



ACCELERATING AI TRAINING AND INFERENCE WITH SECURE, RUGGED, GPU-READY BAM SERVERS

Trenton Systems' secure, rugged, GPU-ready BAM Servers are designed to accelerate and defend artificial intelligence (AI) and machine learning (ML) processes at the edge. The BAM Family, comprised of 2U and 3U rugged servers with third-generation Intel Xeon Scalable processors, up to 11 PCIe 4.0 slots, and a holistic security platform, supports NVIDIA Tensor Core T4 and A100 GPUs, which enhance the real-time capabilities and accuracy of deep learning training and inference in edge computing environments. Users can expedite these processes by quickly and securely leveraging efficient dataset computations that deliver the critical insights necessary to make real-time decisions and gradually improve operations at scale. The BAM Family's 11 PCIe 4.0 slots, switch-less and double-spaced apart for intelligent double-wide GPU incorporation, also offer the fastest industry-standard speeds currently available on the market for such large and demanding workloads.

Integrated Solution: BAM Servers with Tensor Core GPUs

NVIDIA's Turing Tensor Core technology with multi-precision computing for AI powers breakthrough performance from FP32 to FP16 to INT8, as well as INT4 precisions. It delivers up to 9.3x higher performance than CPUs on training and up to 36x on inference. Trenton Systems' ruggedized BAM Servers provide the resilient, cybersecure, high-performance computing platform that enables NVIDIA's Tensor Core GPUs to fast-track model education and prediction in harsh environments continuously threatened by adversarial cyberattacks.

Training today's ML models requires unprecedented compute power and scalability. Trenton Systems' BAM Servers paired with NVIDIA's Tensor Core T4 and A100 GPUs is the ideal, flexible, and protective HPC solution.

NVIDIA T4 GPUs

- > Multi-precision computing
- > Up to 40x higher throughput
- > 320 Turing Tensor Cores
- > 2,560 NVIDIA CUDA Cores
- > Energy-efficient 70-watt design

NVIDIA A100 GPUs

- > NVIDIA's A100 Tensor Core GPU broke eight AI performance records in the MLPerf Training benchmark and was up to 237x faster than a CPU in the MLPerf Inference benchmark.

TRENTON SYSTEM'S BAM SERVERS

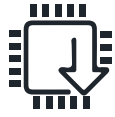
- > Up to 11 PCIe 4.0 slots: Optimized, backwards-compatible PCIe 4.0 slots ensure that current GPUs work flawlessly and are future-proofed for PCIe 4.0 GPUs.
- > Cybersecure from inception: Protect AI/ML datasets from adversarial eyes with the BAM Family's holistic hardware, firmware, and software trusted computing methodology.
- > Ruggedized to withstand: Protect the very hardware designed to deliver unprecedented deep learning training and inference performance.

NVIDIA-CERTIFIED SYSTEMS

- > Confidently deploy scalable hardware and software solutions that securely and optimally run accelerated workloads.
- > Learn more about accelerated servers at nvidia.com/certified-systems

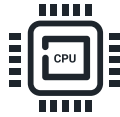
Key Technologies

SECURE



Trenton Systems' BAM Servers use Intel SGX, Intel PFR, and Intel TME to secure software, firmware, and memory, respectively. The servers are also manufactured in a secure USA facility with actively managed supply chain security.

PROCURE



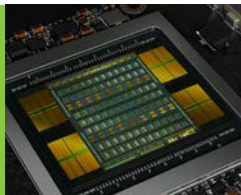
Utilize the latest Intel Xeon Scalable CPUs and PCIe 4.0 slots to procure key insights from massive datasets. The BAM's overall CPU performance and key ML technologies, such as Intel® DL Boost, strengthen AI/ML capabilities in the field.

ENDURE



Ensure that your NVIDIA GPU server endures the world's harshest environments while supporting and improving the autonomous and semi-autonomous processes that embolden your team to think, act, and achieve.

NVIDIA
T4 GPU
EVERY SHAPE
AND SIZE



NVIDIA
A100 GPU
EVERY SHAPE
AND SIZE



**TRENTON
SYSTEMS**
BAM SERVERS
EVERY SHAPE
AND SIZE



Find Out More

NVIDIA GPUs for machine learning help customers analyze, visualize, and unleash the power of AI to transform their digital business into an AI enterprise.

Website: www.nvidia.com/analytics

Partner webpage: www.nvidia.com/dgx-apps

Trenton Systems' BAM Servers secure sensitive information while performing seamlessly in the world's most unforgiving edge environments.

Website: www.trentonsystems.com

Learn more about accelerating the data center at www.nvidia.com/egx-data-center-ai

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