NVIDIA DGX-1
THE WORLD'S FASTEST RENDERING SYSTEM

Rendering on the World's First Supercomputer in a Box

The innovative NVIDIA® DGX-1™ supercomputer delivers the incredible performance you need to minimize the time to noiseless, interactive global illumination. It's powered by eight NVIDIA Tesla® P100 GPUs, accessible to anyone on the network, and easy to integrate into design workflows.

The NVIDIA DGX-1 features NVIDIA NVLink™ technology that delivers a massive increase in GPU memory capacity. This enables rendering applications to process far more complex scenes at GPU speeds.

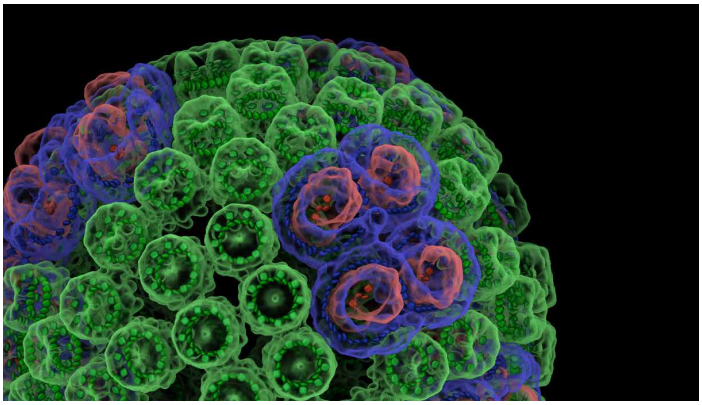
SYSTEM SPECIFICATIONS

GPUs	**8x Tesla P100**
TFLOPS (GPU FP16 / CPU FP32)	**170/3**
GPU Memory	**16 GB per GPU**
CPU	**Dual 20-core Intel® Xeon® E5-2698 v4 2.2 GHz**
NVIDIA CUDA® Cores	**28672**
System Memory	**512 GB 2133 MHz DDR4**
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)**
Packing Dimensions	**1180 D x 730 W x 284 H (mm)**
Maximum Power Requirements	**3200W**
Operating Temperature Range	**10 - 30 °C**
Accelerated Rendering Applications	**NVIDIA® Iray®, OptiX**

For more information on NVIDIA DGX-1, visit **www.nvidia.com/dgx1**

SUPERCHARGE YOUR RENDERING PERFORMANCE.

GPU-accelerate your application with NVIDIA OptiX™.



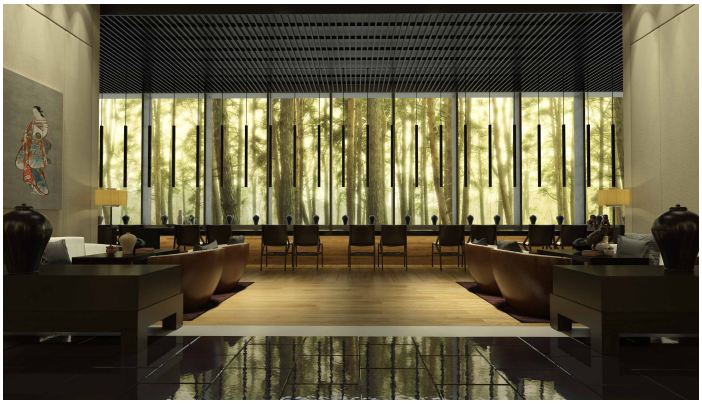
OptiX is an application framework that lets you realize optimal ray tracing performance on NVIDIA GPUs. It provides a simple, recursive, and flexible pipeline for accelerating ray tracing algorithms.

OptiX 4.0 supports NVIDIA DGX-1 and NVLink, enabling ray tracing at supercomputing speeds against truly massive scenes. NVLink takes advantage of OptiX to operate with scenes up to 64 GB in size, a tremendous increase in available memory for GPU-accelerated ray tracing applications.

OptiX applications can also benefit from client-server rendering and interactive image streaming by adopting the Progressive API. Nearly any OptiX application will be able to connect to NVIDIA DGX-1 for a massive boost in interactive performance. This means lightweight computers running OptiX applications can now progressively ray trace with the power of a supercomputer—even across the Internet.

For more information on NVIDIA OptiX, visit
developer.nvidia.com/optix

Save hours of design time with intuitive photorealism—powered by NVIDIA Iray®.



NVIDIA Iray is a highly interactive and intuitive physically based rendering technology that generates photorealistic imagery by simulating the physical behavior of light and materials. Using your favorite Iray-enabled application, you can now connect to the NVIDIA DGX-1 and enjoy the fastest photorealistic rendering experience possible.

NVIDIA DGX-1 allows designers to quickly make critical adjustments or design decisions while reducing reliance on costly physical prototypes or long-running renders. This can help architecture, engineering, advertising, and other design-intensive disciplines save precious time in bringing ideas to market.

You can also combine multiple NVIDIA DGX-1 systems to improve interactive quality in the viewport or create VR lightfield experiences faster than ever before.

For more information on NVIDIA Iray, visit
www.nvidia.com/iray

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