

NVIDIA® DGX™ ESSENTIAL INSTRUMENT OF AI RESEARCH



A TRUE TURNKEY SOLUTION

FULLY INTEGRATED SOFTWARE AND HARDWARE



1. DGX DEEP LEARNING STACK

DEEP LEARNING FRAMEWORKS

Caffe Caffe2 TensorFlow theano torch mxnet
PYTORCH TensorFlow theano torch

DEEP LEARNING USER SOFTWARE

NVIDIA DIGITS™

NVIDIA DEEP LEARNING SDK

CONTAINERIZATION TOOL

NVIDIA Docker
Docker

2. GPU DRIVER

NVIDIA Driver

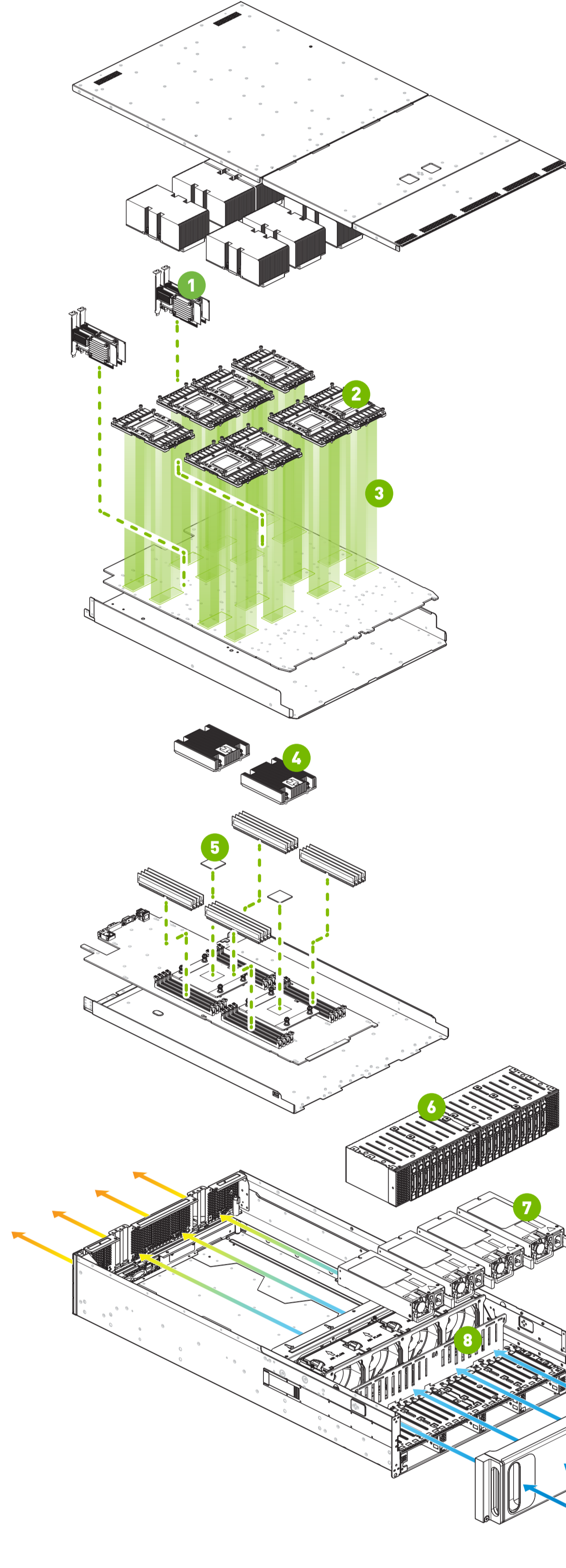
3. SYSTEM

Host OS

4. NVIDIA DGX-1

SOFTWARE

HARDWARE



1. NETWORK INTERCONNECT

4X InfiniBand 100 Gbps EDR
2X 10 GbE

2. GPUS

8X NVIDIA Tesla® V100 16 GB/GPU
40,960 Total NVIDIA CUDA® Cores
5,120 Tensor Cores

3. GPU INTERCONNECT

NVIDIA NVLink™
Hybrid Cube Mesh

4. SYSTEM MEMORY

512 GB DDR4 LRDIMM

5. CPUS

2X 20-Core Intel® Xeon®
E5-2698 v4 2.2 GHz

6. STREAMING CACHE

4X 1.92 TB SSDs RAID 0

7. POWER

4X 1600 W PSUs
(3200 W TDP)

8. COOLING

Efficient Front-to-Back
Airflow

POWERED BY 8 NVIDIA TESLA V100 GPUS

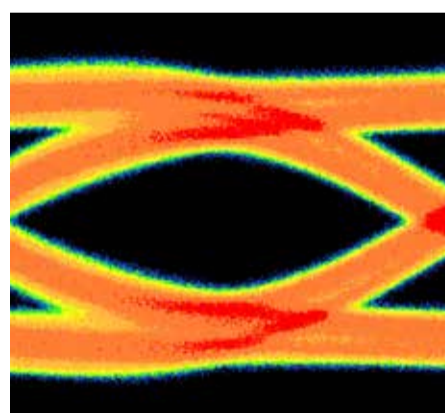
BUILT ON THE LATEST NVIDIA VOLTA™ GPU ARCHITECTURE



The power of
800 x86 CPUs



3X deep learning
training speed-up



10X speed-up
with NVLink™ vs PCIe

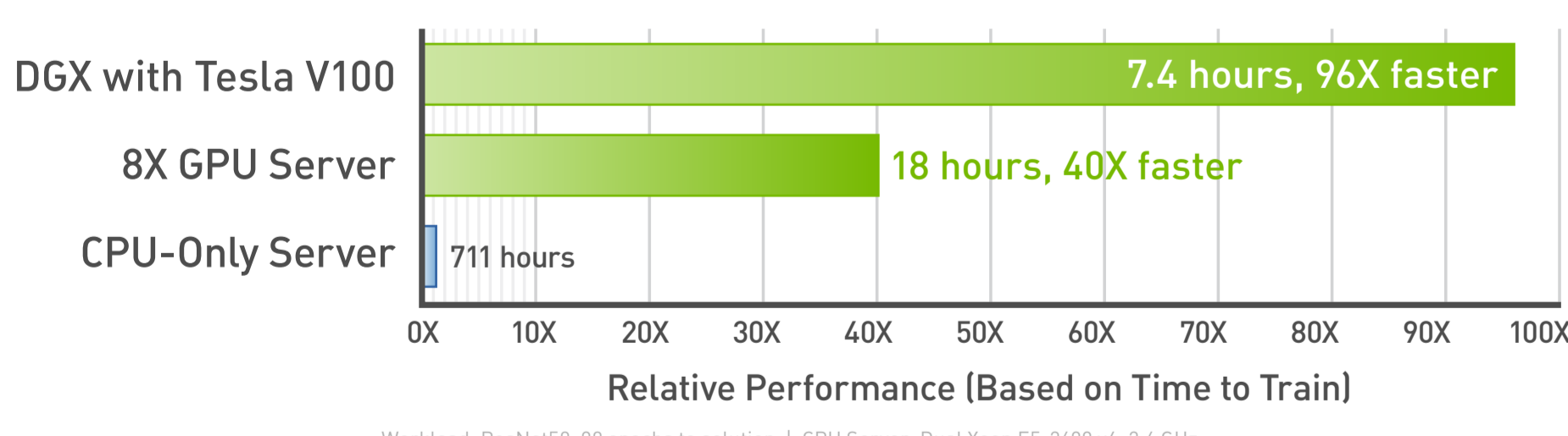


30% faster
performance with
DGX software stack

ITERATE AND INNOVATE FASTER

UNPARALLELED DEEP LEARNING TRAINING PERFORMANCE

NVIDIA DGX Delivers 96X Faster Training



EFFORTLESS PRODUCTIVITY

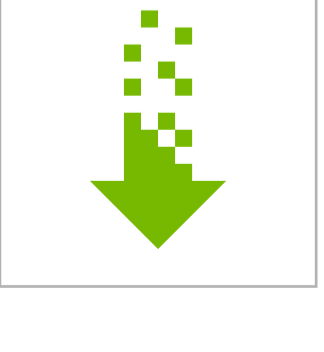
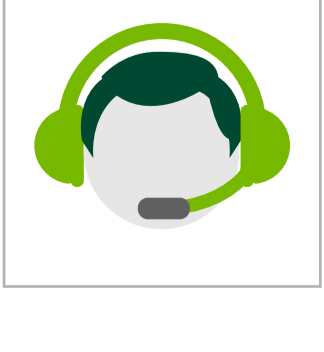
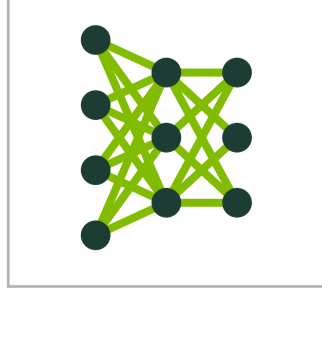
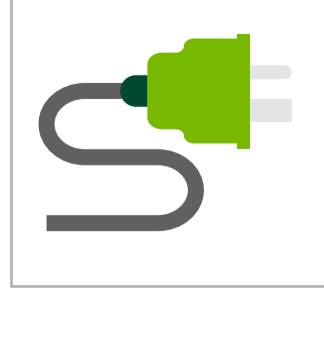
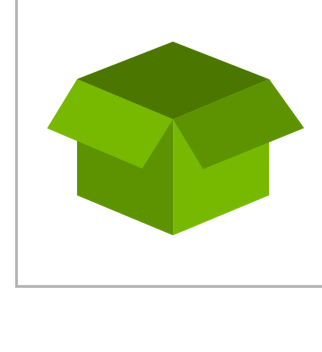
GET STARTED IN AS LITTLE AS 2 HOURS WITH NVIDIA DGX

DEPLOY QUICKLY AND SIMPLY

Plug-and-play setup that takes you from
power-on to deep learning in minutes

NVIDIA GPU CLOUD AND SUPPORT

Access to NVIDIA's vast deep learning
knowledge, expertise, and the latest
software updates



Accelerate Your Deep Learning Today

www.nvidia.com/dgx-server