# REFINITIV STREETEVENTS **EDITED TRANSCRIPT** ADI.OQ - Q4 2023 Analog Devices Inc Earnings Call

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**OVERVIEW:** 

**Company Summary** 

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#### PRESENTATION

#### Operator

Good morning, and welcome to the Analog Devices Fourth Quarter Fiscal Year 2023 Earnings Conference Call, which is being audio webcast via telephone and over the web. I'd now like to introduce your host for today's call, Mr. Michael Lucarelli, Vice President of Investor Relations and FP&A. Sir, the floor is yours.

#### Michael C. Lucarelli - Analog Devices, Inc. - VP, IR and FP&A

Good morning, everybody. Thanks for joining our fourth quarter fiscal 2023 conference call. With me on the call today are ADI's CEO and Chair, Vincent Roche; and ADI's Interim CFO, Jim Mollica. For anyone who missed the release, you can find it relating financial schedules at investor.analog.com.

On our disclosures, the information we're about to discuss includes forward-looking statements, which are subject to certain risks and uncertainties and as further described in our earnings release and other periodic reports and other materials filed with the SEC. Actual results could differ materially from the forward-looking information. These statements reflect our expectations only as the call today. We undertake no obligation to update these statements, except as required by law.

Our references to gross and operating margin, operating and non-op expenses, tax rate, EPS and free cash flow will be on a non-GAAP basis, which excludes special items. When comparing our results to our hysterical performance, special items are also excluded from our prior periods.

Reconciliations of these non-GAAP measures to their most directly comparable GAAP measures and additional information about our non-GAAP measures are included in today's earnings release.

Two comments before we go prepared remarks. We adjusted our mapping to better align revenue to customer end markets. This resulted in slight changes in our end market mix with industrial increasing in each of the other markets slightly lower. These changes are reflected on our web schedule in the quarterly results section for the last 3 years. And second, 1 more quick reminder, the first quarter of 2024 is a 14-week quarter. And with that, I'll turn it over to ADI's CEO and Chair, Vincent.



#### Vincent T. Roche - Analog Devices, Inc. - CEO & Chair of the Board of Directors

Thank you very much, Mike, and a very good morning to you all. Though the industry is obviously moving through a more challenging period of the business cycle, I'm very pleased to share that we're preserving the strength of our financial performance while preparing for the market's recovery.

Fourth quarter revenue was \$2.7 billion, led by double-digit year-over-year growth in our automotive sector. The combination of careful expense management and our employees' commitment to high standards of execution enabled us to deliver operating margins of 44.7% and EPS of \$2.01 for the quarter. For the fiscal year, '23 again set new high watermarks with revenue reaching \$12.3 billion, supported by all-time highs in the industrial and automotive sectors. This resulted in EPS of \$10.09 up 5% from a year ago. Notably, we returned a record \$4.6 billion to shareholders in 2023, exceeding our 100% free cash flow return target.

Since the closing of Maxim just over 2 years ago, ADI has returned roughly \$12 billion to shareholders or nearly 15% of our market cap. Over the same time, we've reduced our share count by more than 6% and increased our dividend per share by 25%.

Now looking to fiscal '24, the near-term dynamics remain uncertain. As you will recall, last quarter, we outlined a broad-based inventory correction across all markets and geographies, reflecting the deteriorating macro conditions and our improving lead times. Consistent with our view 90 days ago, we expect the customer inventory overhang to persist through the first half of the year.

Challenging times like these confirm the wisdom and the strength of our business model. The diversification of our business across customers, applications and products helps to limit volatility while preserving profitability. Building upon that foundation, we took actions to better ensure we can deliver operating margins in the low 40s and solid free cash flow despite the revenue decline.

Importantly, however, we're not simply battening down the hatches. A resilient financial model enables us to continue making the strategic investments necessary to allow us to capitalize on the upside when the business inflects higher. That longer-term focus and commitment is why our customers have the confidence to increasingly depend on us as a key strategic partner. I've been very heartened by my conversations with customers across many markets and geographies over this past quarter.

Despite the near-term challenges, they share our optimism that the intelligent edge is enabling a future replete with opportunity, and they are clear about the expanding role that they expect ADI to play in their success. Our customers' optimism is reflected in the continued expansion of our design win pipeline, which increased by double digits again in 2023. That growth was enhanced by sustained momentum in our Maxim revenue synergies pipeline, which is tracking ahead of our initial expectations.

We expect synergy-driven revenue acceleration in 2025 putting us on a path to achieve our goal of more than \$1 billion in revenue synergy by 2027. The combination of our strong design win growth with recurring revenue streams from our 75,000 product SKUs, which have average life span of a decade or more creates a business with high barriers to entry that's both resilient and rich with growth opportunities.

Now let me share some examples of recent wins with you. In Industrial Automation, we're increasingly delivering more complete solutions. At a top digital factory automation supplier, for example, we recently leveraged our anchor position in software configurable I/O to attach additional solutions value across power, isolation and connectivity. As a result, we captured 3x the bill of materials and secured design wins across their entire platform.

In Industrial Instrumentation, we've increased our design wins at SOC and memory test market leaders. Our next-generation solutions, increased channel density and throughput while reducing energy consumption by up to an incredible 30% per system. These are critical parameters for testing complex, high-performance compute GPUs and high-bandwidth memory for artificial intelligence systems.

Looking now to automotive. In electrification, momentum continues for our wireless battery management system. This novel solution enables lower weight, greater scalability and improved manufacturing productivity, driving down the total cost of ownership for our customers while





increasing ADI's content. Last quarter, we secured our fifth customer, a top 10 EV OEM, we'll begin to deploy our wireless solution in their next-gen EVs in 2026.

Now furthermore, during the year, ADI reinforced our industry-leading position in automotive, high-performance functionally save power. To that end, we won next-generation power for ADAS systems at 4 top suppliers this past year. These wins add another growth vector to our automotive franchise, which has benefited from strong momentum across electrification and in-cabin connectivity.

This proliferation of ADAS is benefiting our high-speed GMSL connectivity portfolio. GMSL has been 1 of our fastest-growing areas and a major revenue synergy generator for us. In the last year, we were awarded 4 new wins across leading North American, Asian and European OEMs. We're also expanding our opportunity and increasing our ROI, winning multiple design wins in industrial areas in adjacent areas such as autonomous robotic systems.

Our cloud infrastructure business is beginning to benefit from the power challenges and connectivity requirements necessary in AI ML systems. Notably, a large hyperscaler designed our high-performance power and protection solutions into their next-generation AI platform. And in connectivity, systems are upgrading now to [1. terabit] per second and require our highest level of precision control solutions to efficiently support the growth in data generation.

In consumer, we won multiple power management sockets in a portable application and a key customer. These wins truly show the combinatorial power of our acquisition strategy. We leveraged our industry-leading cell and switcher, Maxim's cost optimized process technology and our customer relationships to secure these wins.

And lastly, in Healthcare, Maxim strengthened our comprehensive suite of technology for personal monitoring solutions, adding sensor AFEs, microcontrollers and ultra-low power technologies. We secured a design win at a leading continuous glucose monitoring customer this year. Our solution increases the robustness, accuracy and power efficiency of their glucose center, thereby helping to extend its life from days to weeks.

So in summary, we're proud of another year of record revenue and earnings. We continue to demonstrate the power of our business model, which delivers results through all phases of the business cycle. Our continued strong investments in technology and business innovation, customer engagement, and our hybrid manufacturing model positions ADI and our customers to take maximum advantage of the opportunities at the intelligent edge when the business recovery arrives.

Now I'd like to pass the call over to Jim. Over the past 35 years, Jim has taken on a number of critical financial leadership roles across ADI, enabling him to develop a breadth and depth of understanding of our business that very, very few possess. So I'm pleased now to have him on my leadership team and to be joined by Jim on today's call. Over to you, Jim.

#### Jim Mollica - Analog Devices, Inc. - Interim CFO

Thank you for that introduction, Vince, I'm excited to be here today, and let me add my welcome to our fourth quarter earnings call. Starting with a brief recap of fiscal 2023 results. Revenue increased 2% to \$12.3 billion, marking ADI's third consecutive record year. Gross margin of 72.5% moderated from last year's record results of 73.6%. Operating margin of 48.9% decreased 50 basis points, roughly half the decline of gross margin, reflecting strong operating expense control. All told, EPS increased 5% to a record \$10.09.

Now moving to fourth quarter results. Revenue of \$2.72 billion declined 12% sequentially and 16% year-over-year, finishing above the midpoint of our outlook despite the challenging operating environment. Industrial represented 50% of quarterly revenue, declining 19% sequentially and 20% year-over-year. As expected, we experienced broad-based weakness as inventory adjustments continued across our diverse customer base. For the full year, Industrial increased 6%, achieving its third straight record result with strength across instrumentation, test, energy and aerospace and defense.



Automotive, which represented 27% of quarterly revenue was down slightly sequentially and up 14% year-over-year, marking 12 straight quarters of double-digit growth. For the year, Automotive also achieved its third straight record result, increasing 19%, with strong growth across our functionally safe power, battery management and in cabin connectivity solutions. Collectively, these were up more than 30%.

Communications, which represented 13% of quarterly revenue declined 6% sequentially and 32% versus a record fourth quarter 2022. For the year, Communications decreased 13%, with steeper declines in wireless versus wireline. And lastly, Consumer represented 11% of quarterly revenue, down 6% sequentially and 28% year-over-year. Consumer decreased 20% in fiscal 2023, driven by industry-wide weaker demand and ongoing inventory corrections.

Now on to the rest of the P&L. Fourth quarter gross margin was 70.2%, down sequentially and year-over-year driven by unfavorable product mix, lower factory utilizations and lower revenue. OpEx in the quarter was \$692 million, down \$60 million sequentially. These significant savings were driven by disciplined expense management and lower variable compensation. As a result, operating margin came in at the higher end of our outlook of 44.7%.

Non-op expense finished at \$65 million and the tax rate for the quarter was 12.5%. All told, EPS was \$2.01, slightly above our outlook.

Now on to the balance sheet. We ended the quarter with approximately \$1 billion of cash and cash equivalents and a net leverage ratio of 0.9x. Inventory decreased nearly \$70 million sequentially, driven by finished goods. Channel inventory also declined as we actively manage sell-in to be less than sell-through. Given lower revenue, inventory days increased to 188 and channel weeks ticked up slightly, ending within our target range of 7 to 8 weeks.

Now moving on to our cash flow items. Operating cash for the quarter and the year was \$1.2 billion and \$4.8 billion, respectively. CapEx for the quarter was \$476 million and for fiscal 2023 was \$1.3 billion. These CapEx numbers are gross figures, which do not include the benefits of the investment tax credits or grants related to both the U.S. and European Chips Act. Full year free cash flow was \$3.6 billion or 29% of revenue. During the year, we returned 130% of free cash flow via roughly \$3 billion in share repurchases and \$1.7 billion in dividends.

Now moving on to the guidance for the first quarter, which will be on a 14-week basis. First quarter revenue is expected to be \$2.5 billion, plus or minus \$100 million. Once again, we expect sell-through to be higher than sell-in. At the midpoint, we expect all end markets to be down sequentially. Industrial is expected to be down the most, followed by Consumer and Comms with Automotive faring the best. Operating margin is expected to be 41.5%, plus or minus 70 basis points. Our tax rate is expected to be 11% to 13%, and based on these inputs, adjusted EPS is expected to be \$1.70 plus or minus \$0.10.

I will conclude my remarks with a brief update on the current operating backdrop. As Vince mentioned, we continue to see broad-based weakness across markets and geographies as customers work to reduce inventory and a stressed macro backdrop. Importantly, our lead times are now back to normal levels with 95% of our products shipping within 13 weeks, given our customers high confidence and timely supply. Encouragingly, during the fourth quarter, we've seen cancellations fall and bookings stabilize. This gives us greater confidence that the ongoing inventory correction will taper through the first half of the fiscal year.

As we discussed last time, we've taken actions to preserve the integrity of our income statement, our balance sheet and our cash flow statements. Let me provide an update in these areas. We are once again lowering internal utilizations with a goal of significantly reducing inventory in the first half of the year. Our hybrid manufacturing model and ability to swing in external wafers will help us moderate the decline in factory starts. The unique ability positions us to deliver healthy gross margins despite the significant revenue decline from a year ago.

Given the enhancements made to our hybrid manufacturing model over the last 2 years, we now plan to slow the expansion of our internal fabs and back-end facilities. As a result, we expect 2024 CapEx to be between \$600 million and \$800 million or down about 45% versus 2023. Importantly, this CapEx reduction does not compromise our long-term growth or resiliency efforts that gives customers multiple locations to source ADI supply.

And lastly, we took additional steps to structurally reduce our OpEx. These actions, combined with lower variable comp and seasonally lower spend in the first quarter will result in a slight decline in OpEx sequentially even with the extra week.



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So in closing, our ability to generate operating margins in the low 40s, which were our previous highs in the last cycle demonstrates the durability of this franchise and how we've enhanced our operating model over time. And with that, I'll give it back to Mike for Q&A.

#### Michael C. Lucarelli - Analog Devices, Inc. - VP, IR and FP&A

Thanks, Jim. Welcome to the call. It's great to have you. Now let's get to the Q&A session. We ask that you limit yourself to 1 question in order to allow for additional participants on the call this morning. If you have a follow up question please requeue. We will take your question if time allows. With that, we will have our first question please.

#### QUESTIONS AND ANSWERS

#### Operator

(Operator Instructions) Our first question comes from Ambrish Srivastava with BMO.

#### Ambrish Srivastava - BMO Capital Markets Equity Research - MD & Senior Semiconductors Research Analyst

Vince, it looks like order has been restored in the diversified Analog world with -- it looks like a very normal cyclical downturn and with you, what you've built is a structurally more profitable company holding to 40% -- low 40% operating margin line. My question is on a bottoming process. And I know we're not there yet, but can you just remind us or help us understand metrics you're following regarding cancellations, pushouts, backlog, you did talk about cancellations, Jim. And then kind of related to that, is if you look at past cycles, does automotive needs to go down double-digit year-over-year decline as industrial has been there? And how should we think about that?

#### Vincent T. Roche - Analog Devices, Inc. - CEO & Chair of the Board of Directors

Ambrish, and thank you for the question. So yes, we noted last quarter that we believe the inventory digestion issue would last 2 to 3 quarters. And I'd say, given the new information that we have, our conviction of that has actually grown. We have, through careful analysis and observation, we've seen inventory digestion accelerate at our largest direct customers across the board and across all the various segments that we support. And we're continuing to reduce our channel inventories as well.

So I think very encouragingly, even with normalized lead times, as we've said, we're shipping that kind of 95% of customer requests within a quarter, which is very, very normal. We saw against that backdrop, a sharp drop in cancellations, and though the book-to-bill was below unity in the fourth quarter. We did see our bookings improve sequentially. So that gives us a lot of confidence as to what's going on.

Regarding Automotive, I'm not sure, by the way. The automotive -- the assumption you're making is that there could be a double-digit drop in Automotive. I'm not sure about that because we know that cars are consuming about 10% more silicon per year. And in fact, we continue to grow in share and ASP in the car. So my own sense is that against what could be a very challenging macro backdrop during 2024, that of all the elements of our portfolio, automotive, we expect will fare best of them all. And we still have pretty strong confidence that we'll grow in 2024.

#### Michael C. Lucarelli - Analog Devices, Inc. - VP, IR and FP&A

Next question please.

#### Operator

Our next question comes from Vivek Arya with Bank of America Securities.

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#### Vivek Arya - BofA Securities, Research Division - MD in Equity Research & Senior Semiconductor Analyst

Vince, I'm trying to reconcile the comments that were made about some stabilization in bookings. That sounds like a positive. But I think in the prepared remarks, you also said some headwinds that could persist through the first half of the fiscal year, suggesting that April could be a sub-seasonal quarter.

So I know you're not guiding specifically out to April, but what is the right way to look at the puts and takes as we think about April? Can it be seasonal, whether it not be seasonal? And also this extra week from January, did that really give you that 7.5% push, so we should be taking that out of April. So any way to help us give us a sense for how the April could shape up would be very helpful.

#### Vincent T. Roche - Analog Devices, Inc. - CEO & Chair of the Board of Directors

Yes. Well, I think it's -- Vivek, thank you for the question. It's 1 quarter at a time here. What I will say contextually is that we expect the inventory overhang to have been depleted by the start of our third quarter, which is in May of next year. So, we still remain pretty confident about that, given the dynamics that I just outlined.

But the other parts of the cycle that we're really -- I think everybody is seeing pressure from is the macroeconomic climate and particularly the decline of semi business in China. So that's the piece. I mean that is the piece that isn't well understood. But all that said, the macro will be the governor on what happens in the second half of the year. And I think another quarter or so will give us a lot more confidence in terms of what is possible in the second half. But I'll let Jim answer as well give you some particular statistics to underpin our assumptions here.

#### Jim Mollica - Analog Devices, Inc. - Interim CFO

Thanks, Vince. Yes, let me just speak to -- let me unpack lead times a bit first. As we said, lead times are now kind of back to where they were, 95% of our products are shipping within 13 weeks. And we've seen steady improvement in lead times in both 3Q and 4Q. And I guess from the refreshing side of that is from a customer viewpoint, customers have now adjusted to those shorter lead times. And our order rates basically in the fourth quarter basically stabilized in fact, picked up in 4Q versus 3Q. So that's good news for us as the customers have shopped and their signal into us. As Vince said, our book-to-bill will still be low on there, but it is kind of the first lines there.

Additionally, cancellations in the fourth quarter were down meaningfully for the first time and probably close to a year. And cancellations on a shorter time fence were also very, very low. So that's good for us.

From a channel perspective, we're being cautious. We continue to basically ship into the channel less than our sell-through, which basically will position us well for when the upswing occurs. And from an end market viewpoint, let me just close on that point. All markets in 1Q will be down on a quarter-to-quarter basis. Yes, that's it. Mike, anything else?

#### Michael C. Lucarelli - Analog Devices, Inc. - VP, IR and FP&A

Yes. And it's very confusing with a 13- to 14-week card, you're right, Vivek. I'll kind of add some commentary around that, how to think about that. Normally, 2Q from 1Q and a 13-week to 13-week basis up about 5%. And given what have been said, inventory overhang and bookings getting better. It still feels like we should probably grow some, but I don't think 5% is likely. Why? There's still an inventory overhang going on.

So if you think 13-week to 13-week were about flattish, plus or minus, in 1Q to 2Q, that's probably the way to think about it. That means if you include the extra week, it's probably down about 5% plus or minus sequentially. So I hope that helps back a little bit because it is confusing. And with that we go to our next question, please.



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#### Operator

Our next question comes from Joseph Moore with Morgan Stanley.

#### Joseph Lawrence Moore - Morgan Stanley, Research Division - Executive Director

Great. I wonder, I mean now that you're in a revenue downturn that looks more severe than we saw the last cycle, what are you seeing in terms of pricing? And are people -- you obviously raised prices during the upturn. Are people asking you to give that back? And is that a different conversation on kind of a like-for-like basis versus approaching kind of new design win activity?

#### Vincent T. Roche - Analog Devices, Inc. - CEO & Chair of the Board of Directors

Yes. Thanks, Joe. So look, I think overall, the pricing of our existing portfolio is very, very resilient, very stable. And I think something to note as well is that every new generation of product that we build is capturing more value. And -- so if you look at the legacy, it's very stable. You look at the legacy franchise. We've got tremendous stability.

We're capturing more new value per new socket. And I don't see any particular change. And we, as a company, play at the high end of the performance curve, which enables us to get this innovation premium that is a very, very critical part of our gross margin structure and our revenue growth.

And our job is to continue to invest to make sure that we stay on the cutting edge and get well rewarded for that. We fight very, very intensely at the inception of new designs. But as I said in the prepared remarks, Joe, we're seeing generally speaking, our pipeline of new product design wins as well as the more established products continue to grow quarter-by-quarter, year-over-year.

So I feel confident that the pricing that we have managed to increase over the last couple of years, 2.5 years that they're about to reflect the increased cost of goods. We'll hold those prices. So overall, we're bullish about where we are and what the pricing environment holds in the future.

#### Operator

Our next question comes from Stacy Rasgon with Bernstein Research.

#### Stacy Aaron Rasgon - Sanford C. Bernstein & Co., LLC., Research Division - Senior Analyst

I had a question on OpEx and gross margins into Q1. So you said OpEx was down slightly even with the extra week. So if I assume it's downstate a little bit, it would imply the normalized like 13-week OpEx would be running around, I don't know, 640 maybe, maybe a little lower. Once we get through into Q2 when the ex week rolls off, is that the right sort of like steady-state OpEx run rate to think about as we go through the year and some -- are there some other drivers?

And I guess if those numbers are right, it sort of implies gross margins implied in Q1 maybe a little below 70, maybe 69, is that the right kind of level that you're thinking about as the revenue is going to drop here.

#### Jim Mollica - Analog Devices, Inc. - Interim CFO

Yes, Stacy, it's Jim. Let me take the margin one first, and then I'll talk about the OpEx for the quarter. There's many inputs. There's many levers to the gross margin. There's revenue that's priced, there's mix as factory loading utilization levels. And let me just try to unpack that a bit.

Vince mentioned on the pricing side, basically, that's stable. So that's not a drag to gross margins as we move forward. On the revenue side, basically, we're down -- the midpoint of our first quarter guide on a 13-week basis is down, approaching 30% from our previous peak. So basically, revenue



is a headwind for us there. Mix basically is unfavorable as well. As you heard in my prepared remarks, Industrial was down 19% and 20% last quarter on a year-over-year and sequential basis, and that will be down again in first quarter. So mix is a headwind for us.

When you put all those puts and takes together, we'd expect basically gross margin will fall below 70% in the first half of the year at these trough levels. I think if you think about something in the 68% to 69% range, is probably a good range for this trough revenue range. So that's kind of the gross margin.

On the OpEx side, as I mentioned, our 4Q OpEx basically was down about \$60 million on a sequential basis. This was the combination of reducing discretionary spend and, of course, a much lower variable comp. Looking into 1Q, we expect that to be down again even with the extra week. And it's fair to say that probably you can think about 1% to 2% there. This reduction relates to the actions that we structurally took to reduce OpEx as well as a lower typical seasonal spend in 1Q as well.

We don't guide 2Q, but just to give you a sense there, when you look at 2Q, it's probably best to compare that to the 4Q, which was a like 13- to 13-week comparison. And when you're looking at 4Q '23 versus 2Q '24, given some of the structural modest reductions we had made, we'd expect OpEx in 2Q to be down a few percent from the 4Q operating levels. So I hope that helps.

#### Michael C. Lucarelli - Analog Devices, Inc. - VP, IR and FP&A

Thanks, Stacy. I always appreciate your 2-part one-part question. With that, next question, please.

#### Operator

Our next question comes from Chris Danely with Citi.

#### Christopher Brett Danely - Citigroup Inc., Research Division - MD & Analyst

Just a question on Industrial. Historically, this has been a pretty strong sector for you guys, but it seems like it's -- the revenue decline in Industrial is worse than the overall company. Can you just talk about why that is and maybe broader speaking, are the bookings or the revenue falling more because the macro is worse than expected? Or the inventory situation out there is just worse than you guys thought? Do you think you'll be able to hold that 70% gross margin floor for the fiscal '24?

#### Vincent T. Roche - Analog Devices, Inc. - CEO & Chair of the Board of Directors

Yes. Thanks, Chris. So yes, look, we've come off a record year for ADI and for the industrial sector. But I'd say in the second half of '23, we began to see momentum slow on the order side of things. And in the fourth quarter, it's true to say that weakness in the industrial sector broadened and hit all the various market segments with 1 exception, the aerospace and defense area.

And I think when we look into 2024, given the weaker macro backdrop, and we expect the inventory digestion to continue through the first half particularly at the broad market customers who are suffering most here. So I think, as Jim said, when we talk about gross margins, the weaker industrial over the first half of the year, that weaker mix, if you like, will impact the gross margins. And for the trough period here, we're thinking kind of 68%, 69% as reasonable assumptions for gross margin in that period of time.

So it really is, at this point, it's an adjustment of inventories at our customers and how fast we experience the recovery will determine on the macro. But again, I think it's true to say, during the first half of this year, we do expect to get this overhang of inventory behind us and get back to a more normalized growth pattern in the second half of the year. Jim, do you want to take a comment?



#### Jim Mollica - Analog Devices, Inc. - Interim CFO

Yes, Chris, I think just a couple of points there. Vince talked about at the trough revenue, gross margins in the 68% to 69% range. Gross margins at 70% for the year. I think that was the first part of your question as well. A lot of that will depend upon when the demand comes back in terms of -so we don't really guide for the year, but that's probably dependent upon revenue coming back to a more normal level.

Let me just add a few points, though. We are -- utilization levels basically brought them down in 4Q. We're going to bring them down again in 1Q. You see the inventory reduction of \$70 million in 4Q, which was a little bit better than I think we guided last quarter, you're going to expect that inventory to be reduced at a similar level in 1Q and again in 2Q. And what we're also doing now is we're activating a hybrid manufacturing strategy.

So we're actually swinging wafers from external back in-house, which moderates the factory load, which gives a little bit of a cushion on that gross margin side as well. So just a little bit more color as what you can expect for us in the second quarter here.

#### Operator

Our next question comes from Tore Svanberg with Stifel.

#### Tore Egil Svanberg - Stifel, Nicolaus & Company, Incorporated, Research Division - MD

Yes. Thank you and congratulations on the results in this tough environment. I had a question about CapEx. So 1 of your competitors talk about this geopolitical dependable capacity that they're investing in. You're going through the complete all the way, you're reducing CapEx a lot for this year. Help us understand a little bit what your partners are doing -- your founder partners are doing for you to sort of feel comfortable that you don't have to spend as much in CapEx going forward?

#### Jim Mollica - Analog Devices, Inc. - Interim CFO

Thanks, Tore. Why don't we take that in, so I'll answer some color. Yes. So let me just -- let me pause and take a step back on CapEx for a second. So at our Investor Day, we outlined basically elevated CapEx in the high single-digit range for 2022 and 2023. And then long term, that would actually trend back down to mid-single digits. As I said, this past year, CapEx was about \$1.2 billion on a gross basis, which is about 10% of sales, which was a bit higher basically due to the revenue fall off that we saw in the second half of the year.

This year, as I said, we're basically slowing our capacity expansion and our CapEx, given kind of the short-term demand that we're actually seeing there. So from a CapEx viewpoint, we're going to expect that to drop by about \$500 million in our FY '24. And as I noted, this figure doesn't reflect any of the benefit from either the U.S. or European Chips Act.

From a capacity viewpoint, what does that mean? That basically means that we'll be able to still double our internal capacity footprint by 2025. Originally, we were thinking that was going to take place more in the 2024 time period. But given the macro and the demand outlook, we're comfortable with that. So we don't need basically all that capacity in the short term.

From a customer viewpoint, from a swing capacity viewpoint, our goal is to be able to basically swing 70% of our product portfolio from internal to external fabs. That's good for our customers because it gives our customers the ability to dual source, and that really creates a rich and resilient supply chain with multiple options for our customers. And then from a gross margin viewpoint, internally, that allows us to moderate the factories a bit with this additional swing coming in-house as well. So we're comfortable with that strategy? I don't know if Vince?

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#### Vincent T. Roche - Analog Devices, Inc. - CEO & Chair of the Board of Directors

Yes. Good morning, Tore, let me add a couple of pieces of color to what Jim has just said. So most of ADI's revenue today is built on process technologies that are 118 nanometers and above. Now in digital technology terms, that's a very, very old process technology. That's more than 25 years old in terms of its currency.

But in the Analog space, that is still a very contemporary process node. So a little more than 70% of our revenue today is produced on process technologies at 118-nanometers and above. And as Jim said, we've gone through a major internal expansion to give us more flexibility and agility in terms of where and how we manufacture those process technologies.

And we're making all these investments that we've made on the internal fabs are 200-millimeter wafers. So the tool chains are less expensive, and we're able to get tremendous return on investment over many, many decades on the investments that we're making. So I think below that, for the, let's say, at the final line geometry nodes, we have very, very good alternatives with our external partners who are in a very, very really important piece of how we make the hybrid manufacturing model work. So anything that is kind of 19-nanometers and below, it's 300-millimeter wafers, and we secure that production with multiple sources across the globe.

#### Operator

Our last question comes from Timothy Arcuri with UBS.

#### Timothy Michael Arcuri - UBS Investment Bank, Research Division - MD and Head of Semiconductors & Semiconductor Equipment

I had a question on Inventory. It sounds like you're planning to bring it down quite a bit from here. And you mentioned that the target is 120 days, but of course, it depends on what the base of revenue is. So can you quantify how much more you plan to take out of your inventory? It seems like it could come down maybe a couple of hundred million dollars more from here? And then also maybe if you can also quantify -- and this is kind of a hard question to answer, but how much is selling below sell-through? I know you get some metrics, particularly inside of distribution?

#### Jim Mollica - Analog Devices, Inc. - Interim CFO

Timothy, let me take that. Just to be clear, let me kind of step that back what I said. So basically, inventory in fourth quarter was down \$70 million, and that was on a quarter-on-quarter compare. That was almost all at the finished goods level. In 1Q, we plan to take inventory down by a similar amount. And then we'll do that again in 2Q. That's on a dollar basis, not on a days basis, just to be clear there.

So over the course of 3 quarters, fourth quarter and the first half of '24, we expect inventory to be down in the \$200 million plus range for that. In terms of the channel, as I mentioned, our sell-in to the channel is lower than our sell-through. And in fourth quarter, it was in the \$50 million range. And I'd probably expect probably a similar number there in first quarter, yes. And with that, thanks Tim.

#### Michael C. Lucarelli - Analog Devices, Inc. - VP, IR and FP&A

Tim and your question on the days of inventory. I would say our pre-COVID target was 120. We're close to 190 today. I think both of them are going to be wrong when all the dust settles, but we'll re-up you on kind of the long-term inventory days model at a future call. And with that, are we good Tim. Thanks, everyone, for joining us this morning. A copy of the transcript will be available on our website. Thanks for joining the call. I appreciate your interest in ADI, and have a great Thanksgiving.

#### Operator

This concludes today's Analog Devices conference call. You may now disconnect.

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