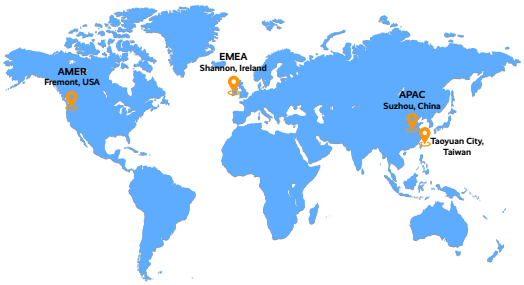
AMAX RackScale GPU Solutions for Semiconductor Manufacturing

Designed for EDA, Computational Lithography, and Manufacturing AI

AMAX ENGINEERING

AMAX delivers GPU infrastructure for semiconductor workloads, combining rack-scale design with supply chain, validation, and deployment expertise. Our solutions support EDA, computational lithography, and manufacturing AI with reliable, compliant, and predictable performance. reliability, compliance, and predictable performance.



Accelerating Semiconductor Workflows

AMAX RackScale GPU Solutions support demanding semiconductor workloads such as chip verification, large-scale EDA simulations, and computational lithography tasks like OPC and ILT, delivering the massive parallel processing power required. In production, these GPU-accelerated systems also enable wafer inspection and yield analysis, improving throughput and product quality.

Key Features for Semiconductor Deployments

Extreme Compute and Memory Performance:
High-density racks with NVIDIA Blackwell Ultra or AMD Instinct GPUs deliver the scale needed for EDA and lithography.

GPU-Accelerated Workflows
Deliver faster runtimes for semiconductor design, lithography, and inspection while reducing time-to-silicon.

Advanced Cooling:
Direct liquid and high-efficiency air cooling maintain performance while reducing energy and facility costs.

EDA and Lithography Integration:
Compatible with Synopsys, Cadence, Omniverse, and NVIDIA cuLitho to accelerate semiconductor workflows.

Compliance and Standards:
Certified to SEMI S2, S8, F47, and IEC/EMC standards, ensuring safety, reliability, and interoperability for semiconductor environments.

AMAX | 1565 Reliance Way, Fremont, CA 94539 | 1 (800) 800-6328 | www.amax.com | info@amax.com |

AMAX Solutions for Semiconductor Workloads

AI-Assisted Inspection and Yield Analysis

AMAX RackScale 32 with NVIDIA RTX PRO™ 6000 Blackwell Server Edition

Built for defect detection, wafer inspection, and yield optimization, this air-cooled rack delivers powerful GPU performance for inference and visualization while maintaining facility compatibility.

AMAX RackScale 32 with NVIDIA RTX PRO™ 6000 Blackwell Server Edition	
CPU	Dual Intel® Xeon® Scalable Processors
GPU	32× NVIDIA RTX PRO™ 6000 Blackwell Server Edition
Cooling	High-efficiency air cooling
GPU Memory	Up to 3 TB GDDR7 with ECC per rack
Networking	NVIDIA NDR 800Gbps InfiniBand switches
Storage	High-performance storage appliance

Design Verification and EDA Simulation

AMAX RackScale 32 with NVIDIA HGX™ B300

Optimized for verification and simulation-heavy EDA workflows, this rack combines NVIDIA Blackwell Ultra GPUs with high-speed interconnects to accelerate design testing and reduce time-to-silicon.

AMAX RackScale 32 with NVIDIA HGX™ B300	
CPU	Dual Intel® Xeon® Scalable Processors
GPU	32× NVIDIA Blackwell Ultra (B300) GPUs
Cooling	High-efficiency air cooling
GPU Memory	Up to 9.2 TB HBM3e per rack
Networking	800G InfiniBand with NVLink/NVSwitch
Storage	High-performance storage appliance

Computational Lithography and Large-Scale EDA

AMAX LiquidMax® ALC-B4872U GB300 NVL72 AI POD

Optimized for verification and simulation-heavy EDA workflows, this rack combines NVIDIA Blackwell Ultra GPUs with high-speed interconnects to accelerate design testing and reduce time-to-silicon.

AMAX LiquidMax® ALC-B4872U GB300 NVL72 AI POD	
CPU	NVIDIA GB300 Grace Blackwell Superchip (72 per rack)
Cooling	Direct liquid cooling with rack-integrated CDU and manifolds
Power	6 × 1U 33 kW (6 × 5.5 kW PSUs)
Memory	Up to 21TB of HBM3e GPU memory per rack
Networking	800G InfiniBand or Ethernet options
Storage	High Performance Storage Appliance

Ready to accelerate your semiconductor workloads? Visit www.amax.com/contact to get started today.

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