



**GSI Technology, Inc.**

**Third Quarter Fiscal 2024 Financial Results Conference Call**

**January 25, 2024**

## C O R P O R A T E P A R T I C I P A N T S

**Lee-Lean Shu**, *Chairman, President and CEO*

**Didier Lasserre**, *Vice President of Sales*

**Douglas Schirle**, *Chief Financial Officer*

## C O N F E R E N C E C A L L P A R T I C I P A N T S

**Brett Reiss**, *Janney Montgomery Scott*

**Jeffrey Bernstein**, *Silverberg Bernstein Capital*

## P R E S E N T A T I O N

### Operator

Welcome to GSI Technology's Third Quarter Fiscal 2024 Financial Results Conference Call.

(Operator Instructions)

Before we begin today's call, the Company has requested that I read the following Safe Harbor statement. The matters discussed in this conference call may include forward-looking statements regarding future events and the future performance of GSI Technology that involve risks and uncertainties that could cause actual results to differ materially from those anticipated. These risks and uncertainties are described in the Company's Form 10-K filed with the Securities and Exchange Commission.

Additionally, I've been asked to advise you that this conference call is being recorded today, January 25, 2024, at the request of GSI Technology.

Hosting the call today is Lee-Lean Shu, the Company's Chairman, President and Chief Executive Officer. With him are Douglas Schirle, Chief Financial Officer; and Didier Lasserre, Vice President of Sales.

I would now like to turn the conference over to Mr. Shu. Please go ahead, sir.

### Lee-Lean Shu

Good day, everyone, and welcome to our fiscal fourth quarter and full year 2023 financial results earnings call.

Starting with product development, we achieved two major milestones that will keep us on track to advance the Gemini APU family.

First, in November, we successfully completed radiation-hardened testing on the Gemini-I APU for compute-in-space applications. The test results confirmed that Gemini-I has met the characteristics to be a radiation-tolerant processor. We are actively engaged with several satellite companies that need radiation-tolerant APUs, and we are encouraged by their strong interest.

Moving to our next-generation APU, we completed the tape out of Gemini-II in the third quarter. In late February, we will evaluate the initial spins and expect to begin sampling Gemini-II chips in the second half of calendar 2024. Gemini II has 8X more internal memory and 10X better performance than Gemini-I, at a notably lower cost. This dramatic improvement in cost performance allows us to target a much broader range of applications. The 96MB of internal memory in Gemini-II can fit many AI models entirely on the chip, enabling in-place data processing without accessing external DRAM. This should give Gemini-II tremendous advantages on compact edge applications like drones and ADAS. We anticipate starting initial alpha deployments with select customers in the second half of calendar 2024.

Lastly, in the third quarter, we shipped radiation-hardened SRAMs to two customers for two new programs, and we received a second SBIR Direct-to-Phase II contract in the amount of \$1.1 million.

Looking ahead, we're in the early stages of developing the architecture for our next-generation Gemini-III chip. We've had discussions with several hyper scalars about APU design options to best address their emerging markets' needs in the data center. In addition to helping hyper scalars lower data center power consumption, the APU can also provide significant benefits to Gen AI end users by reducing inference costs. We initiated preliminary discussions with two major hyperscalars who have expressed interest in our technology and continue to work with internal teams on various early-stage concepts.

Turning to our financial performance, the third-quarter revenue of \$5.3 million met our guidance, while the gross margin of 56% was at the mid-point of our guidance. A sequential improvement in gross margin reflects product mix this quarter.

Our operating expenses, which increased both year-over-year and sequentially, included a one-time expense of \$2.4 million for a pre-production mask for Gemini-II. We view this as an investment in future growth, as Gemini-II will greatly expand the APU's market reach.

In parallel, we continue discussions with potential strategic partners to support Gemini-II launch and assist with Gemini-III development. As our most ambitious chip to date, we anticipate Gemini-III will require significant capital investment, and partnership could help mitigate our funding needs. We remain focused on prudent financial management to fuel our product roadmap and expansion into new markets.

Recently, Cornell University published a research paper spotlighting the unique efficiency of our Gemini-I APU for accelerating location filtering in DNA mapping. Didier will discuss the details of the paper and its implication for GSI in his comments.

In closing, it was an eventful third quarter with tremendous progress on our Gemini roadmap, prudent expense management, and action to increase our financial flexibility to support our growth. We remain laser-focused on bringing our innovative APUs to market and driving long-term value creation.

Now, I will hand the call over to Didier, who will discuss our business performance further. Please go ahead, Didier.

**Didier Lasserre**

Thank you, Lee-Lean.

I want to provide some additional context on why we are so confident in the market potential for our APU architecture, especially for inference workloads.

First, the unmatched flexibility of our variable bit processing is key. With two million undefined bit processors that can toggle from 1 bit to 2 million bits cycle-by-cycle, our APU can adapt in real-time to maximize efficiency. This dynamic bit-wise configurability can process long strings one bit at a time and is ideal for inference since research shows that different bit precisions are more efficient for different models.

Second, our APU architecture breaks from the Von Neumann model by removing the data fetch function. This innovative design delivers higher performance with lower power consumption. As Lee-Lean mentioned, these capabilities directly address the critical needs of data centers and emerging applications by lowering data center power consumption and reducing inference costs for Gen AI end users.

Importantly, I want to emphasize that our APU represents true Compute-In-Memory architecture. Unlike competing chips that claim Compute-In-Memory, but are actually Near-Memory compute, our APU has logic physically integrated into the memory. This fundamental difference in architecture will ultimately enable our APU to achieve the transformative speed and efficiency gains we anticipate as we scale. Our true Compute-In-Memory architecture gives us a sustained competitive advantage.

To accelerate ecosystem development, we are focused on getting APUs into the hands of key partners in the military, hyper scalers, and academia. Their real-world deployment and libraries will showcase the benefits, expand use cases and support our go-to-market capabilities.

One example of how this strategy is helping us promote and monetize Gemini-I is a recently published research paper from Cornell University.

We are pleased to announce that the Cornell paper demonstrates our Gemini-I APU's unique performance benefits for genomics applications. Leveraging the APU's massively parallel in-memory architecture, Cornell researchers showed up to 6X faster DNA sequence filtering compared to a 16-core CPU. This showcases our technology's advantages for data-intensive workloads requiring rapid, low-precision comparisons.

The study also revealed strong potential to accelerate other applications with similar data matching needs, including medical data analysis, search, security, and more. With simple scaling, our APU can be packed into cost-effective, high-density servers to multiply this performance for real-world deployments that can lower power budgets for hyper scalers compared to GPU solutions. These results reinforce our significant market opportunity across sectors that rely on efficiently finding patterns and similarities within massive datasets. We remain focused on delivering this game-changing in-memory compute performance to customers across multiple industries.

As Lee-Lean mentioned, we anticipate receiving the first silicon devices of Gemini-II in February. After initial evaluation and debugging, we will target a second spin this summer and initiate benchmarking shortly after. Our \$2.3 million in SBIR funding will support this development. As a reminder, this amount includes our recently announced second SBIR Direct-to-Phase II \$1.1 million contract to create specialized algorithms for the U.S. Air Force Research Laboratory. The target applications include in-aircraft applications such as search and rescue, object detection, moving target indication, change detection, and SSIM in GPS-absent situations. GSI will also develop algorithms using data from the United States Space Force to showcase the performance benefits of its compute-in-memory APU2 integrated circuit.

In summary, the versatility of our architecture, hands-on customer engagements, and ecosystem partnerships give us confidence in our market opportunity. We have a robust product roadmap to deliver

continuous innovations that we believe will catalyze APU adoption across multiple industries in the coming years.

Let me switch now to the customer and product breakdown for the third quarter.

In the third quarter of fiscal 2024, sales to Nokia were \$807,000, or 15.2% of net revenues compared to \$1.3 million, or 20.0% of net revenues, in the same period a year ago and \$1.2 million, or 20.3% of net revenues in the prior quarter. Military/defense sales were 28.2% of third quarter shipments compared to 26.2% of shipments in the comparable period a year ago and 34.8% of shipments in the prior quarter. SigmaQuad sales were 46.9% of third quarter shipments compared to 45.2% in the third quarter of fiscal 2023 and 55.8% in the prior quarter.

One last note on product sales in the third quarter: we shipped prototype quantities of Radiation Hardened SRAM to two customers. These will be deployed into two satellite programs.

I'd like to hand the call over to Doug. Doug, go ahead, please.

### **Douglas Schirle**

Thank you, Didier.

We reported a net loss of (\$6.6 million), or (\$0.26) per diluted share, on net revenues of \$5.3 million for the third quarter of fiscal 2024, compared to a net loss of (\$4.8 million), or (\$0.20) per diluted share, on net revenues of \$6.4 million for the third quarter of fiscal 2023 and a net loss of (\$4.1 million), or (\$0.16) per diluted share, on net revenues of \$5.7 million for the second quarter of fiscal 2024. Gross margin was 55.9% compared to 57.5% in the prior year period and 54.7% in the preceding second quarter. The changes in gross margin were primarily due to changes in product mix and volume sold in the three periods.

Total operating expenses in the third quarter of fiscal 2024 were \$9.7 million, compared to \$8.5 million in the third quarter of fiscal 2023 and \$7.2 million in the prior quarter. Research and development expenses were \$7.0 million, compared to \$5.5 million in the prior year period and \$4.7 million in the prior quarter. Selling, general and administrative expenses were \$2.7 million in the quarter ended December 31, 2023 compared to \$3.0 million in the prior year quarter and \$2.5 million in the previous quarter.

Third quarter fiscal 2024 operating loss was (\$6.7 million) compared to (\$4.8 million) in the prior year period and an operating loss of (\$4.1 million) in the prior quarter. Third quarter fiscal 2024 net loss included net interest and other income of \$155,000 and a tax provision of \$71,000, compared to net interest and other income of \$61,000 and a tax provision of \$84,000 for the same period a year ago. In the preceding second quarter, net loss included net interest and other income of \$71,000 and a tax provision of \$33,000.

Total third quarter pre-tax stock-based compensation expense was \$649,000 compared to \$655,000 in the comparable quarter a year ago and \$676,000 in the prior quarter.

At December 31, 2023, the company had \$21.6 million in cash and cash equivalents, compared to \$30.6 million in cash, cash equivalents and short-term investments at March 31, 2023. Working capital was \$23.1 million as of December 31, 2023 versus \$34.7 million at March 31, 2023, with no debt. Stockholders' equity as of December 31, 2023 was \$39.6 million compared to \$51.4 million as of the fiscal year ended March 31, 2023.

For the fourth quarter of fiscal year 2024, we anticipate net revenues in a range of \$4.8 million to \$5.4 million, with gross margin of approximately 55% to 57%.

Operator, at this point, we'd like to open the call to Q&A.

**Operator**

Thank you.

(Operator Instructions)

Our first question is from Brett Reiss with Janney Montgomery Scott. Please proceed with your question.

**Brett Reiss**

Hi, gentlemen. You can talk to me like I'm six-years-old. Could you just explain what is an infrequent \$2.4 million charge for a pre-production mask? I'm not an engineer. Just if you can give me some more clarity on that?

**Douglas Schirle**

Yes. Every time we have a product, we have to have a mask set prepared to run in the fab to manufacture the wafers. Now typically, when we incur charges for mask set for a production product, we will capitalize that into prepaids and amortize it over a 12-month period. However, the one exception to that is when we have mask set prepared on a new process technology that we've never run before, we'll charge that expense to R&D expense. In this last quarter, we taped out Gemini-II on a process technology we've never used. It's a 16-nanometer process at TSMC. Now, since we've never used that process before, we charge that \$2.4 million to R&D expense.

**Brett Reiss**

All right. This is one shot. It's not going to be recurring?

**Douglas Schirle**

No. It will recur in the future when we have another product that tapes out on a process technology that we've never used before. It's infrequent. It doesn't happen every year. It's at most every two or three years.

**Brett Reiss**

Okay. The cash, which was my margin of safety in my investment here, keeps dwindling down. I'm a little concerned about that. Some of these initiatives with bringing in other joint venture partners, what's the timetable on that? How long do we have before we burn through the remaining cash?

**Douglas Schirle**

Well, we're currently looking at various opportunities, and Didier mentioned talking to hyperscalers and others. To come out with our next product, it's going to require significant investments. We're looking for partners or other sources of funding. In addition to that, we have a building that we own that's worth quite a bit of money, and we'll be looking into potentially selling that building in the near future.

**Brett Reiss**

Right. What is the building appraised at? In a base case scenario, what do you think you could sell it for?

**Douglas Schirle**

We think we can probably get somewhere in the range of \$10 million to \$13 million.

**Brett Reiss**

Right.

**Douglas Schirle**

There's no debt tied to that. It's fully paid for.

**Brett Reiss**

Right. Could you just give me a broad outline of what the structure of a joint venture partner's capital investment in GSIT would take? Would they pay an upfront milestone payment with other payments to follow? Would it be an equity investment? What do you think the structure of that would look like?

**Didier Lasserre**

It could be either of those. What I mean is when Lee-Lean was talking about a partner for funding the next program that's specifically for Gemini-III. Gemini-II was fully funded internally. But for Gemini-III, we are looking for a partner for that, most likely a customer funding partner. But aside from that, that would be more of an NRE type of funding, so there would be milestones associated with that. But aside from that, we are also open to equity investments in the Company as well.

**Brett Reiss**

Okay. I'll drop back in queue. Thanks for taking my questions.

**Douglas Schirle**

Thank you.

**Didier Lasserre**

Thanks, Brett.

**Operator**

(Operator Instructions)

Our next question is from Jeff Bernstein with Silverberg Bernstein Capital. Please proceed with your question.

**Jeffrey Bernstein**

Yes, hi. Good afternoon. Just a question on the—and congratulations on placing those rad-hard SRAM parts for evaluation. If you were to win those programs, about how much revenue and over what time period might you be able to gain from those two satellite programs?

**Didier Lasserre**

Sure. One of the programs was—and again, this is just a prototype quantity for demonstration purposes. One of them was just over \$500,000 and the other one was about \$150,000, and it totaled 41 parts that we shipped. You can do quick calculation what the ASPs are on those. Those are just the, again, prototype quantities. Obviously, you can multiply by something. We don't have the quantities yet. These are programs that they're looking to launch within the next year. It would be sometime second half of 2025 at the soonest before they release production. But certainly it would be north—if the prototype is \$500,000, you can imagine what a production might be.

**Jeffrey Bernstein**

These would be like GEO satellites. These aren't satellite networks. These are going to be individual larger satellites?

**Didier Lasserre**

These ones are—one is GEO, one is actually LEO.

**Jeffrey Bernstein**

Okay. Will you get an automatic win with these evaluation parts? Are you going to get a ride into space on one of these and actually get sort of provenance from that, or are we still looking to get that somewhere else?

**Didier Lasserre**

No. Certainly, as we've spoken in the past, we have other prototype devices we've shipped out already in the last couple of years. It could be any of the programs we've said in the past or these two. One of these looks like is fairly accelerated in their timetable. There's a chance one of the ones we just shipped this last quarter could get up fairly quickly.

**Jeffrey Bernstein**

Okay. Then just on Nokia lowest revenue from them in forever, what's the story on Nokia and the outlook for that router that you sell into?

**Didier Lasserre**

They're contract manufacturers; because we send these parts to two separate contract manufacturers. They both had a little bit of inventory. They were burning through some inventory. We get, I think we've talked in the past, a 12-month rolling forecast from Nokia, and those still are coming in around the run rate we've been seeing for the last couple quarters. Just a little bit north of what we did this past quarter, somewhere in \$1 million, \$1.1 million range a quarter.

**Jeffrey Bernstein**

Okay. At Needham, I think you also mentioned in addition to looking for a partner, potentially a financial partner, potentially a development partner, possibly a hybrid of both of those, so Gemini-III. I think you also mentioned something about potentially licensing IP. It sounds like for what would probably be an edge case for semiconductor IP for doing in-memory processing. Can you just talk about that? Would that be an upfront license and then royalty stream, or just give some color around that?

**Lee-Lean Shu**



Yea. Well, we are more focused on the Gemini-III. It could be IP or it could be the product development for the customer. Basically, I think as we mentioned in the conference call, we made pretty good progress over the quarter. We're still working on it.

**Operator**

Thank you. There are no further questions at this time. I'd like to hand the call back to Lee-Lean Shu for any closing comments.

**Lee-Lean Shu**

Thank you all for joining us. We look forward to speaking with you again when we report our fourth quarter and the full year fiscal 2024 results.

**Operator**

This concludes today's conference. You may disconnect your lines at this time. Thank you for your participation.