

Hewlett Packard Enterprise Company

Fourth Quarter 2023 Earnings Conference
Call

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CORPORATE PARTICIPANTS

Antonio Neri – *President and Chief Executive Officer*

Jeremy Cox – *Senior Vice President and Interim Chief Financial Officer*

Jeff Kvaal – *Head of Investor Relations*

PRESENTATION

Operator

Good afternoon, and welcome to the Fourth Quarter 2023 Hewlett Packard Enterprise Earnings Conference Call. My name is Gary, and I'll be your conference moderator for today's call. At this time, all participants will be in a listen-only mode. We will be facilitating a question and answer session towards the end of the conference. Should you need assistance during the call, please signal a conference specialist by pressing the "*" key followed by "0." As a reminder, this conference is being recorded for replay purposes.

I would now like to turn the presentation over to your host for today's call, Jeff Kvaal, Head of Investor Relations. Please proceed.

Jeff Kvaal

Thanks Gary, and good afternoon, everyone. I'm Jeff Kvaal, I'd like to welcome you to our fiscal 2023 fourth quarter earnings conference call with Antonio Neri, HPE's President and Chief Executive Officer, and Jeremy Cox, HPE's Senior Vice President and Interim Chief Financial Officer.

Before handing the call to Antonio, let me remind you that this call is being webcast. A replay of the webcast will be available shortly after the call concludes. We have posted the press release and the slide presentation accompanying the release on our HPE investor relations webpage.

Elements of the financial information referenced on this call are forward-looking and are based on our best view of the world and our businesses as we see them today. HPE assumes no obligation and does not intend to update any such forward-looking statements. We also note that the financial information discussed on the call reflects estimates based on the information available at this time and could differ materially from the amounts ultimately reported in HPE's annual form 10-Q for the fiscal year ended October 31st, 2023.

For more detailed information, please see the disclaimers on the earnings materials relating to forward-looking statements that involve risks, uncertainties and assumptions. Please refer to HPE's filings with the SEC for a discussion of these risks. For financial information, we have expressed on a non-GAAP basis. We have provided reconciliations to the comparable GAAP information on our website. Please refer to the tables and slide presentation accompanying today's earnings release on our website for details.

Throughout this conference call, all revenue growth rates, unless noted otherwise, are presented on a year-over-year basis and adjusted to exclude the impact of currency. Finally, Antonio and Jeremy will reference our earnings presentation in their prepared comments.

And with that, let me turn it to you, Antonio.

Antonio Neri

Thanks, Jeff and good afternoon, and thank you for joining us today. In fiscal year 2023, HPE delivered record performance against non-GAAP financial metrics by capitalizing on strong momentum across our portfolio. Our steady execution has resulted in higher revenue, further gross margin expansion, larger operating profit, and record-breaking non-GAAP diluted net earnings per share and free cash flow. Our growth engines in Intelligent Edge and HPC and AI, as well as our HPE GreenLake platform, are helping to accelerate our revenue and profit diversification.

Importantly, HPE has achieved demonstrable success this year in our ongoing portfolio pivot to higher growth, higher margin areas aligned to the key market megatrends driving customer demand. I will focus my commentary today on our full year fiscal year 2023 results and allow Jeremy to expand on the fourth quarter and segment results.

I'm very proud of all that HPE delivered in fiscal year 2023 for our shareholders, our customers, and our team members. Our performance demonstrates the relevance of our strategy, our portfolio differentiation, and our strong execution. We delivered extraordinary innovation to customers, resulting in share gains in key markets and profitable growth for our company. HPE generated our highest gross margin and a highest operating profit since I became CEO, and our highest annual revenue in four years.

Non-GAAP diluted net earnings per share and free cash flow were the largest ever in our company's history. We saw healthy, sustained growth in revenue at \$29.1 billion for the full year, an increase of 5.5% year-over-year in constant currency, our third straight year of revenue growth, and above the mid-point of our full fiscal year 2023 guidance of 5%. Gross margins exceeded 35%.

We also added substantially to our annualized revenue run rate closing fiscal year 2023 with more than \$1.3 billion in ARR. That represents a nearly \$370 million increase from this time last year. Non-GAAP operating profit margin was up 20 basis points year-over-year to end the year at 10.8%. We have executed well on our addressable market opportunities and exercised prudence with our expenses and obligations.

Non-GAAP EPS increased 6.4% year-over-year to \$2.15. Improved profitability also means that we have significantly boosted free cash flows, which rose by about \$400 million this year to \$2.2 billion, and nearly 25% year-over-year increase, both non-GAAP EPS, and free cash flow results are record-breaking and well above our fiscal year 2022 SAM guidance.

In summary, HPE delivered an impressive set of results in fiscal year 2023. With the progress we have made this year and our confidence in generating further value for our shareholders, we are raising our dividend in 2024. HPE is more relevant than ever to our customers. We have deliberately aligned our strategy over the last few years to significant trends in the market around Edge, Hybrid Cloud, and AI. These growth engines align to our customers' interests and where they are targeting their IT spend. Even against an uncertain microeconomic backdrop, we saw continued though uneven, demand across our HPE portfolio with a significant acceleration in AI orders.

Demand in our AI solutions is exploding. We saw a significant uptick in customer demand in recent quarters for accelerated computing infrastructure and services. In Q4, orders for servers that include accelerated processing units or APUs represented 32% of our total server order mix, up more than 250% from the beginning of fiscal year 2023. APUs, which includes GPU-based servers orders across our business, represented 25% of our total server order mix in fiscal year 2023.

Our HPC & AI segment revenue grew 25% year-over-year in fiscal year 2023. We ended this fiscal year with the largest HPC & AI order book on record, driven by \$3.6 billion in company-wide APU orders. This tops what has been an historically large order book in the third quarter, as demand accelerated for our supercomputing and AI solutions. We anticipate demand next

fiscal year will remain very strong. We will likely have a large order backlog until the GPU supply is less constrained.

Two weeks ago at the Supercomputing Conference, we expanded our collaboration with NVIDIA to announce a turnkey pre-configured supercomputing solution for generative AI to streamline the model development process. The new solution speeds up the training and fine-tuning of AI models using on-prem and data sets. Designed for large enterprises, research institutions, and government organizations, it comprises HPE AI software, our industry-leading supercomputing and storage solutions, our HPE Slingshot interconnect fabric and HPE services, and the Quad NVIDIA Grace Hopper GH200 Superchip.

Later this week at HPE Discover Barcelona, we will further expand our NVIDIA partnership with new solutions created for enterprise customers. Also this month, the University of Bristol announced that HPE has been selected to deliver the UK's fastest supercomputer, thanks to our UK government investment of 225 million British pounds intended to make the nation a world leader in AI. The Japan National Institute of Information and Communications Technology recently turned to HPE Cray XD supercomputers to develop an AI-based multilingual communication tool to process, translate, and interpret text and images for 17 languages.

And we just announced a partnership with DarkByte, a provider of next-generation high-performance computing green data centers to power its AI cloud service with HPE Cray supercomputers and our purpose built machine learning software suite. With HPE built supercomputers consistently rank among the top 10 within the top 500 most powerful and sustainable supercomputers, our clear leadership in this space continues to position us well in the AI market.

Our Intelligent Edge segment was the largest driver of our revenue and profit growth in fiscal year 2023, making up 18% of our overall revenue and 39% of the segment operating profit. Fiscal year 2023 revenue in this segment increased by 45% to \$5.2 billion, while operating margins expanded more than 1,200 basis points year-over-year to 27.3%, demonstrating the relevance of our offering and the payoff for the investments over time. A critical part of our Intelligent Edge portfolio in the edge supply portfolio will continue to contribute meaningfully to profitable growth for our shareholders.

The Compute segment is going through a cyclical period where customers are consuming prior investments, making this a price-competitive market for now. As we prepared to capture a greater share of AI-linked inferencing opportunities, we saw overall demand improve moderately in the second half and are encouraged in our outlook for this segment.

Customer interest in servers with APUs is growing. We are investing in specialized sales resources that can enhance future growth. We also know we must keep our focus on capturing every unit in this business, while keeping balance in our operating margin performance. The overall storage market has been sluggish this year. And our uneven performance in this segment is in line with most of our peers.

However, we are encouraged with three quarters of stable demand. We saw sequential improvement in storage revenue in the fourth quarter. We continue to invest in our sales execution capabilities. We recently deployed a larger specialized sales force, including a team devoted to growing our storage IP product mix. We expect our subscription-based offerings and differentiated IP products like HPE Alletra will continue to be sources of strong growth to enhance the profitability of this business in the year ahead.

We remain focused on advancing our position in Hybrid Cloud. We ended the year with 29,000 customers on our HPE GreenLake cloud platform. Customers require a hybrid by design IT estate. They are attracted to our cloud platform because of its experience, flexibility and cost. In the fourth quarter, we closed our largest HPE GreenLake for private cloud enterprise deal to date. In addition, we saw more customer demand around our HPE GreenLake SaaS offerings across data protection, observability and sustainability services.

Finally, our HPE Financial Services segment continues to deliver strategic sustainable solutions for customers accelerating our strategy and helping to expand earnings for our shareholders. Financing volumes rose year-over-year with a major contribution from efforts to boost our as-a-service volumes through HPE GreenLake.

Fiscal year 2023 was an important year for HPE, one we advanced our strategy and delivered record financial performance for our shareholders through focused execution and operating discipline. I'm confident in our ability to continue to deliver for our shareholders in fiscal year 2024 and beyond for three main reasons.

First, the work we have done over the last several years to innovate and invest in the right places - places where we have the expertise and the ability to scale, has given us a portfolio that I believe stands apart from any other.

Second, we have weathered cyclical dynamics well. While others have had much more severe shifts to make, we have been able to stay the course in bringing our strategy to life because we have made operational improvements and have managed expenses in a disciplined way.

And finally, we have been bold in undertaking transformation across the company. The changes we have made to our operating model to strengthen capabilities in our growth segment, focus on our road maps across the portfolio, create new customer experiences and reach them in new ways will each pay off next year and beyond.

We are set up very well to navigate the current climate with and for our customers and to add significantly to the long-term profitability and value we create for our shareholders. While headwinds remain in certain segments of the IT market, HPE is positioned very well to continue our momentum, and we are laser-focused in areas where we know we can do more to improve our performance. I hope you share my optimism in what HPE can achieve in the year ahead.

Let me now invite Jeremy to discuss the fourth quarter and specific segment results. So Jeremy, over to you.

Jeremy Cox

Thank you very much, Antonio. We closed FY '23 with another solid performance. Our Q4 results reflect our strategic focus to diversify our business towards higher growth, higher margin areas of the market. The company's transformation we have undertaken several years ago to pivot to Edge and Cloud is paying off. And with AI exploding in 2023, we see several promising indicators as we look further in 2024 despite some unevenness in some areas of the IT market where we participate.

Q4 performance was highlighted by healthy revenues and gross margins. Revenue grew 5% sequentially in constant currency to \$7.4 billion, hitting the midpoint of our Q4 revenue guidance range. Year-over-year revenue, however, was down 6% on a difficult compared to Q4 '22,

during which significant order book consumption boosted our results. Q4 non-GAAP gross margin was 34.8%, which was up 170 basis points year-over-year, largely due to the increasing contribution of our Intelligent Edge segment.

Let me remind you of the deliberate targeted investment decisions we made in Q4 that I flagged at SAM, which were funded with the better-than-expected OI&E performance in the same period. The impact of this investment, along with the strong seasonal growth in HPC and AI, resulted in a Q4 non-GAAP operating margin of 9.7%. This is down 60 basis points sequentially and 180 basis points year-over-year. We expect non-GAAP operating margins to quickly recover in Q1 '24. This led to GAAP diluted net EPS to \$0.49 and non-GAAP diluted net EPS to \$0.52, which was at the high end of our Q4 guidance range of \$0.48 to \$0.52. Our Q4 free cash flow of \$2.3 billion was record-breaking for the company.

HPE also delivered an impressive full year performance in FY '23. We delivered revenue growth of 5.5% in constant currency, which was at the upper end of our guidance range of 4% to 6%. Currency was a 330 basis point headwind for the year. Non-GAAP diluted net EPS of \$2.15 was also at the high end of our prior guidance and well above our initial guidance from SAM 2022 of \$1.96 to \$2.04. FY '23 free cash flow of \$2.2 billion was well above our guidance of \$1.9 (billion) to \$2.1 billion.

Let's now turn to our segment results. As a reminder, all revenue growth rates on this slide are in constant currency, and I will discuss the segments in our prior structure. The company is now operating according to our new structure. And as communicated at SAM, we plan to file restated historical financials for the new segments well before we report our Q1 '24 results.

In Intelligent Edge, we grew revenue 40% year-over-year in Q4. Demand in our core products was down sequentially on customer digestion but grew in our software centric solutions such as our HPE Aruba Central cloud management software and in our new TAM opportunities such as our SASE security software suite.

Our operating margin of 29.5% was up more than 1,600 basis points year-over-year. While very pleased with this performance, we continue to expect a mid-20% operating margin over time, as communicated at SAM 2023. And finally, we're making progress on our order book and expect to be back close to historical normal levels by midyear 2024.

In HPC and AI, Q4 revenue grew 38% year-over-year and 41% sequentially. Q4 revenue results included only a modest amount of AI revenue. On a sequential basis, the continued strength in AI demand lifted our order book in the HPC and AI segment to more than \$3 billion despite our significant revenue growth in the quarter. We continue to expect double-digit revenue growth in the segment over the next three years, and we are increasingly confident we will be above trend in FY '24 with GPU supply our gating factor.

Our Q4 operating margin was 4.7%, up 120 basis points year-over-year and 550 basis points sequentially. While we have much more progress to make, this does illustrate the positive benefits of scale. The early stage of the AI market, tightness in certain key accelerators and long lead times in this segment means that the HPC and AI margins will fluctuate.

Storage revenues fell 12% year-over-year on a difficult compare but rose 3% sequentially. Storage demand has now been flat to up for three straight quarters. HPE Alletra revenue grew over 50% year-over-year, and it will remain a robust growth contributor in FY '24 supported by

growth in file and object storage. HPE Alletra is shifting our mix within storage to higher margin software subscription revenue, which is a key driver of our ARR growth.

Q4 storage operating margin of 8.1% was down 730 basis points year-over-year. Headwinds included the deferred revenue impact of the HPE Alletra subscription software, accelerated investment outpacing year-over-year revenue performance and a high mix of third-party products this quarter. Our investments in product portfolio give us confidence storage will make progress through FY '24 toward our long-term operating profit margin target communicated at SAM 2023 of mid-teens.

Compute revenue was down 30% year-over-year on a difficult compare and down 1% sequentially. Deal elongation and customer digestion we discussed previously continued to be most prevalent in Compute. Declining AUPs from a record high in Q1 '23 was also a meaningful driver. However, two straight quarters of sequential improvement in demand lends further confidence to our FY '24 outlook.

Our full year operating margin of 13.7% exceeded our target range of 11% to 13%, but the operating margin of 9.8% in Q4 was temporarily below the range. Given gross margins remain largely flat sequentially and the sequential demand increases, we continue to expect operating margins to be in the target range for FY '24.

HPE Financial Services revenues were flat year-over-year, and financing volume was \$1.5 billion. Our operating margin of 8.9% was down 220 basis points year-over-year, reflecting rapid interest hikes that we are offsetting through pricing, as well as asset management margins returning to normal as supply challenges ease. Our Q4 loss ratio remained steady at 0.5%.

Let's double click on our portfolio pivot to higher growth, higher margin, recurring revenue and in particular, to Intelligent Edge. Even three years ago, the Intelligent Edge segment constituted just 10% of segment revenue. This year, it represented 18%. The operating profit trajectory is even more telling. The Intelligent Edge segment contributed approximately 14% of the segment's operating profit three years ago and was nearly 40% in FY '23. In FY '24, we intend to give you a similar view combining our growth pillars of HPC and AI, Hybrid Cloud and Intelligent Edge segments. Within that, we expect the Intelligent Edge segment growth to moderate and the HPC and AI segment growth to accelerate.

Robust demand in our Hybrid Cloud and as-a-service offerings illustrates the durability of our portfolio shift. ARR exceeded \$1.3 billion in Q4. This represented 37% year-over-year growth, which is in line with our long-term CAGR target of 35% to 45%. Storage and Intelligent Edge software and services are the fastest-growing components of ARR.

We continue to lift HPE GreenLake's value proposition with an increasing mix of higher margin, recurring software and services revenue. Our software and services mix was 68% in the quarter. We expect this mix to increase into the upper 70% range by FY '26. This expansion is driven by the growth of subscription-based software with our products and the increased attach of our HPE operational services, which rose double-digits in Q4.

The rising software and services mix is expanding our as-a-service margins. Our as-a-service orders grew 11% year-over-year in Q4 and finished the year up a solid 23% after 68% growth in FY '22. Our cumulative as-a-service TCV has now increased to nearly \$13 billion. As ARR is now on a clear path to meaningful scale, we will simplify our as-a-service disclosure from ARR as-a-service orders and TCV to only ARR in FY '24.

The explosion in AI demand is driving robust growth in our APU orders. Total APU orders, which include APUs in our Compute, Cray EX and Cray XD businesses totaled \$3.6 billion in FY '23, which is up from the over \$3 billion we disclosed at SAM 2023. HPE Cray XD APU orders accelerated in Q3 and in Q4, reaching \$2.4 billion for the year. The impressive APU server demand is also evident in our total server demand. APUs represented 25% of total server order dollars in FY '23, up from 10% in the prior year. We will continue to disclose APU orders. However, orders can be easily north of \$100 million each. Therefore, orders may be lumpy. But the key point is that we are capturing AI demand now, and are well-positioned for coming demand across the entire AI life cycle from training to tuning to inferencing.

Our strategy is delivering top line growth and gross margin expansion. Despite the challenging macro, ongoing product digestion and currency headwinds, we still produce one of our highest quarterly revenue figures since 2018 while sustaining our expanded gross margin profile. Our Q4 non-GAAP gross margin rose 170 basis points year-over-year to 34.8%. And our full year non-GAAP gross margin rose 140 basis points to 35.3%. That's a more than 500 basis point improvement from FY '18.

Moving to free cash flow, in Q4, we generated \$2.8 billion in cash flow from operations and \$2.3 billion in free cash flow. Our \$2.2 billion in free cash flow in FY '23 was above the high end of our guidance and up meaningfully from \$1.8 billion in FY '22, primarily on improved earnings and net income conversion. We exited FY '23 with a cash conversion cycle of negative four days, which exceeded our expectation for neutral we communicated at SAM.

Strong working capital management in Q4 and reduced transformation costs in FY '23 drove an improvement in our conversion of non-GAAP net earnings to free cash flow to approximately 80% in FY '23. Continued progress in FY '24 and beyond leads us to expect to reach 90% by FY '26. We reiterate our FY '24 free cash flow guidance from SAM of \$1.9 (billion) to \$2.1 billion. And we returned over \$1 billion in capital to shareholders in FY '23, including \$421 million in share repurchases. While certain price and volume parameters of our trading program limited us to below our \$500 million target in FY '23, we reiterate our goal of returning 65% to 75% of free cash flow to shareholders between FY '24 and FY '26.

Before we dive into our outlook, let me remind you that we will exclude H3C earnings and gain on sale from our non-GAAP results in FY '24 as we noted at SAM. We continue to expect the process to conclude and the receipt of the cash proceeds in the first half of calendar 2024.

For Q1, we expect revenues in the range of \$6.9 billion to \$7.3 billion. This incorporates historical seasonality in our overall business, including in the HPC and AI segment after its strong Q4. We expect AI revenue acceleration to drive sequential growth in HPC and AI and total HPE revenue in Q2 '24.

We expect GAAP diluted net EPS between \$0.24 and \$0.32 and non-GAAP diluted net EPS between \$0.42 and \$0.50. We're reiterating our prior year 2024 guidance of 2% to 4% revenue growth in constant currency. We expect OI&E, which as noted, excludes H3C going forward to be a headwind of approximately \$300 million and our non-GAAP structural tax rate to be 15%. Our full-year GAAP diluted net EPS guidance of \$1.81 to \$2.01 is \$0.02 lower than our prior view as a bit of transformation costs slipped into FY '24. We are reiterating our full-year non-GAAP diluted net EPS guidance of \$1.82 to \$2.02. We also reiterate free cash flow guidance of between \$1.9 (billion) and \$2.1 billion. We continue to believe our FY '24 performance will be weighted to the second half of the year as GPU supply improves. We are increasing our

dividend by 8% in FY '24 and intend to return 65% to 75% of free cash flow to shareholders this year.

So to conclude, while there continues to be unevenness in some areas of the IT market, our investment in growing areas of our portfolio is paying off. We are confident in our ability to continue to capture the AI explosion in demand. AI also opens broader customer discussions about the benefits of AI inferencing at the edge and the need to be hybrid by design. Our HPE GreenLake Cloud platform, our AI native portfolio, and our services expertise are perfectly aligned to the needs of our customers that we believe will turn into profitable growth for our shareholders.

Now let's open it up for questions.

QUESTION AND ANSWER

Operator

We will now begin the question and answer session. To ask a question, you may press "*" then "1" on your touchtone phone. If you are using a speakerphone, please pick up your handset before pressing the keys. To withdraw your question, please press "*" then "2." We also request that you only ask one question.

The first question is from Mike Ng with Goldman Sachs. Please go ahead.

Mike Ng

Hey, good afternoon. Thank you very much for the question. I just have one on the APU orders of \$3.6 billion. I was wondering if you could talk a little bit about the mix between compute, supercomputing, and Cray XD. And if you could offer any color on the type of customers that are making this order? Is this your typical enterprise customer? Is it more of a tier 2 or AI CSP? Any thoughts there would be great. Thank you.

Antonio Neri

Well, thanks, Mike. This is Antonio. So pretty much all the orders are in the HPC and AI segment, the vast majority. We saw now in Q4 some uptick in demand in the what I call the traditional compute. But what you have to think about is AI is a life cycle, training to tuning to inferencing. And the products we talk about here, whether it's HPE Cray, XD or EX really are on the training side and the tuning side. And so when I think about the type of customers, I think about the model builders, so these are unique customers that in the past generally, we have talk about it. Think about companies like Recursion Pharmaceutical, Crusoe Energy, obviously, large language models like Aleph Alpha, Taiga Data or Northern Data, GE Research, and the like. These are big model builders, and they need a large amount of computational power.

Now, when we start seeing as an uptick in the tuning side with enterprises, because generally, they don't tend to build models, they tend to leverage foundation models in the open source or some of these companies provide and then they tune those models with their data, but they want to do it in a private secure and obviously sustainable way. And that's why we have made announcements with NVIDIA, and you can see further announcements later in the week. And then AI inferencing, I call it for using a sport analogy, the singles, and the doubles, so these are maybe a server with eight GPUs or accelerate resorts where they start deploying these models, they have been trained and tuned into production and think about where their real-time processing data happen where business transformation takes place or maybe doing some sort of POC or pre-training experiments. And so now we start seeing that increasing. But the vast

majority of compute is still CPU-centric, and we saw some uptick in the GPUs. But the vast majority of all the APUs that we talked about are in the traditional high density for training and tuning, and that's where our HPE Cray set of platforms plays a big role. And obviously, they also find its way to supercomputing at large scale that we have talked about from TRL [ph] Capital and in Aurora, or LUMI [indiscernible] and Maersk and the like. Anything you want to add?

Jeremy Cox

The only thing I would just add to that is the supercomputing piece, specific to your question, is less than 10% in the total APU orders in FY '23. The other interesting point to add on to the journey towards inferencing that Antonio mentioned is within Compute, although against a very small base, we did see non tier 1 customer orders around GPU or APUs for compute increase about 100% in the quarter. So again, against a small base, but an interesting point to see the focus start moving towards that realm.

Antonio Neri

Yes. Thanks, Jeremy. And again, only 10% of the APUs were consumed in supercomputer the rest was all in AI. Okay, thank you, Mike.

Jeff Kvaal

Thanks, Mike. Gary, can we have the next question please?

Operator

The next question is from Wamsi Mohan with Bank of America. Please go ahead.

Wamsi Mohan

Yes, thank you so much. Antonio, we've seen some networking companies talk about a slowdown and some inventory digestion. You're still delivering very strong growth in Edge high-30s. I know you called out a more front-end loaded performance for Edge. But curious how you're thinking about the weight and pace of that business trajectory both on revenue and margin terms as you go through the course of the year?

Antonio Neri

Yes. Thanks, Wamsi. I'm going to talk about demand and then Jeremy can talk about revenue margin, which we were very clear at SAM, what to expect. Obviously, we have drove a significant growth over the last two years, I think it was the 12th consecutive quarter of year-over-year revenue growth. That's very impressive, we added \$2 billion of revenue in the last two years. And obviously, that came with an expanded set of gross margins because of our software and subscription-based models that we have been driving.

Traditionally, we think about that has been in the campus and branch, where in our switching or Wi-Fi, but more and more lately, obviously, it's all software-driven and as well as expansion into the new times we discussed at the Securities Analyst Meeting, including SD-WAN and security to create the SSE framework or the SASE framework we talked about it. And going forward, we are also going to add the Private 5G, which we discussed.

And let's not forget, we have been also gaining momentum in the data center with our offers, which are an extension of our switching portfolio in the data center. So definitely was a quarter-over-quarter slight decline in orders for demand for products in the campus and branch, but we saw strong demand in the software in the security space. And that's why at the Securities and Analyst Meeting with Phil, we talked about this multiple-adds, adjacency we have added to the

platform, and they are all incorporated into the HPE Aruba central platform, which is part of HPE GreenLake. So again, we are committed to grow revenues next year on the higher pace that we created, again, on the \$5.2 billion we just delivered. Albeit you should not expect a 40% growth, obviously. And that's why I want to have Jeremy talk about what we're reaffirming in here in terms of revenue and as well as margins.

Jeremy Cox

Right. Yes, as Antonio mentioned, we did, at SAM mention a slight growth we're expecting year-over-year on a full year basis for Edge. As I think about that, I'd almost break that down into two halves. The first half, as we mentioned, we do still benefit from a backlog position or an order book position that will go into the first half and help support that revenue performance. And then the second half will be more dependent on demand improvements and in the areas that Antonio mentioned and the investment areas that were helping drive that expectation.

From an operating margin perspective, I would say that I would expect the first half to still benefit from higher operating margins as again, the order book consumption has been at higher price with lower cost. So that's helped drive our operating margin performance, which again this quarter at 29.5% is exceptional. But we would expect over time probably more in the second half, you'll start seeing that operating margin rate get more back towards the mid-20s that we had mentioned at SAM is our expectation for the long term in this business.

Jeff Kvaal

Thanks very much, Wamsi. Gary, could we have the next question?

Operator

The next question is from Toni Sacconaghi with Bernstein. Please go ahead.

Toni Sacconaghi

Yes. Thank you. If I look at your...take the midpoint of your first quarter revenue guide, and I run out normal seasonality. I get revenues down about 5% for the year. You've just stated that the Edge business is going to be weaker in the second half, so below normal seasonality. So clearly, you're expecting a huge ramp in HPC in AI over the course of the year. And I'm wondering if you can dimension that or are you expecting greater than normal seasonality in the traditional server business? And why would that be?

And then finally, can you just comment on total backlog for HPC and AI? Exiting the quarter, you said it was \$3 billion exiting last quarter or greater than \$3 billion. What is it today? Thank you.

Jeremy Cox

Toni, this is Jeremy. I'll take those two for you. So you're spot on as we think about next year, we will have a seasonal drop in HPC and AI. That's largely as Q4 really benefited from a meaningful amount of Cray EX acceptances. And as you know, the time between order and acceptance can be a long period of time and Q4 saw a larger number of acceptances, which helped drive the revenue performance we'll see a bit of a dip back down in Q1 and then Q2 and the second half really benefiting from the acceleration in AI, as well as some additional supercomputing business. And so, you'll see a pretty significant ramp as we go from Q1 to Q2 and then sustaining that or ramping beyond that in the second half of the year. And HPC and AI will be a big part of the revenue growth story for FY '24.

Your question on the order book total, it landed at just over \$3.2 billion, which was slightly above where we landed in Q3. And that really came off the back, though, of Q4 revenue performance in HPC and AI up about \$350 million on a quarter-over-quarter basis. And so, what happened is you had a runoff of order book from revenue performance in Q4 and then how to rebuild of that order book coming largely from AI demand in Q4 that took it back up to its historical high level of just over \$3.2 billion.

Jeff Kvaal

Thanks very much, Toni. Gary?

Operator

The next question is from Samik Chatterjee with JP Morgan. Please go ahead.

Samik Chatterjee

Hi, thanks for taking my question. In your prepared remarks, you did make it a point to highlight the uneven demand backdrop that you're seeing. I was wondering if you can flesh that out a bit more in terms of what you're seeing between the different product groups. And particularly when I look at that in contrast to the strong AI demand you're seeing, would you really then see some of the AI demand from enterprises cannibalizing their own spend towards the other product groups or is the uneven demand more of inventory correction? Thank you.

Antonio Neri

Yes. Sure. I mean no question, we see an explosion in demand in AI. Jeremy just commented on that. And I will say, of that order book that Jeremy just talked about in Q4, only a very little was converted in AI. And to the point he made the growth we had in Q4 was driven by the supercomputer acceptances. But we have a very, very large pipeline in front of us, which is very exciting but also it's going to come down to time to revenue based on the GPU availability. But I will say that business is going to continue to be super strong. And clearly, when I speak to customers, which I do more than 50% of my time there is a huge amount of interest in AI and how to accelerate the deployment of AI across the enterprise, understand that there are challenges, whether its sustainability challenges, where there are data center capacity, power and cooling and orders. And that's why HPE went bold on that front last June to basically make the announcement we're going to offer supercomputing as a public cloud instance so customers can use it as a virtual private cloud. So that we feel very good about it.

Green Lake continued to be very strong. Just to be in a context, we added \$1 billion in TCV quarter-over-quarter. We added 2,000 customers, and ARR obviously, is a function of the deferred revenue that we materialize over time, but what customers really love about our experience is that it's hybrid by design. They can consume anything from edge-to-cloud to HPE GreenLake, where they pay CAPEX or OPEX, it doesn't really matter in the end. But they really love the experience. And that's why we're building the AI components into the same platform. So those are two very strong.

Edge obviously had tremendous momentum, I think we're going to have the typical adjustments, but that's why we spend a lot of energy and time on adding more capabilities to the Edge platform security as the one private 5G, data center networking, which adds to the momentum, understanding there will be potentially some digestion in the campus and branch. But as Jeremy said, we have very well covered for the first half of 2024. So we have to see that.

And then Compute is a typical business that goes through this cyclical. So last year, obviously, we had a huge amount of orders we converted our order faster than people

expected. And in the back half of this year, we saw sequential demand improvements in units and stable AUPs. And now, we start seeing upticks in the mix with AI inferencing, which has these accelerators. But Q3 demand was higher than Q2 and Q4 was higher than Q3. So I think it's fair to say we are stabilized, and we are improving. I would not call it yet a recovery.

And then on Storage, I believe we're going to see some improvements over time because of AI demand, which require file and object, and we have a great portfolio with HPE Alletra, and we intend to capitalize on that. But for three consecutive quarters now, we have seen stability and improvement. And in Q4, we saw revenue improvements on a sequential basis. So customers are prioritizing the spend where it makes sense, but ultimately we have a portfolio that can meet their needs, wherever they are and HPE GreenLake is the way we deliver all of this which ultimately for shareholders, drives higher margins and higher reported revenues and profit.

Jeff Kvaal

Cannibalization?

Antonio Neri

Cannibalization. Sorry, Jeff, has reminded me, cannibalization. We have no evidence of that yet. I think that will become clear when the traditional compute CPU-driven returned to some normal levels. But remember, not every customer has deployed cloud across that enterprise, still quite a bit of journey to go. And there are clear customers assessing what is the best place to deploy that, whether it's in a power cloud or whether it's repatriating on-prem because of the cost or because of data. I think AI is a huge driver of repatriation in my mind because if you have data distributed across multiple estates, it's very hard to really train and fine tune the models when you have data everywhere. And our focus there is really providing them an automated data pipeline with our unified analytics platform. So fundamentally, it's early to say, but so far, in the traditional compute business, we have not seen evidence of cannibalization at this point in time.

Jeff Kvaal

Samik, thank you, Gary.

Operator

The next question is from Simon Leopold with Raymond James. Please go ahead.

Simon Leopold

Thanks for taking the question. I wanted to see if you could talk a bit about the trends you're seeing in compute for the non-accelerated platforms. And really, the thing I'm trying to tease out here is this issue of the AI projects, pulling budget or sucking oxygen on the room versus organizations buying up compute platforms to prepare for AI inferencing and embracing AI as an inferencing element, not just training? Thanks a lot.

Antonio Neri

Yes. Thanks, Simon. Again, maybe I will elaborate a little more to the comments I made before. So we saw Q4 over Q3 and Q3 over Q2 improvement in demand in units. And a lot of that was CPU driven. Although there is a small base of AI accelerated APUs, if you will, that we saw an increase in Q4. But I will say the unit growth in Q4 was not driven by the APUs, it was driven by a combination of CPUs, the vast majority and some APUs because the base is still very, very small. So definitely, customers are preparing for that. Again, they are all assessing what is the best place to deploy this model. That's why I do believe the inferencing side will accelerate over time, whether is to do some pre-training or POCs or really deploying in

production. And I think many customers also will accelerate deployments of tuning solutions on-prem because of the data aspect I talked about before. No question is still digesting what they bought last time on the CPU side of the house. But again, we saw some improvements in demand sequentially in units. And then let's remind ourselves that we also, for us, in the industry. We are going to the transition of Sapphire Rapids. And ultimately, we call that the Gen 11 platform. That became now, what, Jeremy, 25% of the mix which...

Jeremy Cox

53% of orders in Q4.

Antonio Neri

...53% of the orders in Q4, 25% of the revenue mix. And so, that's good for us because, obviously, it drives higher density and obviously, we can attach more options to the same platform. And customers like the sustainability piece of that and the hybrid by design nature of that, which is actually well optimized. And Gen 11, by the way, was conceived to accept any type of processing unit, whether it's a CPU or whether it's an APU, including ARM-based solutions or GPU-based solutions. Whether it's [indiscernible] on the X86. So that gives us tremendous amount of flexibility. But ultimately, it's not just about the server. It's the software that comes with it. And this is where we spend a lot of time building the partnerships and relationships with NVIDIA. So now you can deploy a tuning or inferencing with the NVIDIA stack and our software as well, all part of HPE GreenLake.

Jeff Kvaal

Thank you very much, Simon. Gary?

Operator

The next question is from Tim Long with Barclays. Please go ahead.

Tim Long

Thank you. Can you just touch on the Storage business a little bit, it's been challenged like some of the other businesses on macro. Could you talk a little bit about the outlook for recovery there? And also, if you could just touch on the third-party business there that's impacted gross margin profitability, how does that look to be trending as we look out over the next year or two? Thank you.

Jeremy Cox

Sure. I can take that particularly towards the latter part of that. I think Antonio already hit on some of the demand dynamics, again, where we've seen three quarters of flat to increasing demand, and so some positive trends from that perspective.

I think from an operating margin perspective, certainly, we saw a reduction in Q4; that was driven off a combination of several things, including a higher third-party mix that you mentioned. As well as the fact that we saw some incremental OPEX in this segment and that OPEX as a comparison to the revenue performance in the quarter also put pressure onto that operating margin. However, we do expect a pretty quick recovery there. We...as we look into Q1, in particular, revenue is not expected to accelerate meaningfully, but we think the mix will improve as far as towards our IP product. And the...we should see some OPEX moderation and favorability as we go into the quarter coming out of Q4 and some of the investments that we made there. And so, I expect to see that get back into a low double-digit area. And then as we work through the quarter and that IP mix starts to improve more on demand acceleration, then

we should start seeing us working back towards our mid-teen target that we identified at SAM for this segment.

Antonio Neri

I will say also, if you look at our HPE Alletra product, it's the fastest ramp we ever had in the history of the company. This past quarter grew another 50%. But also there is some short term impact because a portion of that revenue gets deferred because the subscription is softer on the platform. And so, that was an intentional strategy because ultimately, the infrastructure is one piece of it, but the operating system and the cloud services that comes with it are actually a subscription to HPE GreenLake. So while we're growing 50%, we are not materializing the full revenue because a portion of that gets deferred at least to over three years.

And that's good, because ultimately it comes to a significant higher margins for us. But our strategy is to dramatically improve the mix to IT. And you will see more announcements this week in the storage portfolio, all geared to the AI opportunity. We file an object and that will accelerate some of the momentum we have in the Storage IP portfolio.

Jeremy Cox

Thanks, Tim. Gary?

Operator

The next question is from Sidney Ho with Deutsche Bank. Please go ahead.

Sidney Ho

Thank you for the question. I want to ask about ARR, and it was flat quarter-over-quarter, but still up very strongly, 39% year-over-year. Can you walk us through the dynamics why it didn't change in the quarter? You just talked about GreenLake being very strong multiple times. Are there some negatives maybe some cancellations offsetting the growth or is it more a pause of the two very, very strong quarters? And lastly, was there much contribution from AI servers in the ARR number at this point?

Jeremy Cox

Yes, thank you. I'll take that. So just on the last point, no, there wasn't any meaningful AI impact, but we do expect that to be an accelerator, particularly in FY'24 as we go to Q2 and towards the second half. That will be a big part of our ARR story, and we expect that to be an accelerator for us in FY'24.

On the quarter-over-quarter, this business, similar to what I mentioned on the supercomputing area does have some time between order to revenue recognition and in this case, when ARR begins to be reported. And so, I think the sequential story was more about early in the year, we had seen more as the backlog had been burning down and some of those deals that have been waiting in the pipeline turning into, and converting that helped drive and accelerate the ARR through the first three quarters. We saw a little bit less of that in Q4. But I don't think that it all as an indication of the slowdown in this space. In fact, between the 35% and 45% CAGR or annual growth, I expect us in FY'24 to see the higher end of that range.

Jeff Kvaal

Sidney, there's some rounding in there that we can talk through. But thank you. Gary, this should be our last question, I think.

Operator

And our final question will be from Meta Marshall with Morgan Stanley. Please go ahead.

Mary

Hi, this is Mary on for Meta Marshall. I just had a question on demand trends. Can you speak to linearity within the quarter and whether pockets of weakness you saw during the quarter changed as the quarter went on?

Antonio Neri

Yes. I think overall it was more back ended, I would say, in the quarter, we saw strengthening as we went through the weeks. As always said, we have 13 weeks in the quarter, and we saw stronger momentum as we built along the way. And remember what we said at the SAM, so at SAM we said in AI year-to-date to October '19, I think, was some-date. We had \$3 billion in cumulative orders both between supercomputing and AI specifically, and we ended the year at 3.6%, so in the last 12 days we booked \$600 million in incremental AI orders. That tells you the strong. It was through also for Compute and Storage. By the way, the last few weeks, call it, three, four, five weeks were stronger than the beginning of the quarter.

So I would not make much out of that, sometimes customers take the time. We still actually live in elongated sales cycles that's for sure, customers taking more time to make those decisions and ultimately issue the POs. But what really is giving me the confidence is the strong pipeline we have ahead of us. That's obvious. And clearly, in AI is significantly stronger than we ever imagined. And the only challenge we have there, then as Jeremy said, right, so it's time to revenue. We really recognize very little revenue in AI in Q4. That's why we expect the acceleration starting in Q2 and beyond as lead times improve and some of the supercomputing also gets accepted. But the reality, 2024 will be the year of AI revenue growth. And then in the edge, obviously, we have the momentum that we talked about in the subscription, the scale of our software and the incremental engines that we have. So overall, it was a typical quarter, but stronger on the back versus the front. Yes, I think we have time for one more.

Let's do one more. Thanks Gary, please. Maybe just one more question.

Operator

Thanks for the final question will be from Aaron Rakers with Wells Fargo. Please go ahead.

Michael

Yes, thank you guys. This is Michael on behalf of Aaron I just want to ask around AI software. Can you just help us appreciate or understand how your own AI software solutions that you guys talked about at SAM compared to NVIDIA's own AI software suite? I'm just trying to understand is your software complementary or is it more of a substitute? Just how to think about that overall? Thank you.

Antonio Neri

Yes. No, great question. And I will say, overall, there is a lot of complementary and there are some places overlap obviously. But with [indiscernible] and the team, we have a clear joint plan to win together in different segments of the market. But let me break it out, because we talk about software in general terms, but let's start first at the infrastructure level, we have unique software that allows us to run these supercomputers and AI system, which are cloud AI native by nature at massive scale.

Think about when you run a model you need to start and complete the model training. And you have to have unique technologies for checkpoints and making sure that all the compute power

is acting as unified system because unlike the public cloud or the cloud, as we know it, you run multiple workloads on multiple nodes. In this case, you run one workload on multiple nodes. And that's parallel computing as we know it.

And ultimately, you need the software to run this at scale. The magic around that is that checkpoint. And then the second piece of that is our networking interconnect fabric, which allows us to really connect every accelerated unit to every accelerated unit in a cohesive approach. And that's our Slingshot contingent fabric as we know it. And then on top of that, we have our machine learning development environment. This is where developers and the like use our machine learning development services to prepare the models to automate the data pipeline. One of the biggest challenges customers have is to prepare the data, data is everywhere, but ultimately bringing in terms sort of one place so you can use data to train the models.

And then with NVIDIA, we use their AI enterprise software, including some of the foundation models that they provide in order to provide a complete solution. And obviously, we leverage their APUs, call it, GPUs, whether it's H100, L40, L40S [ph], A100s in the past and going forward as the announcement we made in Supercomputing 2023 in Denver, we are leveraging the Grace Hopper H200. So it's a combination, depending on the use case. And we feel pretty good about what we're doing and stay tuned because Thursday, we're going to make further announcements about our partnership with NVIDIA. But it's our IP and their IP that makes us together unique and differentiated in the AI space.

CONCLUSION

Okay, well, thank you, everyone. I will appreciate always the time. I know you're busy in covering all the earnings, but I will say just to wrap in fiscal year 2023. Clearly, we demonstrated our strategic investments and the extraordinary innovation across the growth areas of Edge, Hybrid Cloud and AI and even Compute for the matter are really resonating with customers and is helping us accelerate revenue growth and profit diversification. That's why you see the growth in gross margin and profit. And I believe we will continue to capitalize on this growing market opportunities and I'm confident to continue to increase the returns to our shareholders. And that's why we are raising the dividend for 2024.

So thank you for your time today. I wish you all a fulfilling end of the calendar year and a special holiday season. Talk to you soon.

Operator

Ladies and gentlemen, this concludes our call for today. Thank you for attending the presentation. You may now disconnect.