AMAX GPU Solutions for Life Sciences
Advancing Discovery Through AI-Powered Research

AMAX ENGINEERING

AMAX designs and integrates GPU infrastructure built specifically for life sciences computing. From AI workstations in research labs to liquid-cooled clusters supporting enterprise-scale biopharma R&D, our engineering expertise ensures performance, efficiency, and compliance. With global integration capabilities and lifecycle support, AMAX enables research organizations to innovate with confidence.

Transforming Scientific Research

AMAX GPU Solutions for Life Sciences provide the compute power required to advance genomics, biopharma, and medical research. These systems enable high-throughput analysis, molecular simulation, and AI-driven discovery across drug development, diagnostics, and personalized medicine. By integrating GPU acceleration directly into research labs and data centers, AMAX helps scientists achieve faster results and greater precision.

Key Features for Life Sciences Research

- **AI-Driven Workloads:** Optimized for genomics sequencing, molecular simulation, and drug discovery using frameworks such as NVIDIA BioNeMo™, NVIDIA Clara™, and leading bioinformatics applications.
- **Scalable Performance:** From NVIDIA DGX Spark™ workstations to NVIDIA HGX™ B300 rack-scale clusters, AMAX systems scale easily to meet growing research demands.
- **Compliance and Data Control:** Built for regulated environments handling genomic and clinical data, supporting HIPAA and FDA-aligned workflows.
- **Proven Reliability:** Validated for GPU workloads including protein structure prediction, image analysis, and computational chemistry.

Advancing Biomedical Research with AI

AI-driven computing is transforming how discoveries are made. Platforms such as NVIDIA BioNeMo™ enable generative AI modeling of proteins and molecular interactions, reducing development cycles from years to weeks. AMAX systems support these breakthroughs with scalable, high-performance infrastructure that empowers researchers to build and deploy AI models across secure laboratory and data center environments.

AMAX // SOLUTION BRIEF

AMAX GPU Solutions for Life Sciences

NVIDIA DGX Spark™

DGX personal AI computer with Grace Blackwell architecture for early-stage AI development, prototyping and testing.

NVIDIA DGX Spark™	
CPU	20 core Arm, 10 Cortex-X925 + 10 Cortex-A725 Arm
GPU	NVIDIA Blackwell Architecture
Cooling	High-efficiency air cooling
System Memory	128 GB LPDDR5x, unified system memory
Networking	ConnectX-7 NIC
Storage	4 TB NVME.M2 with self-encryption

AMAX AceleMax® AXG-428AG

NVIDIA MGX™ server built for maximum flexibility and throughput in AI workloads.

AMAX AceleMax® AXG-428AG	
CPU	Dual Socket AMD EPYC™ 9005 Series processors (up to 5GHz) or Dual Socket Intel Xeon 6 Processors
GPU	Up to 8x double-width GPUs (up to 600W each) or 16x single-width GPUs
Cooling	High-efficiency air cooling
System Memory	32 DDR5 DIMM slots, up to 5200 MT/s (1DPC)
Networking	5x PCIe 5.0 x16 slots for NICs
Storage	8x E1.S NVMe SSD bays, plus 2x M.2

AMAX RackScale 32 with NVIDIA HGX™ B300 (Air-Cooled)

Air-cooled, rack-scale solution built on the NVIDIA reference architecture, delivering high-performance AI computing with NVIDIA HGX B300 GPUs, high-speed interconnects, and offering up to 9.2TB HBM3e memory per rack.

RackScale 32 with NVIDIA HGX™ B300 GPU	
CPU	Dual Socket Intel® Xeon® Scalable processors
GPU	32x NVIDIA Blackwell Ultra GPUs
Cooling	High-efficiency air cooling
GPU Memory	Up to 9.2TB total HBM3e GPU memory per rack
Networking	NVIDIA NDR 800Gbps InfiniBand switches
Storage	High Performance Storage Appliance
Total FP4 Tensor Core	576 PFLOPS
Total FP8 Tensor Core	288 PFLOPS

Visit www.amax.com/contact to get started today

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