THE ACCELERATED DATA CENTER

Drive new levels of throughput – and innovation.

INNOVATORS ACROSS INDUSTRIES ARE ACCELERATING THEIR DATA CENTERS WITH GPUs

RESULTING IN

NEW SCIENTIFIC DISCOVERIES
DEEPER BUSINESS INSIGHTS
SMARTER PRODUCTS & SERVICES

THE HPC COMMUNITY HAS EMBRACED GPU ACCELERATION OVER 400 APPLICATIONS

70% OF THE TOP 50
9 OUT OF THE TOP 10
EVERY MAJOR DEEP LEARNING FRAMEWORK

HIGHER EDUCATION
CLOUD SERVICES
GOVERNMENT LABS
CLIMATE & WEATHER

NEW SCIENTIFIC DISCOVERIES
DEEPER BUSINESS INSIGHTS
SMARTER PRODUCTS & SERVICES

SEE HOW YOU CAN BOOST THROUGHPUT WHILE LOWERING COSTS

Let’s look at a data center with a daily throughput of 1,000 jobs per day.

CPU-ONLY DATA CENTER
Assume 1 job per server, handle 1 job

GPU-ACCELERATED DATA CENTER
Assume 70% of the jobs are accelerated, and get a speed up

1,000 SERVERS
440 SERVERS
140 GPU-accelerated servers
300 CPU-only servers

56% LESS

TOTAL COST OF ACQUISITION
56%

TOTAL COST OF OWNERSHIP
OPERATIONAL COST
POWER CONSUMPTION
SPACE REQUIREMENTS

HARDWARE & SOFTWARE COST
LESS RACKS
NETWORK EQUIPMENT

Download the NVIDIA Tesla whitepaper on GPU-accelerating your data center.
www.nvidia.com/datacenterthroughput

Get to know the NVIDIA® Tesla® accelerator family, including the advanced new Tesla P100.
www.nvidia.com/tesla

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