Advanced Energy

March 6, 2025
9:15 AM PST

Shane Brett: Brilliant. Hi, I'm Shane Brett, U.S. semiconductor equipment analyst. Joining me today from Advanced Energy are Steve Kelly, President and CEO, and Paul Oldham, EVP and CFO. In the audience, we also have Edwin Mok, VP of Strategic Marketing and Investor Relations.

Before I start my questions, I'm going to hand it over to Paul for a quick Reg. FD disclosure.

Paul Oldham: First, thanks for everybody being here today.

Just a reminder that any forward-looking statements we may make today are subject to a number of risk factors. You can read about those in our SEC filings.

Also, we had our last earnings release early in February. And so, today we won't be providing any updates to guidance.

Shane Brett: And from my end, for important disclosures, please see the Morgan Stanley Research disclosure website, at www.morganstanley.com/researchdisclosures. If you have any questions, please reach out to your Morgan Stanley sales representative.

Okay. So, let's get started. So, Steve, for those in the audience who may not be familiar with the Advanced Energy story, can you provide a quick snapshot of the company and its major end markets?

Steve Kelley: Advanced Energy, it's based in Denver, Colorado. We're about a 44-year-old company. The roots of the company are supplying pulsed RF power to plasma chambers. So, our biggest customers are Applied Materials and Lam. Over time, we've branched out into other areas of what we call precision power. So, in addition to semiconductor applications, we're also big now in data center – particularly, AI data centers – as well as industrial and medical applications.

So, by and large, we aim for the top end of the market, and we are positioned as a technology leader. So, we're not competing in the commodity space. We're trying to solve power problems for customers in some very interesting segments.

Shane Brett: Got it. And then you also recently hosted an Analyst Day, where you laid out some long-term targets. Can you share some of the high-level takeaways or what you really wanted to get across to investors from that day?

Steve Kelley: We walked the investors through our target markets and why we have confidence in our long-term plan. So, obviously, semiconductor is all about technology. So, in that market, without technology leadership it's hard to make progress. And so, we'd introduced two products in 2023, called eVerest and eVoS, and we've gained a lot of traction with the customer base over the past year and a half with those products. And so, we're confident they're going to start to grow our market share beginning second half of this year.

And in data center, we had changed our strategy a few years ago to focus on higher-end applications and really focus on increasing our gross margin performance in that segment. We were successful doing that, and it happens that where we're strongest in power density, efficiency, reliability, those are the three metrics the AI data center operators care about the most. So, we've been able to drive revenue growth and are setting records there in data center.

And then, finally, in industrial and medical, we've continued to upgrade our product portfolio and our sales and marketing effort. And so, we think we're positioned to gain share as that market returns to growth later this year.

Shane Brett: And the financial targets?

Paul Oldham: I think the other thing we talked about is our updated business model. That business model calls for us to roughly double revenues, from $1.5 billion to $3 billion, by 2030 and to increase earnings by roughly a factor of four, which would get us to $15 per share in earnings over that period of time.

And that business model is really rooted in three fundamental items. The first is that we believe we're in good markets that have underlying growth: semiconductor, industrial and medical, and data center. Within those markets, we believe we can grow faster than the market. Steve just talked about some of the new products we've talked about. We've made investments in our channel and go-to-market strategies, and we think we're well positioned as these markets recover to grow faster than the markets.

The second factor is we believe we can structurally continue to improve gross margins, and our goal is to move gross margins from roughly 35% at the beginning of last year to 43% over time. We ended the year at 38%. So, we've kind of turned the corner and are starting to make that climb. That's based on a number of things, including a factory consolidation strategy and improved product portfolio and, of course, volume. That gives us a lot of tailwind to the revenue growth from an earnings perspective and gives us very good leverage.

And the third piece is M&A. Within that $3 billion, we anticipate about $0.5 billion of revenue from M&A at roughly our same business model, which we think is very reasonable on a post-synergy basis.

So, we're quite excited about that. I think feedback we received is that sounds like a pretty bold number. On the other hand, when you actually break down the assumptions behind it by market and what it takes to get there, it's pretty reasonable. We're very excited and think we have a really good shot at achieving those numbers, which will fundamentally change the company.

Shane Brett: Got it. So, I want to start by just talking about the near-term dynamics. So, your December quarter, ahead of expectation, with semi ahead of plan and then record data center product revenue. But you expect a slight moderation for semi in the March quarter. Can you kind of give us a sense of what's happening in those two markets at the moment?

Paul Oldham: Maybe just to recap the year, it started off pretty slow for us, and then every quarter we saw sequential improvements in revenues, capped by the fourth quarter, which in semiconductor we saw our best quarter in over two years. So, we've definitely moved off the bottom and into a higher level. That was driven by a broad set of factors, not any one thing. A lot of it's us being nimble to capture near-term demand. So, excited about semiconductor. We ended the year up in semiconductor about 6%.

Data center, as you mentioned, was also strong for us. We saw a rebound in our data center revenues starting in the second quarter, and it's being driven by two things. One, the investment in AI, which is clearly – there's a lot of investment going there. And secondly, new designs that we've won, particularly for these higher-power, higher-efficiency markets.

So, our revenues in the fourth quarter were, on a product basis, a record high. Encouraging to us, though, is within that, it's a fundamentally stronger portfolio: more high end, more product differentiated, with margins that are much closer to the corporate average than they've been historically.

As we look forward, in semiconductor, we've kind of characterized this market as kind of bouncing around the middle. Our underlying assumption is that WFE is flattish for the year. There could be some pluses and minuses. Obviously, the second half, there's not a lot of visibility right now. If WFE is better, that'll be great for us, because we have high exposure to etch and dep, and if that intensity's good, that'll be positive for us. So, we're projecting a flattish year, and we expect to grow a little faster than the market based on the new products.

And in data center, we expect revenues to continue at these higher levels. There's a lot of investment. Design wins that we won last year are kind of in the ramp mode. So, we expect it to be a strong year for data center.

Shane Brett: So, I'll just start with semiconductor. So, you guys expect flat for WFE, but kind of outperformance on top of that. Could you kind of talk to us about some of the customer conversations that sort of underlie that view of flat WFE and then what is the kind of drivers that are pushing you guys to outperform versus that assumption?

Steve Kelley: I would say that we do have forecasts from our customers for 2025 that indicate flattish. So, it could be a little bit up, could be flat. But like Paul mentioned, there's still a lot of uncertainty about the second half. It could be better, it could be worse.

So, what we've said is that given our position with the new products and some of those new products ramping as soon as the second half this year, we think we can grow faster than whatever WFE ends up being, year on year. So, we are confident in that. But it's more difficult to really handicap exactly what's going to happen with WFE this year.

Shane Brett: Then sort of on the second half ramp, so eVerest and eVoS, can you share to the audience what are these products going into, the conversations that you're having with customers? And my perspective of semiconductor sub-components is a very sticky business, but you guys are very confident on these share gains. Can share to us where this confidence comes from?

Steve Kelley: So, we brought eVerest and eVoS to market in mid-'23, and the objective that we had was to make sure that we got designed into all the leading-edge etch and deposition applications. And that's across the memory and the logic space.

And we've been pleased with the reception these technologies have received from our customer base, and there's a strong customer pull for the technology. Because at two-nanometer and below, it becomes very difficult to drill deep holes. This is what you're doing in the etch process. And so, a new technology was needed, and eVerest and eVoS provides that technology to the customers.

Because ultimately, what the end customer cares about is throughput, the ability to move wafers through the fab, and yield. And our technologies allow them to either maintain or improve throughput and yield at the most advanced process levels across memory and logic. So, that's why we think we can gain share in the next three to five years, and that would be meaningful share.

Shane Brett: So, I guess that would be, as we sort of move on to these etch and deposition-intensive semiconductor architectures, you guys are kind of exposed to the right markets. On top of that, market share gains with these new products.

Steve Kelley: So, it's market share built on the fact that etch and dep intensity will go up. Because as the end customer tries to build these complex structures at a nano scale, it requires a lot of etch and deposition steps. And so, you hear that from all the players in etch and dep, that intensity level for those process steps will go up in the coming years. And so, I think between that and the fact that we will gain share with the new technologies, that gives us a lot of confidence in our ability to grow the business meaningfully in the coming year.

The other – I think the other positive is these new solutions bring more value to the customer. And so, they're more expensive, essentially. And so, they also drive, I think, a stronger growth in SAM.

Shane Brett: Got it. Got it. So, I kind of want to hear about how do you think about your customers' inventory right now and your lead times. The kind of background to this question is so you saw the beat in December quarter. I would assume there may be some within lead-time orders. How do you kind of think about the dynamic of where's the risk to the upside from maybe customers being a little bit more positive than you think?

Steve Kelley: So, I think what we do – we do two things to try to stay nimble in the manufacturing process. The first is to keep a healthy inventory of piece parts, because we're basically building boxes and then testing and shipping it to the customer. And so, we need to make sure we've got everything in stock. That's the first thing.

The second thing is to keep our factories more or less fully staffed, because what we find is these opportunities tend to come in the second half of the quarter. And so, we have to scramble to make sure we could ship it out to meet the customer need.

And so, bottom line is stay nimble and be ready for upsides.

Shane Brett: Got it. And then sort of the surprise for me in the March quarter was just the pickup in NAND upgrade-related demand. Could you kind of share your position on how you guys are in NAND? And if there is kind of a broad memory versus foundry logic split for the business, that would also be helpful.

Steve Kelley: I think if you take a look at NAND, the NAND process, there's a little bit higher intensity of dielectric etch steps than conductor etch steps. And so, we're a little less tied to NAND than we are to logic. So, in the logic market, there's more conductor etch.

But overall, I think what you'll see in coming years is we'll be tied to both conductor and dielectric etch, as well as growth in deposition.

Shane Brett: Got it. So, I want to move on to data center. So, for some in the audience that may not be familiar, could you kind of just remind us of the products that you sell to data center and the sort of role you play in the sort of AI data center build-out trend?

Steve Kelley: So, within the data center, each of the racks has a power supply. And basically, what we do is we convert the AC power into DC usable power for the computing parts of the rack.

The difference with AI is that the power levels go up almost by a factor of 10. So, these new circuits are very power intensive. And the second is the cost. The cost is also up close to a factor of 10.

And what that means is the customers are really focused on maximizing efficiency, because they're paying so much for the power: power density – so, basically, how much circuitry can we squeeze into a given volume; and then, reliability, because they can't afford downtime. So, the more you're paying for the compute power and the more power you're drawing, the more attractive our solution is, and that's helped us quite a bit in the AI data center space.

Shane Brett: And I would assume your customers have become very demanding over the last two years with kind of the technology requirements that they need?

Steve Kelley: Yes, the market has changed significantly in the past couple of years. Data center used to be a market where the cadence of new product introduction was every two or three years, but it's changed to almost every year now. And that's being driven by the introduction of GPUs every year by NVIDIA. And so, that's forced us to work more closely with the customer. And we're working on solutions not just for next generation, but also for the generation after that. And so, we're involved more early in the process, and we're locking in our wins a couple of years in advance.

Shane Brett: And your outlook for this year is for that data center demand to remain pretty robust through the year?

Steve Kelley: Yes. Based on what we see in front of us, the forecast from our customers, we think '25 is going to be a record year in data center for the company.

Shane Brett: Just next on industrial and medical, so at your latest earnings you spoke of customers and distributors continuing to sort of work down inventories, but also commented on expectations for growth in as early as Q2. How much inventory do you think your I&M customers have? And sort of how should we think about your visibility towards this kind of Q2 recovery?

Steve Kelley: So, maybe just we'll go back a year and a half. And when you think about the supply chain crisis that we had during COVID, the first customers to get product were the semiconductor equipment customers. They're the highest priority. Then it was the data centers and the hyperscalers. Then, after all that, it was the industrial and medical customers. So, they were the last group of customers to be made whole after a couple of

years of having difficulty getting the products they were ordering. So, what that caused was a lot of inventory bubbles in the supply chain for industrial and medical customers.

We caught up with our overdue backlog in Q3 of 2023. So, that was six quarters ago. So, we've been in a correction mode in industrial and medical for six quarters. And it's hard to track inventory at each of the thousands of I&M customers, but we can track inventory at our distributors. And that's important, because distributors account for about half the business in industrial and medical.

And what we've seen there is inventory coming steadily down. We've been selling less into the channel than they've been selling through for the last three quarters, and what that means is we're getting close to an inflection point where the business starts to grow again. And what we said was we could start to inflect as soon as next quarter.

I think every company is going to be a little bit different. It really depends on when you caught up to your overdue backlog. Then you have to take your medicine for a certain amount of time. And then your business will start to grow again.

Shane Brett: Got it. So, you're taking your medicine. Hopefully, from Q3, we'll have a nice recovery. Where are the kind of end markets where you've had the design wins in '23 and '24, so that once we start recovering we'll see sort of a big pickup – hopefully, a big pickup – in demand?

Steve Kelley: I think one of the nice things about the industrial and medical market, it's full of different applications. And as we've improved our marketing efforts, we've found homes in a lot of new applications we hadn't even thought about.

But I would say some of the leading applications would be in test equipment, burn-in equipment, factory automation, and robotics. But I think there's quite a bit of activity at the high end, where people are trying to automate and they want highly reliable, precision power solutions to be successful.

Shane Brett: Got it. I don't want to put you on the spot, but tariffs impacts? How should we think about that? Has it impacted your business yet? Are there sort of any preliminary thoughts from Advanced Energy at the moment?

Paul Oldham: That's a tough one because it's obviously very dynamic. In fact, just walking into the room I saw yet another change on the tariff landscape. So, it's a little bit hard to handicap.

But I guess a couple things we could do to characterize it. First of all, we've been under China tariffs for some period of time. That's has some impact, but it's quite small. Mostly, we bring in some parts for our service business from China. I think that's de minimis and fairly easily mitigated within our financial framework.

Where we've seen more potential impact is with the tariffs in Mexico. For context, Mexico is projected – our plant in Mexico would be projected at roughly 10% of our revenue. Less than half of that goes to the U.S. As we look over the long period of time, there's ways to mitigate if these tariffs end up being structural and last for a long time. And there's a number of things we do. One, we pass some of that on to customers, certainly. We can look at the logistics. We can also, over time, certainly move production between factories. Because the way we've set up our factories for the future is that they have some overlapping coverage so that we have kind of a BCP approach.

So, it's very hard to handicap. To be clear, we haven't included anything for tariffs in any of our guidance. We'll see how it plays out, but certainly we'll look to mitigate whatever that impact is. It shouldn't be large, and any impact, we'll look to mitigate that.

Shane Brett: And I guess, this does also tie into some of the manufacturing optimizations that you're doing. If I'm correct, you're exiting China by June this year. Can you talk about kind of how you're going about this optimization? And tariffs, does impact any of that kind of thought process?

Steve Kelley: So, the issue was we had too many factories, essentially, and that was the result of a number of acquisitions we've made over the past 15 years. And so, we're basically consolidating 15 factories into five factories. And those five factories are in Southeast Asia, they're in the Philippines, Malaysia, and Thailand, and then Mexico. And so, we think that creates a much more streamlined manufacturing structure, with lower fixed costs. So, it's a big part of our gross margin improvement plan.

The good news is we're almost there. The last big step we're taking is to close our last factory in China, and that'll happen by June of this year; so, next quarter. And so, we think that's a big step forward for the company.

What it also helps us do is maintain very high quality standards at our remaining factories, and it gives us a lot of flexibility in moving product between factories. And as we're seeing today, that's important for many reasons.

So, I think, looking forward, Advanced Energy is going to be in a very good spot from a manufacturing flexibility standpoint, and we'll be able to optimize our cost structure better.

Shane Brett: I think the comment on the cost structure might be a good segue into financials. So, Paul, the gross margin improvement was a pretty big message from the company at the Analyst Day. Could you kind of just remind us about these gross margin goals, the progress you're seeing so far, and kind of the bridge from here?

Paul Oldham: There's really three main legs to our improvement in gross margin, and the first of those is what we've just been talking about, which is the factory consolidation. Starting from a starting point of the beginning of 2024, when we were in the 35% margin range, we think the factory consolidation adds 200 to 250 basis points of gross margin improvement. Over the course of '24, we've realized about half of that. So, we're well on our way.

As Steve said, the middle of this year, we'll close our China factory. That'll be the next big leg up as it relates to that. There's a little bit of mop-up on the smaller factories after that, but exiting 2024, we should be well on our way to achieving the majority of that factory consolidation savings.

The second factor is sort of what we call mix or portfolio improvement. That's two things. We've talked a lot about our new products, which are really across our portfolio. We have new products in semiconductor, which we think on the next generation are really, really critical. We've talked about a big investment in our new product portfolio in industrial and medical. And in data center, you don't tend to think about it so much as new products, but there's really a whole raft of new design wins and new products that are driving our growth there, which come at better margins than we've historically had in data center.

So, the combination of those new product margins being better than we've historically had and the mix of our revenue moving from roughly 70% of sole-source revenue up to 80%, as we go through this transition, we think add another 200 to 300 basis points of margin improvement.

We're at the very early stages of that. We haven't seen much of that yet. We'll start to see a little bit of it later this year, but we'll really start to see it more in '26 and into '27, as those products really get into the market at more meaningful revenue levels.

The third factor is just volume. We would expect that for every $50 million in quarterly revenue, we would be able to see 100 basis points of improved gross margin. And we've seen that. That's partly why we're at 38% gross margins in Q4, is the uplift in volume there. So, we're on track to that. And as we grow through our model, then we'll see somewhere between 100 and over 300 basis points of improvement on that volume leverage.

It's enabled by the lower fixed costs we've talked about. It contemplates the new products. But these three factors we think give us a clear road map to go from where we're at to over 43% gross margins as we grow to our long-term model.

Shane Brett: Got it. And just last question for me before I pass it over to the audience is on priorities on capital allocation?

Paul Oldham: So, the first thing, and consistent with what we said before, it's to grow the company. That's what we want to use our free cash for, is to grow the company. We think we largely do that through smart M&A that's strategic, makes financial sense, and aligns with our business model. We do have a – and by the way, we have a strong balance sheet to execute that, with both cash on hand, access to credit through our line of credit, and the smart borrowing, I think, that we've done to date.

The second thing is we do have an opportunistic share repurchase plan. We have about $200 million of open authorization. We talk about opportunistic because we're not in the market all the time. We try to capture kind of dislocations in the stock. Regardless of our strategies, we know the stock market can be volatile from time to time. Our goal is to offset dilution. So, there may be quarters where we buy a lot, there may be quarters where we don't buy any. But it's sort of a structured program that contemplates all of our priorities and then tries to be opportunistic in the market.

The third thing is we do pay a small dividend. I think that's sort of kind of table stakes to being a midsize industrial technology company. We don't think people are buying the stock for dividend growth. So, we haven't grown that dividend. But it's an important signaling factor, we believe, the fact that we generate cash regularly.

I think at our Analyst Day, we talked about we have over 10 years of consecutive quarterly positive operating cash flow. We do generate cash. We're a healthy company. We can perform in good markets and bad markets. So, that's an important part of that strategy.

Steve, maybe you want to talk a little bit about our M&A approach?

Steve Kelley: Yes. So, we are on the hunt for acquisitions, but they need to make sense strategically and financially. Basically, two areas that we look at. One is technology tuck-ins. And we did a technology tuck-in with a company called Airity in June of last year, and that's worked out extremely well for the company.

The second area is really industrial and medical, because it's a highly fragmented market, and we think in addition to our efforts organically we're going to need to do some acquisitions to really become a bigger player in the I&M market. And again, we like I&M because the margins are good. Typically, the companies we're looking at have high sole-source revenue content, and the applications are very sticky. Typically, the customers buy the product for many, many years.

Shane Brett: Got it.

Paul Oldham: One thing I'd just add on that is because of the nature of it, the ability to generate synergy and leverage scale is very high. These companies look like us, their products are similar, they have similar sales channels. And so, our ability to naturally consolidate and become a bigger player is pretty high. We don't have to force the synergies; they happen pretty naturally. That, we think, contributes to the financial model.

Shane Brett: With that, I'd like to open it to the audience.

Unidentified Audience Member: I had a really quick question about product stickiness. I think with a lot of silicon products, when you look at your design wins, data center, hyperscaler, whatever, through a lot of their engineering talent, software, hardware. And once you have your product deployed in data centers, it's pretty difficult for someone else to come in and kind of un-trench you. I'm wondering if you could speak a little bit about once you win that design win, is there a stickiness kind of with your product? Where's the differentiating factor coming from? How does it affect retention and long-term adoption? And if it doesn't come from the stickiness of that design win, where does it come from?

Steve Kelley: So, you want to talk about data center or in general?

Unidentified Audience Member: Data center and semiconductor, specifically. But just in general would be great, too.

Steve Kelley: Okay. I'll start with data center. I think in data center, because the product cycles have been compressed, there are a couple things that make the difference. One is your technical capability and, again, those factors: the power efficiency, reliability, power density. If we can get there faster, then that is a big factor in our success. And so, it's capability and speed. Those are the two factors. And data center is a pretty fast life cycle market. And so, we'd better be working on next generation and the generation after that to be successful.

Semiconductor is different. Semiconductor goes through upgrade cycles every now and then. When I say "every now and then," it's been 10 years since there's been a significant upgrade cycle in the plasma power RF space. And so, during that window, which opened in '23, if you have the best technology from a measurable standpoint, you're going to win, because the key metrics are throughput and yield. And if you have something that's significantly better than the next guy, you're going to win that particular slot.

And it's going to be very sticky. They're going to keep buying that for years. We see that in our business. Because if you go back 40 years, we had leadership products 40 years ago, we have leadership products today. And we're still selling products that we introduced 30 years ago. So, once they find something that works, it's really difficult for the customer to switch.

The other thing that distinguishes semiconductor is the design-in time. So, typically, it takes us 18 months to two years just to secure the win because we're working closely with the direct customer to optimize the performance of our solution. And every solution is going to be a little bit different. They all have different approaches down the process and the end customer. And so, it takes time. So, there's quite a bit of upfront investment.

Shane Brett: Do you have any other questions?

Unidentified Audience Member: So, particularly for the goal of gaining share in the semiconductor segment, can you remind us roughly how you measure the share today, where are you at today, and what's kind of like the magnitude of that uplift? And do you quantify, like, how many points you can grow faster than the market?

Steve Kelley: So, we've typically talked about process power. And so, this is the power that's supplied into the chamber to keep the plasma lit, essentially. We look across deposition and etch applications. And we're #1. We have strong competitors, but overall, we're #1 in that space.

Within that broad market, there are three sub-markets. There's deposition, which is the smallest market, but then there's conductor etch and dielectric etch. So, our traditional strength has been conductor etch. We're by far the biggest supplier there. But we've been typically weaker, much weaker, in dielectric etch.

And so, the excitement and what's really going to drive meaningful share gain is our ability to gain share in dielectric etch, and we think we can do that with our new technologies. And moving forward, that's what's going to drive the market share gain for AE.

That said, we will make incremental share gains in conductor etch and in deposition, but the most impressive share gain should be in dielectric etch.

Paul Oldham: And overall, what we've said is we believe in the semiconductor market the combination of higher etch/dep intensity, the new products, and the fact that we have irons in other parts of the market as well – measurement, high voltage, system power – we think we can grow 30% faster than WFE.

Unidentified Audience Member: You mentioned you have sold, like, some products for 30 years and also you are a major parts supplier. So, apparently, you should have a very good relationship with the power semiconductor companies. So, I'd like to know from the supply point of view what's your, like, relationship or strategic partnership with your suppliers.

And also, you're talking about, like, gaining share. If business really goes better this year, next year, how do you make sure you have enough supply for semiconductors?

And then, the third part, the last part of this question is, like, I checked your data center portfolios. You make, like, modules, AC/DC, DC/DC, and also bricks. Basically, semiconductor companies also move to the direction of a subsystem or system level. So, since you've started to meet some competition with your suppliers, how do you deal with this situation?

Steve Kelley: Okay. I'll try to remember all those questions. They're all good questions.

So, first, I think your question is about power semiconductor manufacturers and our relationship and how we do that and we maintain supply assurance, moving forward. So,

certainly, we had a great opportunity to build closer relationship with suppliers during the supply chain crisis. We've never been closer to suppliers than from '21 through '23. So, during that crisis, we were able to figure out which suppliers supported us well and which did not. And so, our approach is pretty simple, we're aligned with the suppliers that supported us through the supply chain crisis, they did the best job, and we're pushing business their way. So, that's the, I think, summary of how we deal with the power semiconductor and power MOSFET suppliers.

Moving forward, it's connected to the answer to the first question. The reason why some of the suppliers were able to support us is because they had a coherent supply chain strategy. And we're aligned with suppliers who have the capacity and the ambition to grow their business, and we're shying away from suppliers who don't have the ability to show sudden upticks in production capacity. And so, that forces you into a closer relationship with suppliers, and that's a key part of our equation as we move forward. So, we're consolidating with certain suppliers, and those suppliers have solid production expansion plans.

The third part of the question was what?

Paul Oldham: Are we seeing competition, vertical integrated competition, from our suppliers into power supply?

Steve Kelley: So, while we do make these board-mounted power modules, it's a very small percentage of our business. Most of what we sell into data center are large off-board power boxes. And so, that's where we compete. And so, our competition is really companies like Delta in that area and not with IC manufacturers.

Shane Brett: I think that brings us to our time. Thank you, Steve. Thank you, Paul. Thanks for joining our conference. And thanks, everyone.

Steve Kelley: Thank you, Shane.