addition to the significant design win we announced last quarter for our [400G] ZR plus plugs, we added two new cloud provider wins in Q2 for these products including one that is a new customer to Ciena. And later this calendar year, we'll bring to market WaveLogic six Nano, our next-generation coherent pluggable family.

With this, we will be first to market with the power advantage of 3-nanometer technology. And in Q2, we're pleased to advise that we were already awarded business by a large cloud customer for this [800G] ZR plus technology.

As expected, in addition to our market-leading optical systems business with cloud providers, our coherent pluggable solutions represent an incremental business and market share growth opportunity for Ciena with these customers, particularly in shorter reach DCI type applications. And as a reminder, as much as 50% of our total revenue is driven now directly and indirectly from cloud providers. And we anticipate continued growth from this customer segment in the second half of fiscal 2024, particularly as WaveLogic six becomes generally available for both systems and next-generation pluggable applications.

This will obviously give us significant time to market advantage with cloud providers who typically adopt (inaudible) leading type technologies more rapidly.

Stepping back, understandably, there's been a lot of focus on short-term industry dynamics in recent quarters and we continue to manage through those.

Importantly, we remain focused on the longer-term demand drivers of our business and our growth opportunities. With that said, I'd like to take a few minutes to walk you through how we're thinking about the market will evolve and how we will benefit from that evolution.

As I mentioned earlier, the fundamental industry drivers of bandwidth demand and network growth traffic continue to increase.

These drivers are increasingly being impacted by several business and network architectural trends.

Obviously first and foremost, an increasing portion of bandwidth demand and network traffic growth will be driven by AI. Traffic flows from AI and machine learning will pressure all parts of the network from broadband access to the metro to inside and around the data center, thereby impacting both service provider and cloud provider networks.

As an example, one of our North American Tier one service provider customers recently reported they are seeing a dramatic rise in demand for high capacity, low latency network and edge services, specifically related to the advent of GenAI and the complexity of hybrid multi-cloud architectures.

Optical delivers the combination of high capacity and low latency essential to supporting this type of traffic.

Another opportunity where we have a significant funnel of opportunities is managed optical fiber networks or known as [Mopin]. This term [Mopin] may be new to you, so let me briefly explain what it means.

While cloud providers can build their own network infrastructure in many parts of the world, certain countries have specific rules for fiber ownership, policies on licensing and standards for workforce qualifications.

In addition, given the need to add capacity sometimes very quickly, cloud providers are turning to [Moven] even in jurisdictions where there are no such restrictions. With [Mopin], telecom service providers build highly advanced optical networks and lease fiber pairs to cloud providers.

This enables the cloud providers to quickly expand their reach and better serve their end users. This is an example of an indirect source of revenue from the cloud providers through our service provider customers. Ciena is obviously uniquely positioned to lead this model by leveraging our strong relationships and presence with both global cloud and service providers. With all that in mind, I'd like to expand upon how we are investing to address these opportunities. And I think to start with, I would say that all of our TAM expansion efforts are deeply grounded in the competitive advantage we have with our optical technology.

It is well established and recognized that our industry-leading optical technology has been the driving [force] for some foundational reason behind our success in serving the long haul, subsea, metro regional and DCI markets.

We expect to continue to lead and take share in these markets with our best-in-class coherent technology. This includes the upcoming availability of WaveLogic six which will further extend our leadership in terms of performance, scale and sustainability.

In addition, as I noted, our optical technology is also increasingly applicable to high-growth opportunities where we are investing for growth by expanding our addressable market in three principal key areas. These include: number one, broadband access and number two metro routing, where both the high-capacity optical fiber connectivity we enable has become a foundational element of next-generation edge and metro networks, and number three, inside and around the data center.

The superior performance of our foundational optical technologies in a variety of form factors can serve the cloud provider trend towards disaggregated consumption models in support of AI fabric connections.

In broadband access, we have the market-leading XGS-PON solution, providing our customers with modularity and openness that they haven't enjoyed in previous

generations of PON deployments. This cost-effective, flexible and sustainable OLT solution can address residential, enterprise and mobility use cases.

Looking further out, as you know we also expect to lead in [25 GS PON] as it emerges next year. With prioritized customer investment in broadband access, fueled in part by massive public funding around the world, we estimate the 10G and above POM market will grow at a 55% plus CAGR to approximately \$7 billion by 2027.

Secondly, converged IP and optical layers in the metro are now being used to reduce costs, simplify networks and achieve new levels of scale to support AI. This is precisely what our coherent routing solution is designed to address with our purpose-built metro routers including the [5000 and 8000] series platforms as well as our recently expanded Wave router family. This solution offers our customers scaling choices, common next-generation IPOS integration with the world's best optics and photonics and the market-leading multilayer domain control to manage and fully converge these metro networks.

We estimate the metro routing market specifically, will grow at a 12% CAGR to nearly \$5 billion by 2027. And finally, number three, in addition to our strength in data center interconnect, we see an expanding and incremental opportunity inside and around the data center that also leverages our optical technology leadership.

As cloud providers continue to build massive data centers with high data rates to handle AI workloads, they are increasingly reaching power and space limitations.

We believe that coherent technology and our high-speed interconnect solutions will ultimately better address the need for superior scale, power and signal quality. This is similar to what we saw in the WAN. And while still early, we believe it is largely a function of time as to when a meaningful portion of inside and around the data center moves to these technologies.

In fact, we are already engaged with several cloud customers and ecosystem partners in this area as a direct result of our leadership in Coherent and we expect these engagements to increase and intensify over time.

So in summary, we believe we are incredibly well positioned to continue growing our leadership in optical and are leveraging that technology as well as our deep relationships with both cloud and service providers to further expand our addressable market and deliver profitable long-term growth. With that, I'll turn it over to Jim, who will provide details on the quarter's results as well as our business outlook. Jim?

James Moylan^ Thanks, Gary. Good morning, everyone.

As Gary mentioned, we delivered solid fiscal second quarter financial results. Revenue in Q2 was \$911 million. Adjusted gross margin was 43.5% within the range of expectations. Q2 adjusted operating expense was \$334 million. With respect to profitability measures,

in Q2, we produced adjusted operating margin of 6.8%, adjusted net income of \$39 million and adjusted EPS of \$0.27.

In addition, we generated \$59 million in cash from operations and adjusted EBITDA of \$86 million.

We ended the quarter with approximately \$1.4 billion in cash and investments.

We repurchased approximately 1.1 million shares for \$57 million during the quarter and we continue to target share repurchase at \$250 million total during the fiscal year. Turning to some portfolio highlights from the quarter.

In optical, we added 20 new customers for WaveLogic five Extreme in Q2, bringing our total customer count to 290.

To date, we've shipped more than 123,000 WaveLogic five (inaudible). Revenue in Q2 for our reconfigurable line system, our [RIS] platform was up 12% year-over-year with seven new customers in the quarter. And separately from our momentum with the cloud providers that Gary talked about, we gained 18 new customers in the quarter for our WaveLogic five Nano 400ZR and ZR+ pluggables including service providers who buy these plugs integrated into our optical systems and routers.

We are also seeing strong early traction with WaveLogic six Extreme which remains on schedule to become generally available within a few months. With the industry's first and only 1.6 terabit solution we are looking forward to a favorable competitive dynamic over an extended period, similar to what we experienced with WaveLogic five Extreme, in which we were the exclusive solution in market for more than 18 months.

In fact, we already have orders from 14 customers around the world for WaveLogic six Extreme.

In routing and switching, we continue to be well positioned to gain share with strong customer engagement and a growing portfolio of industry-leading solutions.

In broadband access, we have more than 50 customers globally for our [PON] solutions. These include Tier one service providers, major MSOs, the largest U.S. rural broadband provider as well as multiple regional Tier two and Tier three providers.

We also have more than 100 customers using our Coherent routing solution.

As Gary mentioned earlier, this solution leverages our optical leadership including plugs and is key to expanding our addressable market in the converged metro. This solution includes our Wave router family, which Verizon recently selected among other products in our portfolio to evolve its long-haul and metro networks.

Other portfolio highlights from Q2 include another very good quarter for Platform Software and Services with 23% revenue growth year-over-year. And our Global Services business grew 5% year-over-year and 6% sequentially, driven by another strong quarter for installation and deployment, as we continue to help our service provider customers work through some of their near-term challenges.

Turning now to guidance.

We continue to believe that the fundamental demand drivers in our business are incredibly strong, and the data generation and network traffic will continue to grow at very healthy rates for the foreseeable future.

We are also seeing signs of improvement in the current environment.

We can see this playing out in our hardware-related orders, which have increased steadily in fiscal year '24 to date, and we expect to continue to increase. Based on our pipeline and current projections, we believe that orders will increase meaningfully in Q3 and actually have the potential to meet or exceed our revenue during the quarter.

However, in the near term, while we see signs of improvement, the recovery of service provider order patterns is still slower than initially expected as they continue to absorb and deploy large amounts of their inventory. Based upon all of these dynamics, we now expect fiscal year '24 to be approximately \$4 billion, which is at the low end of the range we previously provided.

We continue to believe that our adjusted gross margin for fiscal year '24 will be in the mid (inaudible) range. With respect to OpEx for the fiscal year, we continue to expect it to average \$340 million to \$345 million per quarter for the full year.

For the fiscal third quarter, we expect to deliver revenue in a range of \$880 million to \$960 million.

Adjusted gross margin in the low to mid-40s range and adjusted operating expense of approximately \$345 million.

In summary, we feel great about our business today and the continued execution of our long-term strategy.

We have the world's leading optical technology to underpin our growth from a portfolio perspective.

We have strong and expanding relationships with both service providers and cloud providers. That combination positions us incredibly well to help our customers address the rise in global data generation and AI-driven bandwidth demand that is accelerating traffic growth across their networks.

With that, George, we'll now take questions from the sell-side analysts.

QUESTIONS AND ANSWERS

Operator^ (Operator Instructions) Our first question comes from Tim Long at Barclays.

Timothy Long^ Maybe if we could talk a little bit about kind of order book in the fiscal Q2.

I'm not sure if you gave that. And then it sounds like the telco continues to push out getting into the lower end of the range.

What confidence do you have that we'll see that in October or January? When do you think we'll start to really see the telco business is fully recovering?

James Moylan^ Yes.

I'll speak to the backlog, Tim.

We ended the quarter at about \$1.9 billion in backlog. And based on what we see for the rest of the year, we do think our backlog will be down a bit by the end of the year. Maybe not in Q3, but by the end of the year, it will be down a bit.

Probably not based on what we see now to as low as the long-term trend we had pre all of the COVID and supply chain situation.

Gary Smith^ So Tim, let me take the second part of that, what gives us confidence to it.

First of all, we've seen sort of a steady increase in the first half in orders from service providers.

We expect that to jump a little more in as a little bit of a step function in Q3.

As Jim said in sort of commentary, we expect meaningful order increases in Q3, primarily led by the cloud but also, we expect an improvement in the service provider piece. And we're also seeing awards, the pipeline, the whole activity level is increasing and sort of just as importantly, I think to talk to your question, we're seeing the inventory levels come down and they are deploying, particularly in North America.

We have good visibility into that.

So I think as we get out of the year, I think you'll -- we'll see service providers in a more balanced supply/demand inventory situation as we come out of our fiscal year.

Operator^ Our next question comes from Karl Ackerman, PNB Paribas.

Karl Ackerman^ In your deck today, you highlighted an emerging opportunity for Coherent pluggables both inside and around the data center.

For inside the data center, are you suggesting these would be used in 7- to 10-kilometer link or would there be shorter reach links also possible? And I have a follow-up.

Scott McFeely^ Karl, it's Scott.

I think both opportunities are there.

I think the more near one is the short -- the shorter kilometer reach links sort of around the data center, if you like, think of it as a 2- to 10-kilometer type opportunity.

I think the second one that you mentioned is as the data rates between GPUs are increasing and because of the power the power usage and the restrictions on power forcing more distributed architectures in these GPU clusters, the lengths of the links that need to get communicated, those Coherent technologies and our belief are going to start to make their way inside sort of more of the traditional -- that's a longer-term opportunity.

But our position of strength from a Coherent technology is pulling us into many of those dialogues around future architectures, both with the end cloud customers, but also with ecosystem providers that service those customers.

Karl Ackerman^ Very interesting and helpful.

For my follow-up, you indicated that orders -- you've already received orders for WaveLogic six products, but do you expect [WaveLogic 6E] and six Nano will be [GA] in the second half of this calendar year? And I guess as you address that, does a muted outlook for telecom impede in any way the near-term demand uplift you see of these new products?

James Moylan^ Yes.

So first of all, yes to answer your timing question, yes, both the 6E and 6N will be in market generally available this year, this calendar year.

We made the comment actually that we had multiple orders for 6E. That's absolutely true, and it comes across both service provider and cloud segments.

We also have awards as well for 6N, so not just 6E.

So -- and to your question of does the service provider sort of get in the -- the service provider dynamics of inventory will not get in the way of the ramp on those (inaudible), I would say not because the early movers on those tend to be the folks that are most -- had the highest bandwidth demand growth and have the tightest constraint on their fibers.

So think of think of the web scalers think of the [Mopin] networks that are serving to the web scalers and think of submarine networks.

Operator^ Our next question comes from Tal Liani in Bank of America.

Tal Liani^ My question is about the non-service provider -- two questions.

First, cloud went down from 33% to 25% of this non-cloud portion. And I'm trying -- I want to understand what is driving the trends right now in the cloud? Meaning they're investing heavily inside the data center, doesn't it translate into more traffic outside that requires your solutions? And if that's the case, it means that they had tons of inventory before.

So where are we on the absorption of cloud inventories? The second question is about the government and enterprise. This portion is growing. And can you talk about trends there, what's driving it, et cetera?

Gary Smith^ Okay. Let me take the first part of that on the cloud, Tal.

If you look at what we've done in the cloud space, we were up 50% -- 57% last year.

If you look at the first half of this year, we're up 14%. Revenues were down slightly in Q2.

That's just normal sort of ebbs and ebbs and flow, frankly. And the order flows we expect in Q3 and we're seeing in Q4, we expect both orders and revenue to increase in the second half of the year. The other thing I would say about it is yes, they're investing heavily inside the data center right now and their cloud business is growing, as witnessed by those numbers that I just gave you. That's really before all of the AI stuff hits and comes out of the data center. That's really all in front of us.

We are now seeing specific plans and engagements around network deployments in the second half and moving into early '25 to deal with what they expect to be an increase in AI traffic as well.

So I think we're very positive around the whole cloud space. And if you look at the first half, we took market share. Even though we have a very high market share in cloud, I want to be very specific about it, we took market share in the first half. And that's before you've got WaveLogic six coming online, which has a massive technology advantage.

You heard us talk about the orders just in the last couple of quarters, you've got multiple strategic awards for [400G] ZR plus and we talked about the new [800G] ZR plus as well which is obviously for WaveLogic Nano.

So -- and that's an incremental market opportunity for us, as Scott was just saying, around the short reach WAN and then eventually into the actual data center itself.

James Moylan^ On the government and enterprise side, we are showing growth in that sector, particularly on the government side.

We were up last year over 22%, 23%. Year-to-date, we're up about 6% and we see a lot of opportunity, particularly on the government side, and we're pushing hard to make sure we have the portfolio, the products, services and software to meet government's demands, which are increasing.

Operator^ Our next question comes from Ruben Roy with Stifel.

Ruben Roy^ Gary, I want to double-click a bit on some of the commentary you had on investing to address some of the opportunities and especially around the cloud service providers.

One of the things that's coming up more recently at OFC and other events is it seems like there's a demand for customized architectures and that type of thing.

So wondering, as you think about those types of investments, are you thinking about disaggregating some of your market-leading technologies, i.e., DSPs or optical front ends, et cetera?

Gary Smith^ Yes. Let me take the first part of that, Scott, if you have anything to add to it. The answer to your question is absolutely. And we've been engaged with these guys for a while. And if you think about it, we're an obvious choice for that given our leading Coherent technology and however they want to consume that, be it in pluggable form or be it in more discrete component form it basically increases the velocity of our existing investments.

There are things that we need to do, we believe, to make that applicable into that space, but that is all additional incremental market for us.

I mean we have 0 market share and 0 revenues from inside the data center right now. And so we are increasingly engaged. And given the depth of our relationship with these folks, we believe we're very well placed to benefit from that. And particularly, as you see the GPU intensity of the AI build-out, that is increasing data rates and increasing distances, which really plays into what we think will be an intersect point with the Coherent technology.

Scott McFeely^ Yes. Ruben, we talked about the opportunity of the coherent coming to solve some of the problems inside the data center.

We're very cognizant of the fact that inside the data center, the key players there, whether they be the end cloud consumers themselves or other ecosystem players that play there are -- have really grown up in a disaggregated model of consuming technology.

We're very aware of that, and we're taking steps to make sure that we are ready to play there and absolutely are willing to play there. That's just the way it's going to get consumed.

Ruben Roy^ Just a quick follow-up.

It's great to see the [wave broader] deployments of Verizon.

Can you maybe just talk about conversations you're having with either other service providers in North America or elsewhere or (inaudible) on that product specifically?

Scott McFeely^ Yes.

I think a bit of a step back, WaveRouter is one of the products in a family of products that we call our Coherent (inaudible) portfolio. And what we're seeing is, as service providers think about their sustainable role in the world going forward. Their metro and access connectivity is really important to them, and they're looking at what they're going to have to be able to deliver in terms of high capacity low latency type networks. And that is, again, playing into the strength of optics is a more and more important part of it.

So we've built a family of purpose build routers that is designed to go after that in an optimized way, Waverouter being the part of that -- the big brother of that family, if you like.

If you take more broader from a Coherent router perspective in the family or 5000 Series, 8000 series and WaveRouter, we've got over 100 customers worldwide deploying that today. And they're buying into the footprint optimization that you get on the purpose-built router, they're buying into the world-class optics. And they're also very importantly buying into the multilayer domain control that really allows them to enable convergence in their network.

So that's where we're seeing the traction.

Lots of -- WaveRouter itself is actually the redundant chassis version of that.

So where people are deeper in their network and they have high capacity redundancy, that's where they land on WaveRouter as part of that broader store.

Operator^ Our next question comes from George Notter, Jefferies.

George Notter^ Just a couple of modeling questions.

I was looking at the DSO number, I think it was [98%] in the quarter. That's up 10 days sequentially. Was there something going on this quarter with linearity or collections? What can you say there?

And then also I wanted to ask about inventories. Your inventories were up sequentially.

I know that you guys said previously that you don't expect them to go down that rapidly this year.

But I guess I was a bit surprised to see inventories go up sequentially.

So any insights there would be great.

James Moylan^ Yes.

We still expect, George, that by the end of the year, our inventory will be down from the end of last year by a couple of hundred million dollars. There are some movements through the year based on what customers are doing and what our vendors are doing.

But we think that by the end of the year, we'll be \$200 million or so below where we were at the end of last year. And the first part of your question was?

George Notter^ The linearity question. Yes.

James Moylan^ I don't think you should read a lot into that.

We actually have large customers who pay large amounts at certain times, and we were lucky enough in Q1 to get an end of quarter amount paid that brought our DSOs down. My guess is our DSOs are going to be in a range of 93% to 96% or so for the year.

It's a little higher than that now but will be 93% to 96%, my guess.

Operator^ Our next question comes from Amit Daryanani with Evercore.

Amit Daryanani^ I guess maybe the first one is when I think about your back half guide, one of the questions that folks seem to be kind of struggling with is you're sort of implying 20%-plus sequential growth in the October quarter at this point at the \$4 billion number. That seems to be a very steep acceleration given kind of what you've seen so far in the year.

So I'd love to just understand what's underpinning from a vertical basis, maybe sizable acceleration that you expect in October quarter right now?

Gary Smith^ Yes. Listen, that's a very fair question, Amit.

I'd answer it in a number of ways.

What gives us confidence around that?

First of all, we're seeing incremental improvement on service providers, not what we'd anticipated coming into the year, but we're clearly seeing incremental improvement in terms of orders, pipeline activity, et cetera.

Secondly, we still have a very large backlog. And that also gives us some confidence around our Q4 step-up for the year. And the other thing I would say is we're seeing strong cloud provider engagement as well even though we're up 14% already.

We expect a very strong second half from the cloud providers as well.

So mental improvement on the service providers, and we've got good visibility, particularly in North America, to them deploying their inventory that they've got.

And we've got -- we're seeing good progress on that.

So I think you put all of those together, and that's what gives us confidence in Q4.

Amit Daryanani^ Perfect. That's really helpful. And then Gary, you sound a lot more -- you sound incrementally more positive on the AI opportunity and how that's going to ramp up for you folks over the next couple of years.

I'm wondering, given everything that you've highlighted so far, does that alter your view of the long-term growth range for Ciena as you go forward? And when do you think some of these AI opportunities will start to show up on your revenue stream?

Gary Smith^ Yes.

I mean I think the question has always been in our space.

We see all the activity inside the data center and logic would say that at some point to monetize that has to come out and I think we've all been collectively looking at that.

I think we're beginning to see the signs of that right now.

I mean AI traffic is being obviously things like the current models are being put out there.

But the traffic flows are then blended with cloud, and it's difficult to see whether that's driving it or just the cloud expansion.

We are now beginning to see specific engagements with the cloud players around provisioning for AI traffic as we get through next year.

So that is informing sort of improved confidence around that impacting it. Then as we've talked a little bit about inside the data center, that's a little more, obviously more nascent opportunity for us.

We are excited by the disaggregation opportunity, which is all incremental to us there as well.

So you put all of that lot together under a reasonable question, our 6% to 8% that we put out there is basically what we can see right now from the TAM opportunities that we're driving.

Could that improve or a better way of putting it, should that improve over the next years? That is probably yes.

But really, the 6% to 8% is just what we can see right now and have visibility to that could obviously increase as the AI traffic flows into the -- both the cloud and the service provider networks, particularly in broadband.

James Moylan^ And you have to remember that our core optical business is -- it grows at only about 2% or 3%. And even in that business, we've been able to do very well and take share.

But the core of our business is not growing at a rapid rate will depend upon all of the things that Gary spoke about as well as routing and switching to get to the higher growth rates we are calling and hopefully, they'll go up from there.

Gary Smith^ If you look at the TAM in aggregate, the three main areas of the TAM, it blends at over 30% CAGR we're hopeful that, that will impact our 6% to 8% over time.

Operator^ Our next question comes from Simon Leopold at Raymond James.

Simon Leopold^ I wanted to first ask about the concentration of your cloud customers because I guess the lumpiness that you've called out should have been expected, you had two really big customers in your October and January quarters.

What I'm looking for is an understanding of how you expect the concentration within cloud evolves. Do you expect others to get more significant beyond the two that have been the major drivers of your direct-to-cloud revenue? And then I've got a quick follow-up I'll come back with.

Gary Smith^ I would say, obviously there are four large network deployed cloud players that we're all aware of.

I think we are employed with all four and you're going to get ebbs and flows between each of them as you go through that.

I think it's fair to say we're expanding our relationship with all four of those, both in terms of new applications. You saw all the pluggable announcements in the last couple of quarters. And that's a market really in this shorter connectivity, DCI connected, where we really don't have a lot of market share.

So that's all incremental market share for us.

So you've seen an expansion of that in addition to submarine, in addition to the [Mopin] stuff that I talked about around the world with service providers.

So you can see our relationship with those four are getting deeper and they're broadening out. And that before we have the opportunity inside the data center as well.

Now in addition to that, we did announce a pluggable win with a new cloud provider that is not in those 4.

So you are seeing other cloud providers, not in the big four come through globally, and we're engaged with most of those as well.

So the overall opportunity in market is getting bigger, and we're increasing our market share in that space because of the multiple applications that we've got. And that's before we start to deliver WaveLogic 6.

Simon Leopold^ And then just as a follow-up, and maybe this is for Scott.

Is that -- the [VR] market is thought of as a revenue headwind.

But I presume ZR Plus would be somewhat different because that's a product or a technology that's not necessarily a standard and provide some better performance than the ZRs.

Can you talk about how ZR+ affects your assumptions in the market overall?

Scott McFeely^ A couple of points back on your last comment. Just a reminder that the four big ones that Gary talked about, all four of those are in our top 10 customer base.

So there's [history in] there. And then there's the [next tier], [next year] includes logos that you would recognize as well as just say non-North American cloud providers that are moving outside their national territory, if you like, and looking for Western suppliers to provide that as well.

We get a good business to begin with through open opportunities on them.

And as they get bigger, they start to build their infrastructure. And the reference that we had on our [400G ZR] when this quarter was one of those logos.

So we start to see them start of growing up, if you like, and becoming a bigger part of the industry, and we're benefiting from that. To your question on the dynamics of [400G] ZR and evolution to [800G] ZR and ZR+, I guess I just would -- from our perspective, sort of have a different view of the [400G] ZR being a headwind because if you look at where

we actually participate, even though we have a massive market share position with the web scalars on all things transport, we don't really participate with them today on their campus metro DCI.

So for us, we look at that as a net opportunity and a tailwind, whether it be a current generation [400G] ZR whether WaveLogic five Nano or next generation.

And then you're right, as we move to next generation, what's happening is because of the power constraints and this sheer demand for compute these data centers are getting pushed further and further apart. Geographical distribution is happening, performance starts to matter again.

So we're not designing to lease common denominators of a [400G] ZR performance matters. And I think that moves to our strengths as a technology provider.

Operator^ Our next question comes from Samik Chatterjee in JPMorgan.

Samik Chatterjee^ You're sounding a lot more positive in terms of the opportunity with telecom service providers bandwidth growth as well as AI that you talked about.

However, I mean another way that investors, I think, are also looking at it is when we look at your telco revenue like from 2019, every year, 2019, 2020, till like even 2024 (inaudible).

It's been largely sort of in this \$2.1 billion, \$2.2 billion range pretty consistently and when we think about sort of pluggables, et cetera, it seems like the telcos have found a way to sort of drive the overall spend that they do despite the increase in bandwidth to a sort of very consistent level. When you think about the drivers that you called out, how do you think about sort of bring out of that sort of range in terms of what the telcos have spent? How the telcos really willing to spend?

Or are they going to look at other ways including like pluggables to keep that spend to that sort of similar level? That's largely, I would say, the concern in terms of (inaudible) as we sort of think about the broader sort of bandwidth acceleration trends. These telcos haven't really shown their appetite to spend more over time.

Can you just share your thoughts on that, please? And I have a follow-up.

James Moylan^ Let me start to answer that, Samik. And I think there are a lot of different dimensions to this question.

But the first thing I would say is that we've gone through a very unusual period in the industry starting in 2020 with COVID followed by the supply chain dynamics and the swinging of the pendulum back and forth. And so my own view is that the recent trends and the recent actual spins on the part of service providers are not reflective of a long-

term trend. The other thing that's happened during this period is that service providers have spent a large amount of money on building out their 5G networks.

So all of that is wireless year in which we don't participate.

It's our view that it's not going to be a highly or rapidly growing business.

But we do think that over time, service providers will start to spend again particularly on optical. Every indication that we see is that demand on their networks is growing, at least on their wired networks, and they're going to have to spend to build that out.

In the near term, as we said, on the [Mopen] side, they're getting that opportunity from the GCNs.

And we've said in the past, this is an area where the GCNs actually are regulated prevented from owning fiber and owning the networks.

But even in places where they can own their own networks they want to get enough gear out there more quickly than they can do themselves. And so they're entering into [Mopen] arrangements with service providers in the U.S. and other parts of the world.

So we don't think that the near-term actuals reflect long-term trends.

We think the service providers are going to be just fine.

Gary Smith^ The other thing I would sort of add to that is you've got traffic growth, and you've got, as Jim said, [Mopen] cloud driving that, we're also winning share.

We have leading technology in this space, leading relationships, and we're winning share in there.

We're also our TAM expansion, some of the TAM expansions in terms of convergence of metro routing, et cetera, means that we're going to take share in those new emerging markets as well.

So service provider is a challenging market for sure.

We believe it will grow in our space, and they will absolutely need to spend and grow their wireline networks, as Jim said, for all the drivers that we know of.

And that's before sort of AI really starts to it. They're going to be responsible for delivering a lot of the broadband AI and we're quite bullish on that broadband space.

So we think that we are going to get to a more normalized state with service providers as we get through to next year from an inventory balance point of view and we are

incredibly well positioned to take advantage of that in addition to our confidence in the cloud relationships.

Samik Chatterjee^ Got it. And if I can just do a quick follow-up. Jim, you mentioned in your remarks that you're expecting orders in Q3 to be slightly above revenue potentially.

Is that really what's embedded in the Q4 guide? Because my math would indicate that you're sort of implying a 50% increase in the orders from Q2 to then sort of drive to that order level in Q3?

Am I doing the sort of -- am I getting it in the ballpark in terms of what's embedded in the revenue recovery in Q4?

James Moylan^ During the ballpark, we do expect a meaningful increase in orders in Q3 based on everything we see now and if things fall right, we could approach we expect to deliver for revenue in the quarter. Whether we get there or not, we're going to be close to what we delivered in Q3. And that order pattern is what drives a lot of our confidence for Q4.

Gary Smith^ And we're also -- I'd also point out, we're carrying a big backlog, too.

Still.

Operator^ Our next question comes from Ryan Koonts with Needham & Co.

Ryan Koontz^ Just circling back to some previous commentary around the 800 ZR impacts.

Can you specify when you think the timing of that impact the cloud business? And which segments of cloud you expect [800ZR] impact in terms of DCI, metro, long haul [Subsea]?

Scott McFeely^ Yes. Commercial availability of our product, Ryan, is going to be late in the calendar year this year.

We wouldn't expect it to be a revenue impact for us until 2025 certification cycles. And obviously there needs to be host platforms and what not that these puzzle go into.

Ryan Koontz^ The other thing (inaudible) later in the year.

Scott McFeely^ Sorry, Ryan. Yes.

I think it will take a couple of quarters beyond availability for it to start to see any meaningful revenue.

James Moylan^ And just to be clear, Ryan, we still believe that the ultra-long-haul submarine long-haul market is going to be a systems business, not a pluggable business. And we think the WaveLogic 6E is the one that's going to drive that, and we'll be ahead of the market on that by a good long time.

Ryan Koontz^ That's great to hear. Just shifting gears quick on the broadband side.

It sounds like some decent momentum there.

Can you maybe kind of outline different segments we're seeing success in terms of cable and Tier 2s and what your differentiation is what the competitive environment is like there? Appreciate it.

Scott McFeely^ Yes, Ryan. And just to remind folks on the call that our play here is to intercept broadband [PON] at next-generation PON, 10-gig and above.

We've got a vertically integrated solution on the OLT side with our tidbit acquisition.

It's a modular solution that brings with the benefits of cost and footprint. And it's an open solution unlike sort of pass technology.

So that's the value proposition resonating.

I think we've got approaching 60 customers globally on that.

It's across all the segments that you mentioned.

So Tier one service providers, MSOs, large regional broadband providers, both U.S.-based and internationally and a number of Tier 2, Tier three broadband suppliers. The majority of those I'm mentioning are actually whole systems, but [in their] mind folks, we also sell the Tibit technology as an individual component in the marketplace through other OEMs as well.

Gregg Lampf^ Thank you, Ryan. Thanks, everyone, for joining us today.

We look forward to catching up with everyone later today and over the next days and weeks.

Have a good day.

Operator^ Ladies and gentlemen, the conference has now concluded. Thank you for attending today's presentation.

You may now disconnect.