



eBook

Unlocking the Power of AI at Any Scale

Enterprise AI Ready Solutions



NVIDIA DGX™
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AI Solutions for Every Innovator

Overcoming the Challenges to Enterprise AI

The use of AI is fueling growth in every global industry. Organizations have the opportunity to implement new technologies and process massive amounts of data to keep pace with change. However, there can be many roadblocks as they work to update their IT environments and develop new practices that bring AI to the core of their businesses. Common challenges include building out AI infrastructure, integration into existing infrastructure, data management, and cost management. Without the proper tools and resources, as many as 88% of AI projects fail to reach production.¹ In contrast, organizations that prioritize AI readiness have achieved 1.5 times higher revenue growth, 1.6 times greater shareholder returns, and 1.4 times higher returns on invested capital in the past three years.² The data indicates that organizations that find a more strategic approach to AI are more likely to succeed.



Partnering with a Trusted Solution Provider

Leveraging solution providers or managed services can reduce costs by 30–50% compared to building and maintaining in-house AI infrastructure.³ Providers deliver access to the latest AI hardware (e.g., advanced GPUs and high-speed networking) and software stacks, which are often cost-prohibitive or complex to manage internally. Providers absorb the burden of hardware investment, upgrades, and maintenance, allowing organizations to pay only for what they use. Furthermore, top providers can ensure that infrastructure meets regulatory and security requirements to help customers remain compliant in highly regulated industries.

Organizations can turn to solution providers like AMAX to achieve AI at any scale. We specialize in designing data center solutions tailored for AI applications, focusing on consistent performance, reduced latency, and improved security to drive accelerated time to value and time to insight. AMAX customers benefit from standardized methodologies, technical experience, and proven frameworks which significantly increase the likelihood of successful deployments and scaling. With deep expertise helping customers optimize infrastructure for AI workloads, AMAX is a go-to partner for startups to enterprises all over the world.

AMAX makes AI deployment turnkey. Our experts help you identify the right [NVIDIA DGX™ platform](#) for your specific AI workloads and follow your journey to effectively plan, activate, and scale your infrastructure. All deployments are validated, whether single system or data center scale, and tested before shipment. Deployments also include white-glove services for ongoing support and fine-tuning—so your infrastructure can evolve with your business requirements.

1. 88% of AI pilots fail to reach production — but that's not all on IT, CIO, 2025

2. AI Adoption in 2024: 74% of Companies Struggle to Achieve and Scale Value, BCG Consulting Group, 2024

3. Optimizing Efficiency and Promoting Innovation through AI-Managed Services, Cloudtango, 2024

Powering Your AI Journey End-to-End



Kickstarting the Path to AI

When you choose AMAX as your solution provider, the process begins with a thorough assessment of your unique compute requirements. Our team of experts then curates solutions that align with your needs, applying NVIDIA DGX reference architectures to create a cluster design that is customized just for you. By combining the performance, scale, and manageability of NVIDIA DGX technologies with industry-tailored software and tools, organizations can transition into the AI space as smoothly as possible. With AMAX's expertise, you can upgrade your AI and high performance computing (HPC) capabilities. We help you take the guesswork out of strategically positioning your business for the future.

Scaling for the Future

As your AI demands grow, your compute requirements will inevitably shift. With NVIDIA hardware and software solutions provided by AMAX, adapting your IT infrastructure becomes future-proof. Designed with scalability at its core, your NVIDIA DGX platform adapts to your needs. Its modular architecture and comprehensive software suite allow you to scale your operations effortlessly, whether you are broadening your AI applications or entering new vertical markets.

AMAX's role in this scalable ecosystem is critical. AMAX ensures that your AI infrastructure remains agile, flexible, and efficient from on-premises to the cloud, allowing you to build and scale with new demands. This intelligent design approach guarantees that your AI infrastructure is not just a solution for today, but a sustainable, long-term investment for your entire AI journey.

“With AMAX’s expertise and experience in deploying NVIDIA DGX SuperPOD, organizations can gain the computational power and scalability needed to power the full lifecycle of AI, from training to inference, helping businesses deliver the ROI of AI at unprecedented speed.”

– Tony Paikeday, Senior Director of AI systems, NVIDIA

Reaching New Levels of Intelligence



The Engine Behind AI Factories

[NVIDIA DGX Blackwell solutions by AMAX](#) are purpose-built for AI at any scale, combining compute, networking, storage, and integrated software.

NVIDIA Blackwell Architecture is a new class of AI superchip for the age of AI reasoning, powering the latest advancements in generative AI and accelerated computing with unparalleled performance, efficiency, and scale. NVIDIA Blackwell GPUs pack 208 billion transistors and are manufactured using a custom-built TSMC 4NP process. All NVIDIA Blackwell products feature two reticle-limited dies connected by a chip-to-chip interconnect that delivers 10 TB per second in a unified single GPU.

NVIDIA DGX platforms combine these elite superchips into a comprehensive GPU network, designed for handling large terabyte-scale models. Common application include recommender systems, generative AI, and graph analytics, offering significant shared memory capacity for scalable performance across expansive AI models.

Simplifying AI Management

NVIDIA DGX combines performance-optimized infrastructure with a full software stack to reduce complexity and improve time to value. NVIDIA software offers a range of tools for data management, workflow orchestration, cluster management, model training, and ongoing optimization. With just a few clicks, you can evolve your AI projects, add more nodes, or even integrate additional NVIDIA DGX units into existing infrastructure.

NVIDIA AI Enterprise is a cloud-native suite of software tools, libraries, and frameworks that accelerate and simplify the development, deployment, and scaling of AI applications. Organizations of all sizes can deploy AI systems quickly and securely—in any type of environment—while reducing infrastructure costs.

NVIDIA Mission Control™ powers every aspect of AI factory operations to simplify the building and management of AI and HPC clusters. It offers a single tool for provisioning, monitoring, and managing clusters with full support for NVIDIA GPU-accelerated infrastructure. NVIDIA Mission Control is available as part of NVIDIA AI Enterprise.

AI Infrastructure Made Easy



Design to Deployment

Every successful deployment begins with a clear plan. AMAX provides a structured process to prepare, configure, and activate NVIDIA DGX systems with accuracy and efficiency. From power and cooling assessments to network design, system validation, and software configuration, each step is managed to ensure readiness for production use. This approach helps accelerate deployment timelines and ensures a stable foundation for scaling AI infrastructure.



Site Survey

We evaluate power, space, and cooling for NVIDIA DGX system readiness.



Testing and Validation

We run performance checks to ensure systems are fully optimized.



Selection and Procurement

We help you choose and source the right systems and storage.



Software Setup

We install and configure your desired software stack and tools.



Rack and Stack Deployment

Our team installs, cables, and validates hardware for operation.



Deployment Support

We provide onsite or remote help during rollout.



Networking Configuration

We design and deploy high-speed, low-latency network setups.



Ongoing Maintenance

We offer monitoring and service to keep deployments running smoothly.

NVIDIA DGX Platform Overview

At AMAX, we design solutions for a broad range of industries, built on NVIDIA DGX platforms that help organizations to do more with HPC and AI at any scale. The NVIDIA DGX portfolio delivers proven performance by combining NVIDIA's leading AI hardware, software, infrastructure, and expertise into a single, unified AI enterprise solution. Each platform offers a full-stack, hybrid architecture which enables cloud and on-premises deployments, all managed through an integrated software platform.

[Contact AMAX](#) today to explore your customized solution featuring the NVIDIA DGX line.

HARDWARE



NVIDIA DGX Spark
Cluster 2 for 405B Models

A Grace Blackwell AI supercomputer on your desk. Features the NVIDIA GB10 Superchip delivering up to 1 petaFLOP of AI performance to run models up to 200 billion parameters.



NVIDIA DGX System
DGX B200, DGX B300

A customized infrastructure solution for the unique needs of enterprise AI. Provides the critical foundation for new AI applications, with performance and flexibility to fit your size and space requirements.



NVIDIA DGX BasePOD™
DGX B200, DGX B300

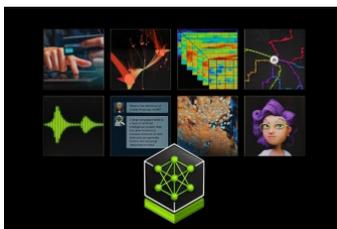
AI data center infrastructure that delivers performance without compromise for every user and workload. Offers leadership-class accelerated infrastructure and scalability for the greatest AI challenges, with industry-proven results.

SOFTWARE



NVIDIA DGX SuperPOD™
DGX B200, DGX B300,
DGX GB200, DGX GB300

A comprehensive, cloud-native software platform designed to accelerate the deployment of AI applications. Provides a suite of tools, libraries, and pre-trained models optimized for performance and certified for use on accelerated computing infrastructure from NVIDIA.



NVIDIA AI Enterprise
Available with NVIDIA DGX
Accelerated Infrastructure

NVIDIA AI Enterprise is a cloud-native suite of software tools, libraries, and frameworks, including NVIDIA NIM and NeMo microservices, that accelerate and simplify the development, deployment, and scaling of AI applications.



NVIDIA Mission Control
Includes NVIDIA Base Command
Manager™ and NVIDIA Run:ai

NVIDIA Mission Control powers every aspect of AI factory operations—from developer workloads to infrastructure to facilities—with the skills of a world-class operations team, now delivered as software.

Building Next-Generation Solutions for AI



Expert Services to Simplify and Accelerate AI

With AMAX as your total solution partner, we help you navigate the challenges to AI. We pride ourselves on enabling performance and excellence to power your AI initiatives so that every stage of the journey is strategically planned, highly efficient, and precisely aligned with your goals.

Step into the future with AMAX's tailored solution architecture including specialized technologies and support to streamline AI—from deployment to ongoing management—regardless of your requirements. Backed by the AMAX team of expert engineers, you can unleash the full potential of the latest and greatest NVIDIA DGX technologies. Key advantages include:



Comprehensive Deployment Services: AMAX manages the full build process from assembly to validation. Solutions are racked, stacked, cabled, tested, and validated prior to shipment. Turnkey delivery and ongoing support ensure a smooth path to deployment.



HostMax™ Hosting Service: [HostMax accelerates time to deployment](#) by offering temporary hosting services for immediate activation after build. This keeps AI projects on schedule while customers wait for permanent colocation.



NVIDIA Elite Partner Status: As an NVIDIA Elite Partner, AMAX delivers expert technical guidance with a global track record of supporting customers. This status ensures access to resources needed for scalable AI infrastructure.



Global Manufacturing Integration: AMAX supports rapid deployment and fulfillment through global manufacturing facilities across the US, EMEA and Asia, enabling consistent delivery for enterprise and hyperscale customers.

AMAX solutions support both liquid-cooled and air-cooled environments, equipping customers with the technologies and resources they need to operate and scale with confidence.

AMAX Engineering



About Us

AMAX is a global solutions provider of AI, HPC, and Edge technologies. Across key verticals, we deliver high-performance solutions that span desk, data center, private cloud, and major multi-rack enterprise deployments. As one of the pioneers and first to market for liquid-cooled solutions, we offer our customers choice between liquid, air, or immersion-cooled solutions. Our professional services include design, build-out, validation, hosting, and deployment.

Get more information at www.amax.com.
AMAX Makes AI Possible.

Resources

- [NVIDIA DGX On-Prem Deployment Services by AMAX](#)
- [The Essential Infrastructure Behind AI Factories](#)
- [Bringing Advanced AI Computing to All Corners of Academia](#)
- [AMAX Deploys NVIDIA DGX SuperPOD with NVIDIA DGX B200 Systems for Leading Generative AI Developer](#)
- [Watch the SuperPOD Deployment Video](#)



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