

## **NVIDIA-CERTIFIED SYSTEMS**

# Enabling the Enterprise Accelerated Data Center

Accelerated workloads abound across all industries, from the use of artificial intelligence for better customer engagement, to data analytics for business forecasting, to advanced visualization for quicker product innovation. With the drive towards remote and flexible workplaces, the need for virtual desktops to be as powerful as physical desktops is also growing. And scientific researchers are innovating ways to solve problems that go well beyond traditional CPU-only computing. Enterprises are looking for an easy way to deploy modern, scalable computing infrastructure to run their GPU-accelerated applications, whether in the data center or at the edge.

NVIDIA-Certified Systems<sup>™</sup> brings together NVIDIA GPUs and NVIDIA networking in servers from leading NVIDIA partners in optimized configurations. These servers are validated for performance, manageability, security, and scalability and are backed by enterprise-grade support from NVIDIA and partners. With an NVIDIA-Certified System, enterprises can confidently choose performance-optimized hardware solutions to power their accelerated computing workloads—both in smaller configurations and at scale.

The NVIDIA-Certified Systems program encompasses a wide range of enterprise GPUs, as well as the latest networking smart network interface cards (SmartNICs) and data processing units (DPUs) from NVIDIA. The certification test suite is designed to exercise the performance and functionality of the configured server by running a set of software that represents a wide range of real-world applications. This includes deep learning (DL) training, AI inference, data science algorithms, intelligent video analytics (IVA), high-performance computing (HPC) and CUDA<sup>®</sup> functions and rendering. It also covers infrastructure performance acceleration, such as network and storage offload, security features, and remote management capabilities.

## NVIDIA-Certified Systems component options

#### GPU

- > NVIDIA HGX<sup>™</sup> A100 8-GPU and 4-GPU
- > NVIDIA A100 Tensor Core GPU for PCIe
- > NVIDIA A40 GPU
- > NVIDIA A30 Tensor Core GPU
- > NVIDIA A10 Tensor Core GPU
- > NVIDIA RTX<sup>™</sup> A6000 GPU
- > NVIDIA T4 Tensor Core GPU

#### **NETWORKING**

- > NVIDIA<sup>®</sup> ConnectX<sup>®</sup>-6
- > NVIDIA<sup>®</sup> ConnectX-6 Dx
- > NVIDIA BlueField®-2

### NVIDIA-Certified Systems provide these key benefits tailored for enterprise IT

- Performance—NVIDIA-Certified Systems are configured to deliver excellent performance for a diverse range of workloads. Customers can run most accelerated applications on these systems and be confident that they will perform well.
- Manageability—NVIDIA-Certified System configurations ensure that GPU-enabled servers work well out of the box, streamlining the procurement experience and reducing time to deployment. The validation of features such as remote management further simplifies the experience of IT administrators.
- Scalability—NVIDIA-Certified Systems are tested on single-node and multi-node configurations to validate cluster-level features and performance. They enable IT to scale out accelerated infrastructure to meet future workload demands.
- Security—NVIDIA-Certified Systems secure workflows by protecting data at the platform, network, and application layers. Whether deployed in a data center or at the edge, customers can be assured that they do not have to compromise on security features when running accelerated applications.

### NVIDIA-Certified Systems Software Support

Many customers will choose to run software from the NVIDIA NGC<sup>™</sup> catalog, which offers a wide range of software products such as pre-built application containers, Helm charts for automated deployment in a Kubernetes environment, libraries and SDKs for application development, and industry-based AI frameworks for building application workflows. To provide enterprise support for these customers, NVIDIA offers NVIDIA-Certified Systems Software Support. Every NVIDIA-Certified System qualifies for this support, which can be purchased through the server vendor. This service offering covers:

- > NVIDIA GPU and networking drivers
- > CUDA libraries and toolkits
- > Software for integration with Kubernetes, including GPU operators, container runtimes, and device plug-ins
- > All software published by NVIDIA on the NGC software catalog

Direct access to NVIDIA subject matter experts allows for quick remediation of L1 software issues during local business hours or via web and email. Support also includes clear escalation paths for L2 and L3 issues. Enterprises can maximize user productivity during development and minimize system downtime during deployment.



