

✓ **Event Details**

Date: 2024-08-06

Company: Advanced Energy Industries, Inc.

Ticker: AEIS-US

✓ **Company Participants**

Stephen Douglas Kelley - Advanced Energy Industries, Inc., President, Chief Executive Officer & Director

Paul R. Oldham - Advanced Energy Industries, Inc., Executive Vice President & Chief Financial Officer

✓ **Other Participants**

Steve Barger - Analyst

MANAGEMENT DISCUSSION SECTION

Steve Barger

Good afternoon, everyone. Thanks for joining us today. My name is Steve Barger. I'm an analyst with KeyBanc, covering cyclicals to include semi-cap equipment and industrial machinery. And today, I am joined with the team from Advanced Energy Industries. I have Steve Kelley, CEO; Paul Oldham, CFO.

And to start, if you guys want to just introduce yourselves, give a little background, maybe talk at a high level about Advanced Energy, and we'll take it from there.

Stephen Douglas Kelley

Yeah. Thank you, Steve.

So, Advanced Energy is actually headquartered here in Colorado, so we're just right down the road in Denver. So, we have a significant presence in Fort Collins as well. Advanced Energy is a 43-year-old company. We got our start providing pulsed power to plasma chambers, and it's still our primary business. In addition to semiconductor, we also provide solutions for other high-end markets like data center, industrial and medical. We're about a \$1.7 billion revenue company, selling into a \$10 billion TAM. Our focus is on the high-end, and we see a lot of synergies between our businesses from a technology standpoint.

And thanks for the intro.

Steve Barger

Paul?

Paul R. Oldham

Yeah, thanks. We're glad to be here. Paul Oldham, obviously, with Advanced Energy. I think it's an exciting time for the company as we diversify into a broader set of markets. And we're excited to talk to you about some of our growth strategies today.

I'll just remind you that any statements we make today are subject to certain risks and may be forward-looking, and just encourage you to have a look at our SEC filings for a further discussion on those.

QUESTION AND ANSWER SECTION

Analyst: Steve Barger

Question – Steve Barger: Great. Steve, you've been CEO for a few years now. Before we get into the segment specifics, I just want to talk about the broader strategy. What do you push the company to do every day to win in the market, and to really drive the results that you want to see?

Answer – Stephen Douglas Kelley: Yeah. I think there are three basic things that we're trying to do: one is technology leadership, drive that throughout the company; second is new product execution; and the third is manufacturing execution. Because those are the three key areas for us to gain share in our chosen markets. So, I think we're making good progress there. Actually, it's almost counterintuitive, but this is really fortunate for us to be going through slow periods in our markets, because this is when most of the innovation happens.

In semiconductor, we're working hard with our customers on two new technologies, eVoS and eVerest, which we think position us to gain a lot of share over the next five years. Similar things are happening in our other businesses. So, the general comment is many of our customers were focused on qualifying alternatives and scrambling during the COVID supply chain shortages. That changed in 2023. They went full bore into innovation, and luckily, we had a lot of new products they could use to improve the performance of their own products.

Question – Steve Barger: And I'll definitely ask about eVoS and eVerest. But, for the second thing, strategically, you've driven a lot of change already since you've been here, but what do you think the company needs to do differently just to innovate and drive outgrowth in the future?

Answer – Stephen Douglas Kelley: I think it's a culture. It's a culture of continuous improvement, and also a sense of urgency. So, speed is very important in our market. We have competitors, and we have to move faster than they do. We also have to listen to our customers. We've brought on some new customers recently. They are pretty demanding. But what they've done is actually improve our performance as a company, right. So, I think it's important to keep the team challenged. We continue to invest in R&D at a very high rate. As a company, we have not cut back during this slow period, and that's going to serve us well as the markets come back.

Question – Steve Barger: And SEMICON West was about a month ago, and it wasn't this year, but last year that you introduced the new power supplies for the most advanced semiconductor nodes, like 2-nanometer, eVerest and eVoS, as you as you mentioned. Can you start there just how has the qualification of the products and the customer tools been progressing?

Answer – Stephen Douglas Kelley: It's been beyond my wildest expectations, I would say, to summarize it. But we introduced these, like you said, in summer of 2023. And I could tell you today, every customer we have is evaluating eVerest and eVoS actively. And I mentioned in our earnings call last week that we're going to ship over 200 of these units to customers this year.

In addition, we launched a new product called NavX at the show last month, and we'll ship 50 of those. So, this is unprecedented, this level of shipment of new products into our market. What it shows, that first, all of our customers are looking at these products. And secondly, many of those customers are moving beyond the

evaluation phase into the qualification phase at their customers. So, a number of the products that we'll deliver over the next four months will not go to our customer, but they'll go to their customer, and they'll be using these products in the fab to basically tune their processes. So, this is really interesting stuff, and we think you'll see a material impact on our revenue starting second half next year. But things will begin in earnest in 2026 and 2027. But the trends are very, very strong for us with eVoS and eVerest.

Question – Steve Barger: Is that kind of the normal cadence for new product rollout it takes, or can you talk through that from a timing standpoint?

Answer – Stephen Douglas Kelley: Yeah. Sometimes, in this market, it could take years. What we're seeing here is a sense of urgency from our customers, and that's because we're going through node transitions in both the logic area as well as the memory areas. And so, the challenges that our customers face are significant as they move to these very high-aspect ratio content, geometries, as well as gate-all-around and other unique features. And the issue they have is using their conventional technologies. It just doesn't work like it used to. And so, they need something different, and that's what eVoS brings, as well as eVerest. It gives the customer more control over the shape of the wave that we send into the chamber. And it gives them more control over the pulsing frequency, and allows them to dial it in to a degree they've never had before.

Question – Steve Barger: And you're talking about just enabling the process in the chamber of etch primarily?

Answer – Stephen Douglas Kelley: Yeah.

Question – Steve Barger: Yeah.

Answer – Stephen Douglas Kelley: Yeah, it's etch. It's for conductor and dielectric etch, as well as with deposition equipment.

Question – Steve Barger: Yeah. And what sort of revenue opportunity do you think these product lines could generate over time? I know it's early, but how do you think about that opportunity?

Answer – Stephen Douglas Kelley: What we think of is basically market share. So, we haven't discussed specific revenue numbers, but we think this could drive multiple points of market share over the next five years. That's going to translate to a lot of profitable revenue for the company.

Question – Steve Barger: Yeah. And it seems like the pending upcycle will be driven by memory, by leading edge. What's the best mix of device types that would really benefit you as a company?

Answer – Stephen Douglas Kelley: I don't think we really have a preference, quite frankly. I think we benefit no matter what part of the semi market grows. We've been in the business for 40-plus years, and we have good penetration into memory market, as well as the logic market. And we also have good business with mature products as well. And so, it's not just leading edge we're talking about. Our customers continue to buy the mature products for many years, and we continue to ship those products, as well as service the products. And service has become a more important part of our business. Right now, we're generating more than \$40 million a quarter in service revenue, which is pretty significant. Comes in at reasonable margin, and will continue to grow as our installed base grows.

Question – Steve Barger: Right. And I know the goal is to grow 1.2 times WFE through the cycle, which of course can't happen every year, hasn't happened in the last couple of years. But when you think about 2-nanometer gate-all-around, other vertical architectures, do you feel like you're positioned for that now?

Answer – Stephen Douglas Kelley: Yeah. I think we are for a couple of reasons. One is if we listen to our customers, our customers are telling us the etch and deposition intensity goes up with these gate-all-around and high-aspect ratio structures. So, they'd be basically buying more etch and dep equipment, which is good for us. The second is if we go back to eVoS and eVerest, we think our share will go up in the etch and dep market. So, if you take the share gains, plus the greater etch and dep intensity, then that's going to drive outsized growth.

Question – Steve Barger: And you said mature customers or customers for mature products will continue to buy. It seemed like there were green shoots and mature that became a little less clear through earnings. Can you talk about what you're just seeing on those more mature nodes?

Answer – Stephen Douglas Kelley: Yes. I think it's a mixed picture. I think on the mature nodes, what we've seen is a general pullback, right, because obviously there're inventories out there that the IC vendors are working through, and so they're not adding capacity at the same rate they have been in past years. I think that's true across the world. So, again, the service business continues. There is activity in this space, but not quite as intense as we've seen in the past two years.

Question – Steve Barger: On the mature nodes, are you primarily focused on automotive, or do you have other industrial applications in your semiconductor business?

Answer – Stephen Douglas Kelley: I really don't know exactly where all the products go. But typically, in a mature node, those fabs will produce products for all markets, whether it's consumer or industrial, medical, automotive, you name it.

Question – Steve Barger: And since we're on trailing edge, China has been much in the news lately. Can you just give us a view of what you see in China given just the amount of tooling that's been shipped over there?

Answer – Stephen Douglas Kelley: Yeah. So, our view is somewhat limited. Even before the export control regulations came out in October of 2022, our direct exposure to China was low-single-digit percentage of revenue. And since that time, it's become even less, due to export controls. Our primary exposure today is indirect, so through our customers. And so, I mean, our customers are shipping into China, where they're able to. And so, we participate in that business. And based on what I've read, the business is still pretty good, but it's tailed off a little bit from its high point last year.

Question – Steve Barger: And during the last upcycle from 2019, we saw a semi equipment expansion for about three years. And based on what you saw from this down-cycle, how you compare it to the other cycles, any thoughts on duration of the upcycle that we can see and any context you can give just now versus what you've seen in prior?

Answer – Stephen Douglas Kelley: Yeah. Boy, if I can answer that question precisely. The answer is...

Question – Steve Barger: We're all counting on you.

Answer – Stephen Douglas Kelley: ...it's difficult to accurately gauge the length of the upturn, but it's not difficult to see where the market's going over time. So, long term, the demand for semiconductor technology is going up into the right. There's no argument about that. So, we think we're in the right market there. Think short term, the issue in 2023 and so far in 2024 has been inventory. That's been the wildcard. We think inventory issues go away for us at least by the end of this year.

So, as we look to 2025, we think it's really a function of demand, not inventory. And we have the benefit of the eVoS and eVerest products starting to ramp in second half. So, I think 2025 is going to be a decent year for us

in semiconductor.

Question – Steve Barger: So, cyclical inflection and a lack of inventory in the channel, which should lead to...

Answer – Stephen Douglas Kelley: Yeah.

Question – Steve Barger: ...stronger revenue growth.

Answer – Stephen Douglas Kelley: Yes.

Question – Steve Barger: Let's switch over to industrial and medical. We know industrial markets are down due to both end market weakness and destocking. Can you just talk about line of sight to recovery?

Answer – Stephen Douglas Kelley: Yeah. So, in industrial and medical, I think it's important to start with the supply chain issues. Because when you think back, these supply chain issues, which started as early as 2020 but certainly were robust in 2021, they impacted all of our customers. But the first customers who came out of the supply chain crisis were the semiconductor equipment customers, because they had a lot of leverage. The second group of customers were the high-volume customers, specifically data center. Third group were the medical accounts. And the last group were the industrial accounts. And so, for us, we were able to clean up our industrial delinquencies in Q3 of 2023. And so, we saw a correction start in Q4 of 2023, so almost a year ago.

So, we think, based on our analysis of channel inventories, sell-in, as well as sell-through, we think we're out of that in Q4 of this year or Q1 of next year in that timeframe. So, we think we start to grow again, and that's that. It's going to vary, I think, depending on which company you're talking to. And a lot of it depends on when they're able to basically clear the delinquencies in their backlog. For some of our competitors, they weren't able to do that until Q1 or Q2 of this year.

Question – Steve Barger: And you alluded to this in some of your opening comments where slower periods can be good times to invest. What is the best use of time for your sales and engineering teams during this slower period for these newer markets for you?

Answer – Stephen Douglas Kelley: It's design-in. So, we want our salespeople and our applications engineers at the engineers desk every day, right, because this is the time when our customers want to innovate, and this is the time to get the design wins. And those will pay off for the company and for those salespeople over time.

Question – Steve Barger: Yeah. And can how do you think about – I know it's still evolving to some degree, how do you think about share in industrial and what the TAM is?

Answer – Stephen Douglas Kelley: Yeah. I think the industrial market is extremely fragmented. And so, I think we'll grow share, but because it's so fragmented, it's difficult to grow share quickly. And so, that's why a lot of our M&A effort is focused on industrial and medical targets, because that's the way you grow share quickly in the short term. Over time, we'll gain share organically. And so, I think the combination is ideal in industrial and medical.

This market is a very long lifecycle market. So, once we get a design win, customers typically will keep buying for somewhere between 7 and 20 years. And so, it's an annuity of sorts. And that's the same when we buy a company, with a lot of industrial and medical business, the revenue will keep coming to us.

Question – Steve Barger: And I know it's a newer end market. Can you just tell us what is the competitive advantage or the differentiator? How do you go to market to try and win those designs?

Answer – Stephen Douglas Kelley: So, it's similar to semiconductor in that we had first introduced a standard platform. So, we have one called the Evergreen platform, we introduced last quarter. And customers will show interest, and then they'll tell us, well, you know, we like this platform, but can you do these other things, right. Different outputs, different inputs, different color, whatever. And we'll do it. And so, we have a team of people in Philippines. Their only job is to basically customize our standard products for our industrial and medical customers. And once we do that, then it becomes a sole source product, and that's good for the company.

Question – Steve Barger: And then, that's the 7 and 20 years that you talked about.

Answer – Stephen Douglas Kelley: Yes. Yeah.

Question – Steve Barger: I want to talk about data center next. But just one quick one on medical, how would you characterize that market? Is it more stable than industrial, or is it performing the way you would have predicted?

Answer – Stephen Douglas Kelley: I think medical, again, going back to the supply chain crisis, they suffered a lot during supply chain. So, they came out of it a little bit quicker than industrial did. And so, we are seeing the medical market pick up this quarter. So, I think Q3 and Q4 will be significantly better than the first half for us. And so, that's, again, going back to my theory that a lot of this is tied to the supply chain crisis, it's logical that medical customers are coming out of it faster than industrial...

Question – Steve Barger: Right.

Answer – Stephen Douglas Kelley: ...because they worked their inventory already.

Question – Steve Barger: Data center has obviously been a hot topic in the industry. You have a business there, but you've kind of deemphasized it over the past couple of years to really focus on industrial and medical, because you want those more differentiated and higher margin kind of exposures. But can you explain what's going on in data center, how that's benefiting you, and what you think happens over the next couple of years?

Answer – Stephen Douglas Kelley: Yeah. So, going back a few years, we took a look at the margins and some of the data center opportunities, and they weren't very good. And so, we basically took some of the engineers and pushed them over to industrial and medical to work on those new products. But the remaining engineers, we said, you know, we're going to focus on sole source opportunities and opportunities where we're the first of two sources. And we're going to drive higher margins in that business, and that strategy has worked. And so, we have much better margins than we used to have in data center. They're not as strong as corporate average, but they're a lot closer than they used to be. And our revenues, about the same as they used to be.

So, we've managed to make the switch in profitability without sacrificing much revenue, which makes me quite pleased. So, that's what we're going to continue to do. We're going to continue to engage with some key customers, and really work with them on difficult issues. So, this is where you need our engineering expertise to solve challenging problems, and are willing to pay for it.

Question – Steve Barger: And is this really an AI-centric kind of thing, where that's where the engineering is coming in? Or what are you doing to win in that high-end part of the market?

Answer – Stephen Douglas Kelley: So, with the high-end, it's interesting. These AI servers consume a lot of power. So, anywhere from 3x the conventional server rack to 10x. So, it's a lot of power. And so, what that means is there's a premium on power supply efficiency, which is where we excel, the power density, basically, how much can you fit into the same amount of space, and then reliability of the system. And so, those are the three areas where we've differentiated in the past is our efficiency, our power density, and our reliability. So, it becomes a bigger issue for AI, because of the cost of the platforms and the power consumption.

Question – Steve Barger: And I know I guess still you're probably going to see higher growth in semi and industrial and medical just because of the easy comps. But do you have kind of a projection for what the growth rate in data center could look like?

Answer – Stephen Douglas Kelley: In data center?

Question – Steve Barger: Yeah.

Answer – Stephen Douglas Kelley: No, I don't, actually. Do you?

Answer – Paul R. Oldham: Yeah. It's hard to tell, but we do think that we can get back to our previous peak levels in this market, which if you look back over two, three years ago, our peak levels, if you exclude the premium parts that were part of revenue, were in the high \$80 million range. So, frankly, we're well on our way there even after Q3. And we think Q2, Q3, Q4 can be higher. We think that's within reach, certainly. And we'll see where it goes from there.

Question – Steve Barger: It's a good segue to you, Paul. I want to ask some question about gross margin.

Answer – Paul R. Oldham: Sure.

Question – Steve Barger: You've laid out a plan to reach 40%. Consensus is around 36% this year. Can you just talk through what gets you there? Is it volume? Is it mix? Is it more of an operating focus...

Answer – Paul R. Oldham: Yeah, it's really...

Question – Steve Barger: ...and maybe the new margin or new products as well?

Answer – Paul R. Oldham: Yeah, certainly. It's really a function of three large things. The first one is I'll put in the self-help category, we've been embarked in a process to consolidate our factory footprint and optimize that around a few large scalable sites. As part of that, we're closing in or reducing the size of a number of factories. That action, we believe, will lower our cost, and should add 200 basis points to gross margin. Now, we get part of that this year. And so, this year, we expect to see margins higher in the third quarter. We guided up from Q2. And higher again in the fourth quarter.

Along that line, we announced that we're going to close completely our last remaining China factory. We started that effort. That will cause a little bit of higher transition costs in the meantime, because we have to move those products into an existing factory. But ultimately, it will reduce our fixed costs further, and give us more leverage in the model. So, the first step is cost optimization. That's 200 basis points, and should largely be completed by the middle of next year.

Second thing is volumes we expect to recover. Obviously, we're running at a relatively low level now. And the analysis we've done suggests that our new cost structure, we should get about 100 basis points of improvement for every \$50 million per quarter of revenue that we add. So, if we can exit the year around \$400 million, that adds roughly 100 basis points. If we get to \$450 million, that adds 200 basis points. Those two things, combined with a little bit of help from material cost, gets us to roughly 40% margins sometime in 2025 as our markets recover.

Now, beyond that, we've talked about our new products, the emphasis on semiconductor, industrial and medical, and our intent to increase our percentage of sole-sourced products from 70% to 80% of our total revenue. Those things, we think add another 200 to 250 basis points in margin over the course of a product cycle, which should be the next two to three years. So, our goal is to have 40% gross margins in good markets and bad. This should give us enough headroom in normalized markets to be in the low-40s, and to absorb in the next trough and stay above 40%.

Question – Steve Barger: More durable through cycles.

Answer – Paul R. Oldham: More durable through cycles.

Question – Steve Barger: Yeah.

Answer – Paul R. Oldham: That's exactly right. And look, this is where we should be. It's taking us longer than we'd like to get there. We had to battle the headwinds of the supply chain crisis, COVID before that, and more recently, the lower volumes. But those tailwinds are largely behind us. So, we believe we have a pretty clear opportunity to improve margins and accelerate earnings over the next 12 to 18 months.

Question – Steve Barger: Now, we just have like a minute-and-a-half left. I want to ask about your balance sheet, \$1 billion in cash. Steve or Paul, maybe, can you just talk about how you're approaching the M&A market? That's an important part of your strategy going forward.

Answer – Stephen Douglas Kelley: Yeah. Why don't I start and let Paul finish? But, we're on the hunt, basically. And there're two things we look for. One is in the industrial and medical market. Since it's a fragmented market, we think there's an opportunity to roll up some companies there. And there are a lot of synergies from a manufacturing and a sales standpoint. So, that's the first objective. The second is technology tuck-ins, where there's a smaller company, which has a technology that we need. And we just did one of those with Airity Technologies, which has been a very good acquisition for us. So, we'll continue to look at opportunities like that in the I&M space and the technology space.

Answer – Paul R. Oldham: Yeah, the only thing I'd add to that is we take a fundamental approach to value. Value has been the biggest challenge, I think, recently to find an agreement on value. Most recently, we did make a possible offer for XP Power. In the end, that's an acquisition that fits our strategy perfectly. But we also have financial discipline, and we couldn't come to an agreement on what was a reasonable value. So, we will continue to look for deals that make sense from a strategic, operational and a financial perspective.

That's perfect. We're out of time on that. We'll wrap it up. Thanks so much.

Thank you very much, Steve.

Thanks, everyone.