GSI TECHNOLOGY

Creator of the Associative Processing Unit for AI and a leading provider of high-performance memory solutions Doug Schirle, CFO Didier Lasserre, VP of Sales and Investor Relations

October 2023

SAFE HARBOR

The statements contained in this presentation that are not purely historical are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding GSI Technology's expectations, beliefs, intentions, or strategies regarding the future. All forwardlooking statements included in this presentation are based upon information available to GSI Technology as of the date hereof, and GSI Technology assumes no obligation to update any such forward-looking statements. Forward-looking statements involve a variety of risks and uncertainties, which could cause actual results to differ materially from those projected. These risks include those associated with the normal guarterly and fiscal year-end closing process. Examples of risks that could affect our current expectations regarding future revenues and gross margins include those associated with fluctuations in GSI Technology's operating results; GSI Technology's historical dependence on sales to a limited number of customers and fluctuations in the mix of customers and products in any period; global public health crises that reduce economic activity (including the ongoing COVID-19 global pandemic and the governmental and regulatory actions relating thereto); the rapidly evolving markets for GSI Technology's products and uncertainty regarding the development of these markets; the need to develop and introduce new products to offset the historical decline in the average unit selling price of GSI Technology's products; the challenges of rapid growth followed by periods of contraction; intensive competition; and delays or unanticipated costs that may be encountered in the development of new products based on our in-place associative computing technology and the establishment of new markets and customer and partner relationships for the sale of such products. Many of these risks are currently amplified by and will continue to be amplified by, or in the future may be amplified by, the COVID-19 global pandemic. Further information regarding these and other risks relating to GSI Technology's business is contained in the Company's filings with the Securities and Exchange Commission, including those factors discussed under the caption "Risk Factors" in such filings.

GSI TECHNOLOGY

GSI TECHNOLOGY BACKGROUND Leveraging decades of Memory Chip expertise

- Founded in 1995 in Silicon Valley; IPO in 2007
- 25+ years working with world's leading manufacturer, TSMC
- Industry-leading portfolio of highest density, highest performance SRAM memory products
- Large patent portfolio on **advanced memory**, **compute-inmemory** hardware and algorithms
- Legacy SRAM business funding APU R&D

1. Based on the closing share price of \$1.91 on October 30, 2023, and common stock outstanding of 25,216,143.

2. Includes cash and cash equivalents, short-term investments, and long-term investments as of September 30, 2023.



- **126** Patents Granted



- **\$50.0M** Market Cap¹







EXPANDING TO NEW SEMICONDUCTOR MARKETS GSI TECHNOLOGY IS POSITIONED TO ADDRESS BOTH



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BUILDING ON CORE MEMORY EXPERTISE Higher ASP, Higher Margin Products with High Growth Tams

DEEP ROOTED MEMORY PROFICIENCY **NEW PRODUCT CATEGORIES**



Aerospace & Defense Applications



AI, HPC, & Generative AI Applications



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AEROSPACE & DEFENSE APPLICATIONS Radiation-hardened & tolerant products

- Targeting space, satellites, and aerospace and defense
- Expands addressable market
 - New customers
 - Increasing revenue from new divisions at existing customers
- 85%+ gross margin, ~\$30K ASP
- Addressing a >\$100 million annual market opportunity
- Long design cycles but long recurring revenue lifecycle of 10+years



THE REALITY OF TODAY'S AI SOLUTIONS

Increasing user demand, for use cases like GPT, causing capacity issues Adding new data requires constant retraining

Adding lots of GPUs increases costs and consumes huge amounts of power









HOW GSI'S APU FUTURE-PROOFS AI TECHNOLOGY

Innovative Architecture with Scalable Technology



APU scalable to meet increased demand without the limitations of CPUs / GPUs

Zero-shot Learning



APU's architecture allows adding new data without retraining

Lower Power Consumption



Smaller carbon footprint means lower operating expenses and higher profit



APU ADDRESSES THE MEMORY BARRIER → MEMORY = PROCESSOR



- Going off-chip for data creates I/O bottleneck
- Significant and unsustainable power consumption



- Computational memory reduces off-chip retrieval and computation time
- Flexible at the framework level
- Scalable to address the limitations of CPU / GPU architecture

GSI TECHNOLOGY

GEMINI TECHNOLOGY DELIVERS LOWER TCO Key advantages of gemini apu

Industry Problem APU Architecture Addresses	CPU	FPGA	GPU	ASIC	Gemini
Data type flexibility (support flexible workloads and rapidly changing algorithms)		lacksquare	•	\bigcirc	
High core utilization that is workload independent	lacksquare	•		\bigcirc	
Large L1 Cache Size to minimize external data transfers	\bigcirc	J		J	
Bandwidth to L1 local memory		\bigcirc			
Lower power consumption			\bigcirc	•	

Full support

Highest performance/watt/\$ with flexibility and scalability from Datacenter to Edge



AWS BENCHMARK 1 BILLION DATASET INFERENCE EFFICIENCY*

APU Reduces Infrastructure Cost & Carbon Footprint





APU'S HPC ADVANTAGES Power-efficient, Portable Sar Image Processing



COMPARISONS FOR A 5 KM X 5 KM SAR IMAGE IN 1 SECOND AT 0.5 M RESOLUTION

Gemini-I Mobile Solution with Real-Time Performance and Very Low Energy Consumption is Gaining Traction in SAR Market



APU PLATFORM SOFTWARE / HARDWARE



APU Roadmap	Gemini-I (28 nm)	Gemini-II (16 nm)	Gemini-III (5 nm)
	Now	CY 2024	CY 2027



GEMINI'S ROLE IN GSI'S GROWTH

- Currently engaging target SAR customers with Gemini-I solution; expectation of closing sales in FY2024
- On-track to build a SaaS revenue source with customized solutions for fast vector search customers beginning in current fiscal year
- Completed tape out of Gemini-II in Fall 2023; sampling in CY 2024
- Exploring strategic partners for APU technology to develop service or licensing revenue sources to fund APU development
- Laying out development roadmap for Gemini-III to move further into Generative AI territory



THE JOURNEY IS JUST BEGINNING

GSI TECHNOLOGY'S REVOLUTIONARY APU WILL UNLEASH GENERATIVE AI'S ECONOMIC POTENTIAL

"Our latest research estimates that generative **Al** could add the equivalent of \$2.6 trillion to \$4.4 trillion annually across the 63 use cases we analyzed—by comparison, the United Kingdom's entire GDP in 2021 was \$3.1 trillion."

The economic potential of generative AI: The next productivity frontier; McKinsey Digital, June 14, 2023, report



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INVESTMENT HIGHLIGHTS

- Radiation Hardened SRAM and the APU position the company to enter large, higher-margin, high-growth semiconductor markets
- APU's groundbreaking architecture enables unprecedented capabilities, unlocking new horizons for innovative applications of Generative AI
- Extending data center capabilities to the edge with APU's efficient power consumption and compact footprint



GSTECHNOLOGY

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High Performance Components for Leading-Edge Technology

GSITechnology.com / IR Contact: GSIT@HaydenIR.com

APPENDIX





GEMINI-II VERSUS **GEMINI-I**

Paramotor	G2	G1	
Farameter	Spec	vs. G1	Spec
Process Technology	16 nm		28 nm
Operating Frequency	1.4 GHz	2.33X	600 MHz
Cores	4		4
L1 Size	768Mb	8X	96Mb
BP (MMB) Size	48Mb		48Mb
BP Count	2M		2M
L1 <-> BP Data Bandwidth	367Tb/s	1.16X	315Tb/s
Die Size	26 mm x 21.5 mm	2X	20 mm x 14 mm
Package Size	37.5 mm x 37.5 mm	2.25X	25 mm x 25 mm

Overall G2 performance improvement over G1 will vary by application, but it's expected to be 8X~10X for many applications. G2 power consumption is expected to be ~2X that of G1.



EXPERIENCED MANAGEMENT TEAM

Name	Title	Years of Experience	Years with GSI	Prior Companies
Lee-Lean Shu	Chairman and CEO	46	29	Sony, AMD
Doug Schirle	Chief Financial Officer	46	25	Cypress, Pericom
Didier Lasserre	VP Sales and IR	36	26	Cypress, Solectron
Avidan Akerib	VP of Associative Computing	44	8	MikaMonu, NeoMagic
Patrick Chaung	SR VP of Memory Design	48	15	Sony, AMD
Robert Yau	VP of Engineering	47	29	Sony, Mosel Vitelic
Bor-Tay Wu	VP of Taiwan Operations	44	28	Atalent, AMD



INCOME STATEMENT

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share data) (Audited)

	Three Months Ended			Six Months Ended		
	Sept. 30, <u>2023</u>	June 30, <u>2023</u>	Sept. 30, <u>2022</u>	Sept. 30, <u>2023</u>	Sept. 30, <u>2022</u>	
Net revenues	\$5,708	\$5,587	\$8,953	\$11,295	\$17,862	
Cost of goods sold	2,587	2,518	3,351	5,105	6,895	
Gross profit	3,121	3,069	5,602	6,190	10,967	
Operating expenses:						
Research & development	4,691	5,204	6,395	9,895	13,014	
Selling, general and administrative	2,523	3,004	2,412	5,527	5,100	
Total operating expenses	7,214	8,208	8,807	15,422	18,114	
Operating loss	(4,093)	(5,139)	(3,205)	(9,232)	(7,147)	
Interest and other income, net	71	80	14	151	40	
Loss before income taxes	(4,022)	(5,059)	(3,191)	(9,081)	(7,107)	
Provision for income taxes	33	51	37	84	97	
Net loss	(\$4,055)	(\$5,110)	(\$3,228)	(\$9,165)	(\$7,204)	
Net loss per share, basic	(\$0.16)	(\$0.21)	(\$0.13)	(\$0.37)	(\$0.29)	
Net loss per share, diluted	(\$0.16)	(\$0.21)	(\$0.13)	(\$0.37)	(\$0.29)	
Weighted-average shares used in computing per share amounts:						
Basic	25,161	24,866	24,554	25,014	24,538	
Diluted	25,161	24,866	24,554	25,014	24,538	



SUMMARY BALANCE SHEET

CONDENSED CONSOLIDATED BALANCE SHEETS (in thousands) (Audited)

	<u>Sept. 30, 2023</u>	<u>March 31, 2023</u>
Cash and cash equivalents	\$24,669	\$27,212
Short-term investments	651	3,363
Accounts receivable	3,084	3,471
nventory	5,577	6,415
Other current assets	1,258	1,414
Net property and equipment	7,060	7,423
Other assets	10,801	10,578
Total assets	\$53,100	\$59,876
Current liabilities	\$6,402	\$7,202
_ong-term liabilities	1,333	1,302
Stockholders' equity	45,365	51,372
Total liabilities and stockholders' equity	<u>\$53,100</u>	\$59,876

