



NVIDIA DGX-1

DEEP LEARNING SYSTEM

The NVIDIA® DGX-1™ is the world’s first purpose-built system optimized for deep learning, with fully integrated hardware and software that can be deployed quickly and easily. Its revolutionary performance significantly accelerates training time, making it the world’s first deep learning supercomputer in a box.

Data scientists and artificial intelligence (AI) researchers require accuracy, simplicity, and speed for deep learning success. Faster training and iteration ultimately means faster innovation and time-to-market.

The NVIDIA DGX-1 is the first system built with groundbreaking NVIDIA Pascal™-powered Tesla® P100 accelerators, interconnected with NVIDIA NVLink™. Pascal was designed as the engine of computers that learn, see, and simulate our world - a world with an infinite appetite for computing.

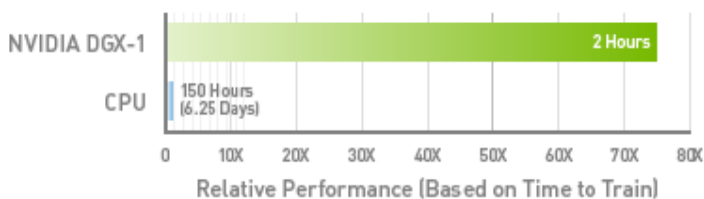
Iterate and Innovate Faster

High-performance training accelerates your productivity, which means faster time to insight and faster time to market.



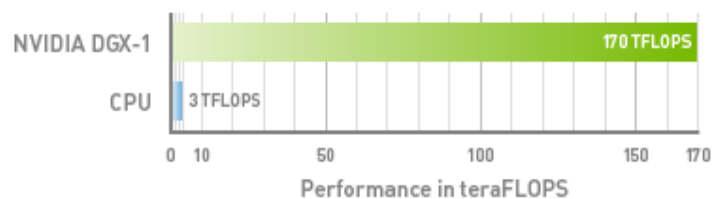
System Specification	
GPUs	8x Tesla GP 100
TFLOPS (GPU FP16/CPU P32)	170/3
GPU Memory	16 GB per GPU
CPU	Dual Intel 20-core Xeon E-2698v4 2.20 GHz
NVIDIA CUDA® Cores	28672
System Memory	512 GB 2133 MHz DDR4 LRDIMM
Storage	4x 1.92 TB SSD RAID 0
Network	Dual 10 GbE, 4 IB EDR
Software	Ubuntu Server Linux OS DGX-1 Recommended GPU Driver
System Weight	134 lbs
System Dimensions	866 D x 444 W x 131 H (mm)
Packaging Dimensions	1180 D x 730 W x 284 H (mm)
Maximum Power Requirements	3200W
Operating Temperature Range	10 – 35° C

NVIDIA DGX-1 Delivers 75X Faster Training



Note: Caffe benchmark with AlexNet, training 1.28M images with 90 epochs | CPU server uses 2x Xeon E5-2697 v3 CPUs.

NVIDIA DGX-1 Delivers 56X More Performance



CPU is dual socket Intel Xeon E5-2697 v3. 170 TF is half precision or FP16.



Exponential Performance Leap with Pascal Architecture

The new NVIDIA Pascal™ architecture enables the Tesla P100 to deliver the highest absolute performance for HPC and hyperscale workloads. With more than 21 TeraFLOPS of FP16 performance, Pascal is optimized to drive exciting new possibilities in deep learning applications. Pascal also delivers over 5 and 10 TeraFLOPS of double and single precision performance for HPC workloads.

Supercharge Deep Learning Performance

The NVIDIA DGX-1 software stack includes major deep learning frameworks, the NVIDIA Deep Learning SDK, the DIGITS™ GPU training system, drivers, and CUDA® for rapidly designing deep neural networks (DNN). This powerful system includes access to cloud management services for container creation and deployment, system updates, and an application repository. The combination of these software capabilities running on Pascal-powered Tesla GPUs allows applications to run 12x faster than with previous GPU-accelerated solutions.

Maximize Your Investment

NVIDIA DGX-1 support provides you with comprehensive system support and access to NVIDIA's cloud management portal to get the most comprehensive services from your NVIDIA DGX-1 system. Streamline deep learning experimentation by leveraging containerized application management, launch jobs, monitor status and get software updates with NVIDIA cloud management. Services for NVIDIA DGX-1 bundled software and hardware are available from NVIDIA in support terms, 1 and 3 years.

	NVIDIA DGX-1 Support
NVIDIA Cloud Management	✓
NVIDIA DGX-1 Software Updates	✓
NVIDIA DGX-1 Software Upgrades	✓
NVIDIA DGX-1 Firmware Updates	✓
Hardware Support	1 or 3 Years
Hardware SLA (Replacement Parts Shipped)	1 Business Day
Online Access	NVIDIA Enterprise Support Portal
Phone Hours	24/7
Searchable Knowledge Base	✓

****Meadowgate can provide NVIDIA Education pricing. Please contact us for eligibility requirements and legal terms and conditions. ****

About Meadowgate Technologies

Meadowgate Technologies is a **HUBZone Certified Women Owned Small Business** and a NVIDIA Preferred Solutions Provider. Meadowgate specializes in providing IT Solutions for our customers across a variety of specialties including Server, Storage, HPC, Networking, Virtualization, and Analytics.

To get a quote from Meadowgate for NVIDIA products or to speak with one of our solutions architects, please call 609-916-0188 or email hunter@meadowgate.us.