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# Semtech Corp. (SMTC)

## Q3 2024 Earnings Call

# CORPORATE PARTICIPANTS

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**Paul H. Pickle**
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# MANAGEMENT DISCUSSION SECTION

**Operator**: Good day, and thank you for standing by. Welcome to Semtech Corporation's Third Quarter 2024 Earnings Conference Call. At this time, all participants are in a listen-only mode. After management remarks, there will be a question-and-answer session. Please be advised that today's conference is being recorded.

And I would now like to hand the conference over to Mark Lin, Executive Vice President and Chief Financial Officer. Thank you, sir. Please go ahead.

## Mark Lin

*Executive Vice President & Chief Financial Officer, Semtech Corp.*

Thank you, operator. Good day, everyone, and welcome to all those joining today's call, including analysts, investors, and my fellow employees. I'm Mark Lin, Executive Vice President and Chief Financial Officer, and I'm joined today by Paul Pickle, President and Chief Executive Officer.

Today, after market close, we released our unaudited results for the third quarter of fiscal year 2024, which are posted to our investor website at investors.semtech.com. Supplemental earnings materials, including net sales data by end market, reportable segment and geography, as well as with the a share count table, reflecting potential share issuances from our convertible notes at various stock prices, are also posted to our investor website.

Unless otherwise noted, all income statement related financial measures will be non-GAAP, other than net sales. A discussion of why the company considers such non-GAAP financial measures useful along with reconciliations of such non-GAAP measures to the most comparable GAAP financial measures are included in today's press release.

Today's call will include forward-looking statements that include risks and uncertainties that could cause actual results to differ materially from the results anticipated in these statements. For a more detailed discussion of these risks and uncertainties, please review the Safe Harbor statement included in today's press release and in the Risk Factors section of our most recent periodic report filed with the Securities and Exchange Commission. As a reminder, comments made on today's call are current only as of today, and Semtech undertakes no obligation to update the information from this call should facts or circumstances change.

With that, I will turn the call over to Paul to discuss our business and end markets.

## Paul H. Pickle

*President, Chief Executive Officer & Director, Semtech Corp.*

Thank you, Mark.

Semtech's Q3 financial performance generally met my expectations with net sales slightly above the midpoint of guidance. I'll provide a bit more color on end market performance which, we believe, improves understanding and comparability of our business before turning the call back to Mark. Infrastructure net sales were $43.2 million, a sequential increase of 2%. Hyperscale data center applications benefited from continued momentum of AI-driven applications and grew both sequentially and year-over-year.

We recorded growth in general compute data center applications as well. We had record shipments in 200-gig, 400-gig and 800-gig applications with our Tri-Edge and FiberEdge products having been well received in data centers around the world. Net sales for other products in the infrastructure end market, including passive optical network, wireless and infrastructure-focused transient voltage suppression, faced a headwind from elevated channel inventories, though POS for each of these products grew sequentially.

As stated previously, PON tenders are expected in our fiscal fourth quarter and we have seen some early channel pulls in anticipation of this timing. We believe we continue to lead the PON space. Last March, we announced the world's first 50-gig PON chipset, which enables multi-gigabit broadband services for multi-tenant locations and will drive new use cases for the PON market, including enterprise applications for small business needs. This chipset is currently sampling with module vendors and system integrators with positive feedback.

We have also started sampling 1.6-terabit and Linear Pluggable Optics applications at optical module vendors and system integrators with early success. We believe our technology solutions have meaningful advantage in AI applications offering lower cost, lower power, and lower latency. Net sales from these leading edge applications are expected to begin in the second half of calendar year 2024.

On the automotive front, while net sales are currently small, we believe we are making inroads with the next-generation Ethernet protection devices. Adoption of automotive Ethernet continues to accelerate and our leading products in this space are positioning us for future growth. For the fourth quarter, we expect net sales from the infrastructure end market to be flat to slightly down, as the market further digests channel inventory.

High-end consumer net sales were $37.6 million, a sequential increase of 10%, benefiting from seasonality in TVS products, primarily directed at smartphone applications. Sales from these TVS products increased both sequentially and year-over-year, with corresponding increases in POS. Strength in the quarter was driven by measurably greater Protection content and current generation products at a leading North American smartphone manufacturer compared to prior generations.

Design wins also grew 10% sequentially for handheld devices and wearables, further validating our recent innovations in this space. Sales from proximity sensing products declined slightly on a sequential basis, but grew year-over-year while, encouragingly, POS grew on both a sequential and year-over-year basis.

Our PerSe sensing solution provides capacitive touch and user sensing capabilities. For wearables, PerSe sensors improve the user experience by providing automated functionality and rapid response interactions, such as smart assistant activation, noise cancellation control, and media player management. Our PerSe sensors also provide the industry's best performance of minimizing end users exposure to RF energy. This allows equipment manufacturers to achieve compliance with specific absorption rate or SAR regulations while maintaining optimal signal connectivity.

While PerSe is well-known in the smartphone space, efforts to reduce SAR have opened opportunities and design-ins for applications, including notebook computers, tablets and wearables. For the fourth quarter, we expect net sales from the high-end consumer market to be down due to the aforementioned seasonality and channel inventory digestion.

Industrial net sales were $120.2 million, down 26% sequentially, but within expectations with the bulk of the decrease in the ISP modules business. Semtech delivers product leadership in low-power wide area and broadband applications, and we'll continue to leverage these areas to return the business to growth.

IoT Connectivity (sic) [Connected] Services reported net sales of $24.2 million, up 1.4% sequentially, highlighting the stickiness and relative stability of this recurring revenue stream. Within AirVantage Smart Connectivity, we continue to see growth in our Advanced service line, which offers global access through a multi-MC, multi-profile single SIM solution.

Our Carrier+ plus offering, which simplifies regional deployments with multiple Tier 1 carriers is showing growth, particularly in Australia and New Zealand. These growth areas are partially offset by the sunsetting of legacy technologies, but net to stable sales. Net sales of LoRa-enabled industrial products declined sequentially, but POS and bookings increased, providing some indication of market recovery. Connected gateways increased 3% sequentially, and we are encouraged by substantive increases in POS for end-node products.

Adoption of LoRa-based solutions in the utility space gained further traction in Q3 with multiple European-based utilities announcing RFPs with a requirement for a LoRa solution. We are also integrating LoRa into custom SoCs for a customer, which has expanded opportunities in hearing aid applications.

Returning to our hardware business and expanding on the regulatory environment I discussed in our last quarter's earnings call, as the largest in North American module supplier, Semtech is definitely seeing a meaningful share shift in pipeline from our competitors to us, and pipeline is translating to design wins. Customers in this market have varying degrees of risk tolerance. Most sensitive is critical infrastructures, such as industrialized laptops used by first responders and cellular routers used by utilities. We are now benefiting from the next wave of concern with applications that involve payments or personal identifiable information.

Point-of-sale devices are a prime example. Where there was perhaps a hyperfocus on cost for point-of-sale applications, the security of Semtech as a North American supplier has resulted in design wins that translates to revenue in the second half of next year. Our near-term headwind for our router business is government spending constraints under the current federal budget situation with traditional end-of-year public sector spend lower than trend.

For the fourth quarter, we expect industrial net sales to be flat to slightly down with continued inventory digestion and the aforementioned public sector headwind, but stable net sales from our managed connectivity offerings.

Now, I'll turn the call back over to Mark.

## Mark Lin

*Executive Vice President & Chief Financial Officer, Semtech Corp.*

Thank you, Paul. Turning to our Q3 results. We recorded net sales of $200.9 million, slightly above the midpoint of our guidance. Paul discussed end market net sales performance with infrastructure up 2% sequentially, high-end consumer up 10% sequentially, and industrial down 26% sequentially. I'll refer participants to our investor website for the last five quarters of net sales data by end market reportable segment and geography.

Gross margin was 51.3%, a sequential increase of 170 basis points and above the high end of our guidance for the quarter. Gross margin reflected well-negotiated supplier concessions to reduce third quarter manufacturing costs, offset by incremental inventory reserves and unfavorable mix. Supplier agreements particularly benefited IoT Systems for the third quarter. Netting these items, consolidated gross margin would have approximated the midpoint of guidance.

Operating expenses were $82.5 million, favorable to the midpoint of guidance, with R&D expense sequentially increasing about $900,000 and SG&A sequentially decreasing by $4.1 million. Net interest expense was $22.3 million, with only about one week's benefit from the capital structure change completed at the end of October. We recorded net earnings per share of $0.02 based on a diluted share count of 64.3 million shares.

Changing gears to the balance sheet, we ended Q3 with a cash balance of $123.8 million and undrawn revolver capacity of $280 million. Working capital moved in a favorable direction with inventories decreasing $19.6 million. Principal outstanding on our debt was $1.4 billion with a weighted average interest rate of 5.57%.

At the end of our third quarter, our consolidated net leverage ratio, calculated in accordance with our credit facility was 6.49x, and we expect to maintain compliance with our debt covenants for the next 12 months. Including the effects of our convertible notes and interest rate swaps, loan principal was about 83% fixed and 17% floating at the end of Q3, and all of the loan principal was long term.

At the end of Q3, there are no scheduled principal payments on our senior secured credit facility until January 2028, and no scheduled principal payments under convertible debt until November 2027. I'd like to discuss the five-year $250 million 4% convertible note we issued this past October. In addition to the benefits of increasing our mix of fixed to floating rate debt and eliminating scheduled principal payments on our term loan, we placed emphasis on reducing cash interest costs.

A Federal Reserve rollback in interest rates may occur. When I turn on the high beams, I expect to be in a protracted, elevated interest rate environment. As I mentioned, all of our loan principal is long term. While deleveraging is a key use of excess cash, the convert eliminated $67 million in scheduled principal payments next fiscal year, providing optionality.

Also addressing dilution, please refer to the convertible notes dilution table posted at the Semtech investor website. This table provides incremental dilutive shares on both the 2027 and 2028 convertible notes. On both the notes, par value or principal is paid in cash and conversion of par is settled in cash or shares at Semtech's discretion. Assuming the conversion of both notes were settled in shares, dilution of 20% is reached at a stock price, a bit above $85 with no effect on diluted shares today.

On the date we priced the 2028 notes offering, a $250 million raise would be the equivalent of 15.6 million shares or an immediate 24% dilution, which I do not believe counteracts the benefit of reduced interest expense. I hope this extended explanation provides some insight into management's calculus in issuing the convert. Free cash flow was a $12.4 million use of cash, reflecting ongoing restructuring and integration activities, but sequentially improved $6.5 million. Adjusted EBITDA was $28.1 million, compared to $39 million in the second quarter.

Now, turning to fourth quarter guidance. We currently expect net sales of $190 million, plus or minus $10 million. Our industrial end market is expected to be flat to slightly down, the high-end consumer end market is expected to be seasonally down, and the infrastructure end market is expected to be flat to slightly down. While end customer demand consisting of direct shipments plus POS has improved, our net sales guidance reflects a thoughtful reduction in channel inventories.

Based on expected product mix, gross margin is expected to be 48%, plus or minus 100 basis points. Operating expenses are expected to decrease 10% at the midpoint to $74 million, plus or minus $2 million, primarily reflective of cost reduction actions we already implemented in the third quarter. SG&A is expected to sequentially decline 13% to $33.5 million at the midpoint. Research and development expense is expected to sequentially decline 8% to $40.5 million at the midpoint. And we do not believe we have materially impacted projects that result in near-term revenue or materially affect any of our customers' roadmaps.

Net interest expense is expected to be $21 million, reflective of timing of interest rate reset periods relative to quarter end. These amounts are expected to result in a diluted loss per share of $0.05, plus or minus $0.06.

I now like to turn the call back over to the operator for Q&A.

# QUESTION AND ANSWER SECTION

**Operator**: Thank you. We will now be conducting a question-and-answer session. [Operator Instructions] And the first question comes from the line of Quinn Bolton with Needham & Company. Please proceed with your question.

**Quinn Bolton**
*Analyst, Needham & Co. LLC*
Q

Hey, guys. Thanks for taking my question. I guess, the first question, Paul, you've talked about the growing pipeline on the module side for North American operators. Just wondering, can you give us a sense of how big is that total TAM, how much of the North American market maybe currently supplied by the Chinese module vendors? Just trying to get a sense of how big this opportunity is. I think you cited last quarter at $200 million. It sounds like it's bigger than that now. And then I've got a follow-up for Mark. Thanks.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*
A

Yeah. Thank you, Quinn. By the way, I think you got the best title on – I love the Harry Potter reference on your note this past quarter. Okay.

**Quinn Bolton**
*Analyst, Needham & Co. LLC*
Q

Thank you.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*
A

So, getting to your question on the pipeline, I would put that market worldwide just over $6 billion. If you want to kind of strip out APAC and automotive in particular, you're talking about just north of $3 billion. I'd be excluding NBIoT in that as well. So, if you look at the North American portion of that, there's a significant automotive number in North America and another analyst put Quectel at about $4 billion over five years in terms of revenue into North America. So, excluding automotive, we look at it about a $400 million opportunity.

**Quinn Bolton**
*Analyst, Needham & Co. LLC*
Q

On an annual basis?

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*
A

Yes.

**Quinn Bolton**
*Analyst, Needham & Co. LLC*
Q

Got it. Perfect. And then, Mark, you've guided the gross margin to 48%, down from over 51%. I'm just, I guess, having a little bit of difficulty kind of reconciling the quarter-to-quarter change. It sounds like there were potentially some benefits in the fiscal third quarter that may not repeat, but it also sound like there were some inventory charges that you took in the third quarter. So, can you walk us through what are the major puts and takes going into the fourth quarter from either increased inventory reserves mix among the product buckets and, yeah, whatever else might account for the change quarter to quarter? Thank you.

**Mark Lin**
*Executive Vice President & Chief Financial Officer, Semtech Corp.*
A

Yeah. Thanks, Quinn. I'll also point out that our guide for Q3 was a 48% gross margin, so we're guiding the equivalent margin. So there's quite a bit of noise going kind of up and down, and we're quite a bit mix sensitive. But if you take the mix, normalized mix at 48%, that translates to the 48% target for the next quarter.

**Quinn Bolton**
*Analyst, Needham & Co. LLC*
Q

So, really, 300 plus points of benefit in Q3 that you don't expect to repeat in Q4?

**Mark Lin**
*Executive Vice President & Chief Financial Officer, Semtech Corp.*
A

That's right.

**Quinn Bolton**
*Analyst, Needham & Co. LLC*
Q

Okay. Got it. Thank you.

**Operator**: And the next question comes from the line of Tore Svanberg with Stifel. Please proceed with your question.

**Tore Egil Svanberg**
*Analyst, Stifel, Nicolaus & Co., Inc.*
Q

Yes. Thank you, Paul, Mark. So, it sounds like POS is starting to improve just broadly speaking. But it also sounds like there's still some channel inventory out there. So, could you maybe quantify that for us, either in weeks or percentages or anything like that? Because it does sound like POS is the really encouraging data at this point.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*
A

Yeah. I think, if you reflect to my comments from the last earnings call, we talked about an improving bookings trend over the last four quarters. I'd say at this point, we're five quarters in. If we look at just the IC portion of the business and the component portion, so hardware, we obviously took a significant decline this past quarter. So it's a little hard to judge where that's going to settle out. So, I'll separate the two for the time being.

If we look at it, there's – in some cases, the channel is quite lean. We're well positioned to respond to any kind of market demand or market upside. In other cases, consumer, we've seen that come back. The inventory pools have been quite good. So the channel's relatively healthy. It's hard for me to put a number on it overall, because it really does depend on the product line. But if I were to speak philosophically, we would want roughly 8 to 12 weeks in the channel. In some cases, we're right at the 12-week number. And in some cases, we're over that number, and we're really kind of watching POS.

Lastly, on the component portion, I would say that, for the first time, we've kind of crossed that 1:1 book-to-bill threshold. So, that's very encouraging for us in terms of where we sit in the recovery. On the hardware side, I have less visibility on the module business that's seen a significant decline this past quarter. And the reason for that is it's largely a direct business and those customers don't report the inventory numbers back to us.

We obviously do talk to them and we do hear what they're saying in terms of what their inventory levels are. But we've seen some decline in the industrial end market, similar to what we've seen in routers, roughly 30%. We think our customers are experiencing the same. As a result, the inventory levels in terms of weeks on demand – or weeks on hand have kind of gone up. And so, I think it's still a little early to kind of look at what we might characterize as a correction there, but we would expect that to play out over the next quarter or two.

**Tore Egil Svanberg**
*Analyst, Stifel, Nicolaus & Co., Inc.*

Q

No. That's helpful color. And as my follow-up, on the infrastructure business, I appreciate the guidance there, flat to down, but could you maybe talk about some of the subsegments there, and what you're expecting? Especially, data center, is that expected to still grow and perhaps that's being offset by still weak PON and wireless?

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yeah. So, yeah, the data center, definitely, we're still expecting some positive things. I will highlight that we're fairly early on though with a no change in data center. So the traction has been quite good. The channel has been pulling those orders in anticipation of usage. And most of the stronger production ramps are really kind of slated for Q1 calendar. So, while we're seeing a nice uptick – last quarter, we saw a 112% increase in terms of data center numbers, we saw an increase this quarter in terms of data center numbers. I would expect a little bit of absorbing the pause and then kind of a resumption of growth as we kind of look at next calendar year.

So, the data center number is going quite well. PON is a little bit steady state until we get a look at those tenders. We're expecting those tenders to come in in the January timeframe. That's about a one-month delay, still ahead of Chinese New Year. But we were expecting to kind of see those in December. It's now been moved to January. So, we'll see those tenders and we'll be able to respond accordingly. But overall, I'd say, infrastructure is fairly well positioned. There are some bright spots. Most of it's moving sideways. But those increases that we're seeing definitely offset as we kind of look at the module business. Although I don't expect significant further decline, we just expect that to move sideways at this point.

**Tore Egil Svanberg**
*Analyst, Stifel, Nicolaus & Co., Inc.*

Q

Sounds good, and congrats on the progress. Thank you.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Thank you.

**Operator**: And the next question comes from the line of Craig Ellis with B. Riley Securities. Please proceed with your question.

**Craig A. Ellis**
*Analyst, B. Riley Securities, Inc.*

Q

Yeah. Thanks for taking the question. And, Mark, thanks for the additional transparency with the convert dilution things you've posted on the website. So, Paul, I wanted to start off with one for you and follow-up a little bit on Tore's question, but maybe take a longer-term view. Would be helpful if you could provide some more color on things that you see as we look out over the course of calendar 2024? In data center, for example, what are some of the things that you're really excited about in traditional data center versus hyperscale? And then similarly, what are some of the things you have your eyes on in base station and then in PON?

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Okay. Yeah. Thank you for that question. I will say, the data center, we're pretty excited. I'm personally pretty excited about the data center. What we're seeing there is just an absolutely rapid SAM expansion, report expansion in data center. And I would really kind of bifurcate data center or hyperscale data centers into a general compute bucket and an AI bucket. Those are two very different applications. They have different needs. And right now, the appetite in AI is pretty insatiable.

So, we're making grounds in general compute in 4x100 applications as well, as you kind of look at just breakneck speed in AI. And so, most of the volume that we ship today really is more 50-gig single lambda. I know we kind of throw out 400-gig, 800-gig, but we kind of look at, for us, it's a generational device thing. We look at 50-gig devices, we're shipping 100-gig devices, and we've got out in the market, but are not shipping against those devices quite yet today, 200-gig single lambda that's performing quite well in POCs. So, as I kind of look out over the next several years, the massive growth that we expect to happen in AI-driven data centers is just a significant upside opportunity for us, and we're well positioned to take advantage of that. So, to me, this is across the board, small customer set, very exciting opportunity to say the least.

**Craig A. Ellis**
*Analyst, B. Riley Securities, Inc.*

Q

Got it. And then you talked a little bit about needing to see tenders in PON, but on the base station side of the business, anything standing out as you look at 2024?

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yeah. If you go back to ECOC, we did a 1.6-terabit test case with Coherent, I should say, demonstration. And this was for 10k let's call it, mid-haul type applications. So, in terms of pushing up the speed or the availability to implement high-speed connections in both short reach, as well as mid-reach or long-reach applications, both of them were well-positioned to take advantage of.

So, as infrastructure just drives data connectivity up and there's that last mile that will happen naturally as well on both European and North American countries as well, China is important to us or has been with all the infrastructure growth and multi-tenant dwelling growth, their data connectivity has been really key. We would expect share in North America and Europe to creep up as they look to implement higher speed applications as well. So, just released the 50-gig part as well. We're looking at 25-gig adoption. But I think from my standpoint, the tenders in January are going to give us a bit of a near-term effect as we continue to gain market share in other territories, which will give us a little bit more of a long-term tail as well.

**Craig A. Ellis**
*Analyst, B. Riley Securities, Inc.*

Q

Got it. And then, I'll flip it over to Mark for the second topic and it's on operating expense. So, Mark, very impressive guide, decreasing OpEx by 10% quarter-on-quarter to $75 million. And it sounds from the color that you provided that that decrease is structural, but I wanted to confirm that. And then, if you could, just any color on things we should expect as we look to 2024 with OpEx, for example, FICA impacts early in the year, or any other optimizations that you might see coming. Thank you so much.

**Mark Lin**
*Executive Vice President & Chief Financial Officer, Semtech Corp.*

A

Sure. Thanks for the question, Craig. We've guided $74 million for next quarter, and we're pretty confident in hitting that number because the actions that we need to hit that number have really been taken. There, of course, is going to be seasonality in the calendar of Q1 with things like FICA resets, but we're pretty comfortable staying at around this neighborhood in terms of OpEx. There may be some incremental increases, slight incremental increases in R&D, but that's just really timing.

**Craig A. Ellis**
*Analyst, B. Riley Securities, Inc.*

Q

Got it. Guys, congratulations on the progress. Thank you.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Thank you.

**Mark Lin**
*Executive Vice President & Chief Financial Officer, Semtech Corp.*

A

Thanks.

**Operator**: And the next question comes from the line of Anthony Stoss with Craig-Hallum. Please proceed with your question.

**Anthony Joseph Stoss**
*Analyst, Craig-Hallum Capital Group LLC*

Q

Hey, guys. Paul, I wanted to follow up on the whole cellular module side of the business in your commentary. I'm just curious, a lot of these design wins that you're lapping up now, when do they turn to production? And I'm curious if any of those customers are contemplating or having conversations with you about rip and replace kind of the existing products that they already have with, say, Quectel, or is it just kind of go-forward products? And I had a follow-up.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yes. So, as we kind of look at it, most of the programs today that we're bidding on or have captured, they're really kind of talking about production starts near the end of the calendar year. So, I would not characterize those as rip and replace. However, if there's – I will note that on the customer side, there's a little bit of hesitancy in terms of forecasting, just because of some market uncertainty.

So, if there's a little bit of bolstering in market confidence, I think people will start to march some of these a little bit early. But right now, they're kind of slated at the end of the calendar year and there are additional wins and pickups that we're noting, not additional follow-on programs that we've classically held. If we get some additional scrutiny out of the China Select Committee, it's highly possible that we'll see some of those critical infrastructure applications look for an acceleration of next-gen or that next design. And that, I would characterize, a little bit more in terms of rip and replace, because I don't think somebody will pull a module out of existing hardware without refreshing that hardware as well, at least at this point.

**Anthony Joseph Stoss**
*Analyst, Craig-Hallum Capital Group LLC*

Q

Got it. And then, just a broader question on visibility. And also, if you'd think your January revenue guide down a little bit sequentially, you think that marks the low on a quarterly basis going forward?

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yeah. So, I think I'm remembering my comments from last earnings call. I was pretty confident on the last earnings call that we hit a bottom on the IC business. We continue to see that we're making progress and moving forward on the IC business. I think, even though some of our peers maybe are not seeing that, we corrected a little bit earlier in the cycle and we continue to see that strength.

At this point, I don't anticipate the hardware business getting any worse. I can say that the last quarter was a little early. We're just starting to see that decline. We've seen some pretty good, let's say, steady numbers out of the routers business. The modules business did pull back, as we saw a little bit of a knee jerk reaction out of the customer base, where a lot of that direct business has had. And the Fed buying, I think, was a little bit of a surprise as well for some of that customer base, where our product goes into. We've seen a little bit of sluggishness coming into the Fed buying season. And so, I don't anticipate it getting worse. If anything, we might get a little bit of a pickup sooner rather than later, but I think it's a little bit early to tell.

**Anthony Joseph Stoss**
*Analyst, Craig-Hallum Capital Group LLC*

Q

Very good. Best of luck, guys.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Thank you.

**Mark Lin**
*Executive Vice President & Chief Financial Officer, Semtech Corp.*

A

Thank you.

**Operator**: And the next question comes from the line of Christopher Rolland with Susquehanna. Please proceed with your question.

**Christopher Rolland**
*Analyst, Susquehanna Financial Group LLLP*

Q

Hey, guys. Thanks for the question. I wanted to talk on AI as well, just given the attention it's all getting. So, last quarter, you guys mentioned a large US hyperscaler, I think, who had placed some initial orders for some CDRs and TIAs for AOCs. A lot of [ph] TLAs (00:33:23) there, sorry. But would love an update there on any purchasing. And then, you talked about sampling some 1.6T products. Was that linear direct drive, analog PAM4 CDRs? And just maybe talk about your 800-gig and 1.6T opportunity as you see it.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yeah. I think – so, last quarter, we talked about initial orders, but we actually saw some shipments for that large US-based hyperscalers. So that is 400-gig application. And I'll be a little bit cautious in terms of their ramp. The first half is going to be a bit sluggish, but we expect it to pick up as it goes through the end of the year. December was final qualification, hardware and then it sets the forecast – the forecast gets set according to that. So, right now, things are moving rather nicely for that. That's, let's say, roughly a $30 million annualized upside once it gets to full production, and we would expect that sales cycle to span three to five years or so. So things are moving rather nicely there.

In terms of looking at – we will see occasionally 4 – we do see 4x100s. We do see occasionally 8x100s. But really, the next node in AI that we're talking about is 200-gig single lambda devices. That's where you start to see 1.6 terabits in any appreciable volume. We're looking at those speeds at both mid-reach 10k type applications, as well as short reach. But right now, it's just a really frothy opportunity environment for me to put a number on when those things start to translate to volume. I think it's a little bit early, but we're seeing really some nice numbers coming out of the POCs and some demonstration.

So, given the environment, I think it's going to be – I would expect this to be pretty quickly picked up. But I see that more of a second half calendar year 2024 phenomenon, rather than something in the short term. But we're going to see steady uptick of the 400-gig modules certainly in the first half of the year, and then it will strengthen in the second half. And then, that's when we'll start to see really some nice plans around 800-gig.

**Christopher Rolland**
*Analyst, Susquehanna Financial Group LLLP*

Q

Excellent. Good progress there. I wanted to look at your segments also in another way here. If I'm reading kind of the tea leaves right here, on the Signal Integrity side, you'd expect that to fall and then Protection and Sensing maybe up and the other two IoT related down. Is that kind of how we think about it?

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

I'll take this one. Yeah, I think if we look at APS, we saw some strong pulls, a little bit of digestion into that ramp for that smartphone – North American smartphone manufacturer. I think we'll see a little bit of pullback, but largely due to some seasonality, that's really strong pulls up until launch, and then a little bit of pullback. So that's Protection. Protection should have a baseline component that's going to steadily improve from here. So, we've seen some nice stability in the base numbers, especially as it relates to the proximity detection. And so, we'll see that slowly strengthen.

I kind of look at a 13-week booking average by product line and it's just been steadily improving. Not really snapping back, but just steady improvements as those inventories come off and our channel partners kind of anticipate some of those production runs. So SiP is a little bit of digestion. Signal Integrity is a little bit of digestion on a really strong data center number. We could probably see some surprises to the upside, but I would – right now, we're anticipating our revenue being a little bit softer on that channel inventory digestion. For the initial launch, they usually like to validate the hardware and the numbers that they're seeing, and then they kind of resume an additional schedule. So, Protection and SiP both kind of moving a little bit sideways at this point, but slightly down.

**Christopher Rolland**
*Analyst, Susquehanna Financial Group LLLP*

Q

Thanks so much, Paul. Appreciate.

**Operator**: And the next question comes from the line of Rick Schafer with Oppenheimer and Company. Please proceed with your question.

**Rick Schafer**
*Analyst, Oppenheimer & Co., Inc.*

Q

Yeah. Thanks. Thanks, Paul. Thanks, Mark. I guess, my first question, if I could, just maybe at high level. And, Paul, I was just hoping that you could share a little more about your strategic kind of vision for Semtech and what the company you think it's going to look like, or you expect it to look like, say, in three years from now. I mean, what role do modules in particular play long term and near the growth opportunities there? I mean, do they justify the associated margin pressure, or do you see a path to maybe improving those margins, demonstrably sort of more to kind of classic fintech corporate average?

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

So, that's a good question and you're putting me on the spot. So, I certainly appreciate that. So, what do we look like three years from now? There's no doubt that our core competencies really does kind of come from components. And I do think that it makes sense to move into module products as long as you can pick up additional stacking margins. So to have – to produce a module that essentially has component content that you produce does make sense. Participating in businesses before where, a lot of times, you have to produce a reference design. In some cases, it just makes sense to go off and sell that reference design, commercialize it, manufacture and sell it.

This gets a little bit more complicated – and that's, generally speaking from a semiconductor standpoint, it gets a little bit more complicated when you start talking about IoT. Because of the diversity of use cases, you end up having to pull a lot – a broad range of technologies through in order to produce an entire solution. If I had to be a module maker in and of itself today, the business model would be very different, and I think my investor base would be very, very different.

So, does it justify in and of itself the margin pressure? I think the answer to that is no. But if we can pull together a bit more of a comprehensive IoT strategy in which it becomes an enabling component on higher-margin sales, then yes, I think it's quite possible that that can happen. It doesn't necessarily mean that we have to own it for the entirety of that three-year – five-year play. But cellular backhaul is always going to be a part of an IoT strategy. And I do think that we have a rather large IoT opportunity in front of us that we need to kind of reimagine that strategy, and how we're going to capture that in the marketplace.

So, if we can combine it and it becomes a part of the story along with software, along with components, then I think it's perfectly fine and makes sense. In and of itself, no, it doesn't justify the margin pressure. And in the meantime, we would look to continue to capture the opportunity. I do think that there's tremendous upside opportunity associated with modules. In some cases when you're engaging with utility companies, they'll want an LPWA solution, or they might gravitate towards a private network, like LoRa solution. So having the opportunity to do both is an advantage as well, as long as you build together a bit more of a broader product offering or solution in story. So, hopefully, that gives you a little bit of a color without specifically nailing everything down after five months.

**Rick Schafer**
*Analyst, Oppenheimer & Co., Inc.*

Q

No, I appreciate. That is a lot of color, Paul. And it actually is a great segue to my next question, which is LoRa. If you wouldn't mind, maybe give a little bit more on the order trend side, sort of order velocities, however you want to describe it? And I'm curious, it sounded like that business was starting to pick up. I believe it's – last call, I think you talked about it being stable, sort of around $100 million or so a year. I'm curious, if that's still kind of where you see that business for the foreseeable? And if you could talk at all about sort of your strategy, if you feel comfortable, talking about a strategy to grow that business, maybe even a sense on revenue funnel if you're sharing those kind of metrics? Thanks.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

So, are you talking about LoRa in particular?

**Rick Schafer**
*Analyst, Oppenheimer & Co., Inc.*

Q

That was a LoRa-specific question. Yeah. Thanks.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yeah. So, I kind of bill LoRa as about $100 million business, so thank you for that. Yeah. So, I do think, as we kind of look, there is a significant opportunity for components or semiconductor content in IoT. And it becomes – because of the diversity of use cases, it really becomes a multipronged strategy. You do have to have a software component. This is where we do have a rather mature cloud platform. We do have a rather mature, let's call it, gateway software team as well. And so, as we kind of look at that, there's an overall theme that I do think that there's an opportunity for us to capture, but we need to adopt this tenant of making private network deployment a lot easier.

If we look at connected end-node, connected gateway numbers, those increased sequentially this past quarter. It further shows that there is a rather large opportunity and continued wave. Even through a downturn, we're still seeing numbers from an end market standpoint that continue to migrate up, where people are wanting an alternative of connectivity for, let's say, low-bandwidth, low-power devices. And so, that is still an opportunity that we believe in.

However, I believe I've said this before that we need to fill out the technology portfolio. Part of the reorganization that we're going through is to kind of group R&D competencies for us to take advantage of that. And so, we're in the middle of formulating that strategy in order to capture that vision of what we see, making private network deployment very easy. And part of that story is certainly LoRa along with a few other components in the technology portfolio. We're formulating that today and we'll be working on that over the next couple of quarters, reorganizing around it. And then at appropriate time, we'll be laying it out, so that we can kind of talk about what that market opportunity looks like exactly, why we have a right to win that market opportunity, and what that timeline looks like?

In terms of overall opportunity, I know that it's been said that it's – roughly, we had a $1.1 billion pipeline in the past. Rather than qualifying that number, I'd say, roughly today, we're around $400 million on that LoRa-based pipeline. And we continue to work it, we continue to see the opportunity and the use cases. We need to look for use cases that have a lot of commonality and product solution. And then, we need to start to work on delivering a standard solution to that end market, rather than just simply a component.

**Rick Schafer**
*Analyst, Oppenheimer & Co., Inc.*

Q

Got it. Thanks a lot for all the color, Paul. Good luck.

**Operator**: And the next question comes from the line of Tristan Gerra with Robert W. Baird. Please proceed with your question.

**Tristan Gerra**
*Analyst, Robert W. Baird & Co., Inc.*

Q

Hi. Good afternoon. Just as a follow-up to your commentary on Sierra Wireless, just looking at where we could see the revenue run rate before any type of synergies, including with LoRa? It looks like your quarterly run rate right now is probably a little bit below what it was two years ago before the big ramp up of last year, and you've talked about the October quarter being presumably a trough. So is a $100 million a quarter kind of a good base from which we should be basing assumptions before you build any cross-selling opportunities? And then if you could elaborate a little bit on the share shift within the different businesses for Sierra Wireless? Thank you.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yeah. So, I'll comment on the share shift. I don't think we've noted any share loss or share shift. If anything, we would expect to gain some share in modules, especially. If we look at the routers, that's pretty steady. The one piece, if you want to call Sierra Wireless a $400 million business, I said on the last earnings call, I believe, after it recovered, I would put it right around $460 million. I still think that's probably a good number, although in the short term, I think your number is probably a little bit better. But – so, let's take the $400 million. Basically, $100 million of it is going to be pretty steady, very predictable. It's that connectivity business, it's recurring, great visibility. We're growing it. It's not going to be a burner in terms of growth rate, but it's just going to be steady pickup, good gross margin and contribution.

So, the routers, right now, we've seen about a 30% pullback. I'd say that's largely industrywide. I would expect that recovery to bounce back a little bit from that base, but certainly not be what it was the previous year. If you go back a little over a year, those numbers were a little bit elevated in a frothy buying season. And the modules, that has fluctuated quite a bit. We probably put it somewhere around $260 million or so on a normalized basis. And with some potential upside, we look at it, but about $390 million, $370 million upside opportunity in North America, but we don't expect to get 100% of that business. So, we'll be pursuing that rather aggressively. It will take some time for us to realize that, and we would probably look to deliver those in two years out.

**Tristan Gerra**
*Analyst, Robert W. Baird & Co., Inc.*

Q

Great. Very useful. And then for my follow-up question, so you mentioned making private network adoption much easier as an opportunity for LoRa. Is that really 100% of your focus on LoRa right now, as it sounds like the bulk of the inventory correction associated with Helium is behind? The feedback notably from The Things Conference is that there is basically much easier access to LoRa implementation than just a few years ago and with a fairly clear path of kind of a one- to two-year ROI from customers who want to implement LoRa. So, could you expand a little bit on what you think is still holding LoRa at a revenue run rate that admittedly is lower than the prior management team was guiding for a few years ago? And any elaboration on where you see opportunities to improve the adoption?

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yeah. I will say this. I think the execution in LoRa is pretty good, let's say, below expectations that were set by prior management. But I still think anytime you grow a business from $0 to $100 million in four years in semiconductor land, that's usually pretty special. So, it's a unique technology. Obviously, it's a technology that the market is there, ready to adopt. When you start bringing together a large ecosystem set of partners that all have to work together to drive a solution, it definitely is going to slow down. But as we look at adoption, it continues to pick up. There's a little bit of a blip in there in terms of Helium gateways that maybe was a contributor to the numbers being a little bit larger than what actual market adoption showed, so during that frothy buying season. But I still look at it as good, steady adoption.

Overall, the market needs something that's easy to implement. If we talk to customers that are looking for something that's LoRa base, in IoT, they're not necessarily somebody that has the breadth of R&D in order to implement something from womb-to-tomb. So, this is where we have done – taken initiatives in the past in order to make LoRa easier to adopt. We are licensing the technology out in order to further that adoption and we'll continue to evolve and deliver to the market tools necessary to speed up that adoption. But I do think that there's a couple of holes in the delivery of that solution that we could fortify in order to speed things up.

**Tristan Gerra**
*Analyst, Robert W. Baird & Co., Inc.*

Q

Great. Thank you very much.

**Operator**: And the next question comes from the line of Christopher Rolland with Susquehanna. Please proceed.

**Christopher Rolland**
*Analyst, Susquehanna Financial Group LLLP*

Q

Hi, guys. Just a quick follow-up. The amount of turns business you guys expect to get to a guidance in the quarter, POS turns...

[indiscernible] (00:51:50)

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yeah, last quarter...

**Christopher Rolland**
*Analyst, Susquehanna Financial Group LLLP*

Q

Yeah. Go ahead.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

...we were just over 50%. We're slightly less than that this quarter. It's not something that we'll be tracking and reporting on, but it's slightly better than it was last quarter.

**Christopher Rolland**
*Analyst, Susquehanna Financial Group LLLP*

Q

Thanks so much.

**Operator**: And the next question comes from the line of Harsh Kumar with Piper Sandler. Please proceed with your question.

**Harsh V. Kumar**
*Analyst, Piper Sandler & Co.*

Q

Yeah. Hey, guys. Thanks for sliding me in. Quick question, Mark. So, in the analog space in the industry, we're seeing a variety of companies, basically all of them, start to guide down. I guess, looking at your results, you're faring much better. My question to you is, why is that? Is that a function of data center offsetting a lot of your traditional analog businesses, or is it because you started the correction earlier, or is there something else going on that is perhaps helping you do better?

**Mark Lin**
*Executive Vice President & Chief Financial Officer, Semtech Corp.*

A

Yeah, it's both. I'll have Paul – he provided a lot of color on the end markets and for data center, but it is. We did start to guide down before our peers and that group. So, I think that's another big portion of why we're guiding down from $200 million to $190 million.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yeah. I think I said it in a set of investor meetings one time, the bane of our existence is an operations team that's really good. So, when we got all the orders, our team had been able to secure the capacity and deliver on it. And I'm saying that, of course, tongue in cheek, they're phenomenally efficient team. But we did – we were able to secure that capacity and deliver it. As a result, we shipped it all and saw the correction a little bit early. As a result, we're seeing the rebound a little bit early, but we are getting helped out with a couple of key markets where we do have beachheads. One, surprisingly enough, is TVS where we continue to innovate on the next-generation interfaces. We got some of the best specs out there. And yes, you do kind of share this with competition over time. But right now, we're the only guy who can deliver and we're seeing upside as a result. And AI is just a gift. It's phenomenal SAM expansion.

**Harsh V. Kumar**
*Analyst, Piper Sandler & Co.*

Q

So, on the AI stuff, can I ask you if your visibility is extremely solid? In other words, are you seeing orders just pile up from multiple quarters visibility? Or is it a situation where, of course, you're hand-to-mouth, but the orders are coming in kind of spurts of a quarter?

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yeah. I wouldn't say the orders are piling up. The design-ins are piling up, and we anticipate the orders piling up. We did see a nice bookings increase this quarter. So, it's early on in that trend. It will strengthen this next year as it rolls out. But ECOC was a nice validation on a few fronts. I think you might have seen some of the press releases that we've put out, but just had some amazing feedback that came back from that. Our 200-gig single lambda devices, very well received, very well-positioned, and the industry does have a decision on which data center architectures they're going to implement.

And every hyperscaler has a tendency to be a little bit differently. But the bottom line is, it really doesn't matter what direction they go. Retimed, direct, it's all going to add up to additional SAM and growth for us. Even it could be a bit more explosive if they choose a particular route, but overall, it's just a very nice, frothy environment. And so, we would be starting the discussions in terms of capacity, securing the capacity for this next year that would be happening today and then orders would follow.

**Harsh V. Kumar**
*Analyst, Piper Sandler & Co.*

Q

And if I can ask one last one. Do you think, Paul, that you're done cutting at this point in time? You reached a pretty happy threshold, if you will.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

I'd say, my goal was, I intimated that we probably had another $40 million to go. We did do that. At this point, we pulled out $140 million out of the business. And that was done thoughtfully with historical budgeting exercise. So, if you go back in time, you look at 2017, you look at what the budgets were, we're at those appropriate stages. And I think everything kind of comes down to just continual refinement and improvement at this juncture. I'm comfortable with the cuts that we made. Anything that we do will just be to refine and improve our chances for growth in the future.

**Harsh V. Kumar**
*Analyst, Piper Sandler & Co.*

Q

Great. Thank you, Paul. Thanks, Mark.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Thank you.

**Operator**: And the next question comes from the line of Cody Acree with Benchmark. Please proceed with your question.

**Cody Acree**
*Analyst, The Benchmark Co. LLC*

Q

Yeah. Thank you, guys for taking my question. The next one, I guess, just a follow-up to Harsh's question. Paul, what other segments [indiscernible] (00:57:04) you're reviewing today that you believe are near the bubble to require less investment going forward?

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

So, I'd say that I've got a practice or a cadence in my management that I've always implemented and I review everything on an annualized basis. So, if we don't have good projects to invest in, we don't just assign budgeting to a business unit just because they had it before. So every project requires a justification and every project would have an opportunity attached to it. So, at this point, I scrutinize everything on a regular basis.

Obviously, I can look at market expansion in certain areas and certainly feel a lot more comfortable of the risk profile associated with that investment. But we would look to – as we kind of pull back OpEx overall, we'd look to refortifying the beachheads. If those beachheads have, let's say, some sunsetting attached to them, we would look to take those investments and put them in other areas that are a bit stiffer top line growth.

**Cody Acree**
*Analyst, The Benchmark Co. LLC*

Q

Thank you for that. And I guess, secondly, just if you can summarize the improving demand that you noted in the press release about your high-end consumer business and data center, how much of that is for near-term visibility for the current quarter in the next six months? And to what detail can you provide that's offsetting those two businesses? I think your guidance for both was flat to sequentially down.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yeah, yeah, that is correct. I'd say, data center came in a bit higher in Q3 than we fully anticipated. When I speak to improving demand, I'm really not talking about revenue. I'm talking about end market consumption. So there'll be direct shipments plus POS. And so, you just have to kind of qualify that. To me, that's the best measure of where our business is going, and it eliminates all the channel inventory noise.

So, when I say we have an improving demand, it's modest, sequential, improving demand that has been, for the most part, improving over the last four quarters. That I look to see corresponding booking rates, that 13-week trailing average booking rates that match that, and I'm seeing that correlation. So anything that I give you is not forecasted. It's in the rears – it's in the rearview mirror. It's demand – continually, sequentially improving demand that we've seen over the last four quarters at least.

**Cody Acree**
*Analyst, The Benchmark Co. LLC*

Q

All right. Thank you very much.

**Operator**: And the next question comes from the line of Scott Searle with ROTH MKM. Please proceed with your question.

**Scott W. Searle**
*Analyst, ROTH MKM*

Q

Good afternoon. Thanks for taking my questions and sneaking me in. Nice job on the restructuring efforts...

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Thank you, Scott.

**Scott W. Searle**
*Analyst, ROTH MKM*

Q

Hey, Paul, maybe go back to modules, it sounds like you don't necessarily need any sort of a formal exclusion list on Quectel to win business, because it seems like customers are diversifying away from that anyway. But I'm wondering, I don't think I heard any comments on that front, is there an update on that front? And it sounds like, based on the normalization of that business at around $260 million or so, that you're basically running at less than half that rate right now, when would you expect normalization on that front? I think last quarter, you talked about the middle of calendar 2024, is that what we should still be thinking about? So, in the second half of 2024, we're getting back to levels like that before you start to add on some incremental Quectel business?

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Yeah. I was trying to give you a color in terms what the calendar year is going to do for. So, if you do the math on that $260 million, I'm kind of tipping my hand when I think that this is going to recover and I put it in the second half. So this is after some feedback from customers, what we expect, as well as some additional uptake from new design-ins. So on the exclusion list front, no, we don't need Quectel, Fibocom to be officially excluded in order to benefit from this. We are benefiting from it. We will continue to benefit from it.

I think it has – even if the China Select Committee came out tomorrow and said, okay, everything's fine, we're not going to put them on the list, we're still going to benefit from this. There's been enough shift because of the overall tensions that exist with China in the US, especially around networking equipment, and it's been going on for years. So, it's just now finally coming to a head where people are not willing to jeopardize their company's business on the basis of using a particular supplier that might be $0.10 cheaper. It just doesn't make any sense. So, we're getting a lot of pick up. Not to mention, we have good relationships with Qualcomm. I come with those relationships, because of the previous work done in compute. And so, we're leveraging that in order to pick up very heavily on those leads. And I should mention that we also sell quite a few Sony chipsets with the LPWA modules as well. Have a fantastic relationship there.

**Scott W. Searle**
*Analyst, ROTH MKM*

Q

Great. And lastly, maybe to just wrap up on the LoRa front. Thanks for calibrating, sounds like the annualized run rate now was down at about $100 million. I'm wondering, what the growth rate on that business looks like and what the composition of that is today in terms of sales outside of China? I know that's where a lot of design activity has been going, but I'm wondering how that's building at this point in time? And lastly, just on the asset to sale front, I know you guys were reluctant to do anything essentially under pressure of the balance sheet. But now, that you solved the covenant issues for the immediate future, are there some assets now that you're starting to reevaluate that may not be part of the long-term Semtech? Thanks.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

A

Okay. Yeah, on LoRa, I will say, we will probably still report very strong China base number, just because of where manufacturing typically is. But if I look at where that revenue originates, we're seeing quite a bit of adoption outside of APAC in particular. And so, what would the growth rate be? I definitely expect it to be on the order of

10% to 15%. In the near term, we could see some acceleration of that as a couple of technology pieces come together and it becomes a little bit easier to implement. But we've seen steady adoption in infrastructure applications, especially outside China.

We do have some China-based wins as well. But Europe, definitely seeing some nice adoption there as well. So 10% to 15%, I think is our long-term growth rate that we would probably target for that, and we can adjust that as time goes on. In terms of balance sheet, we are definitely hyperfocused on getting the leverage ratio down. We will continue to be – I won't comment on any particular asset sale, but I'll just say that all cards are on the table in terms of driving that leverage ratio down to the benefit of our shareholders.

**Scott W. Searle**
*Analyst, ROTH MKM*

Q

Great. Thank you.

**Operator**: There are no further questions at this time, and I'd like to turn the floor back over to management for any closing comments.

**Paul H. Pickle**
*President, Chief Executive Officer & Director, Semtech Corp.*

Thank you for joining and have a good day.

**Operator**: And that concludes today's teleconference. You may disconnect your lines at this time. Thank you for your participation.