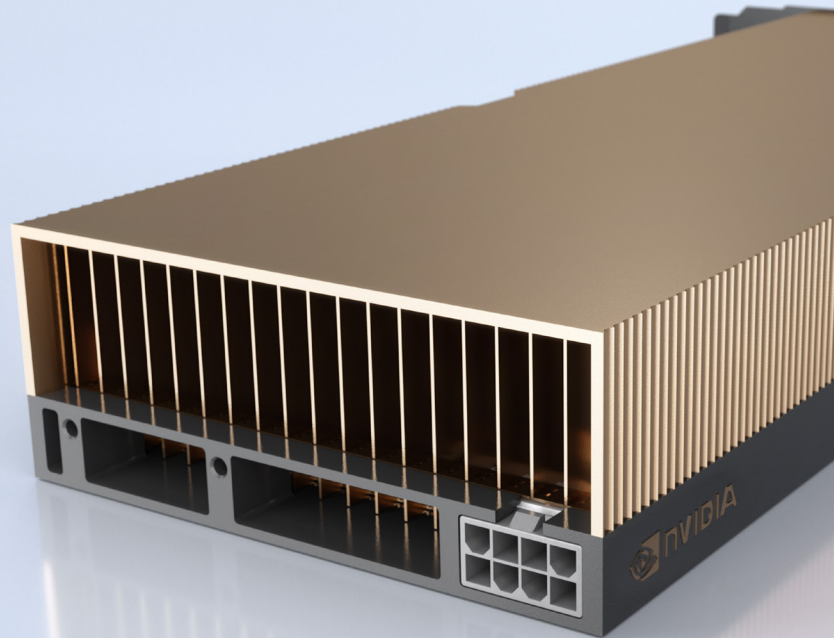


# THE WORLD'S MOST POWERFUL DATA CENTER GPU FOR VISUAL COMPUTING NVIDIA® A40



## Real time ray tracing for professionals

NVIDIA® A40 delivers the data center-based solution designers, engineers, artists, and scientists need to meet today's challenges. Built on the NVIDIA Ampere architecture, the A40 combines the latest generation RT Cores, Tensor Cores, and CUDA® Cores with 48 GB of graphics memory for unprecedented graphics, rendering, compute, and AI performance. From powerful virtual workstations accessible from anywhere, to dedicated render nodes, the A40 is built to tackle the most demanding visual computing workloads from the data center

Quadro cards are certified with a broad range of sophisticated professional applications, tested by leading workstation manufacturers, and backed by a global team of support specialists. This gives you the peace of mind to focus on doing your best work. Whether you're developing revolutionary products or telling spectacularly vivid visual stories, Quadro gives you the performance to do it brilliantly.

### FEATURES

- > Three DisplayPort 1.4 Connectors
- > DisplayPort with Audio
- > VGA Support<sup>4</sup>
- > 3D Stereo Support with Stereo Connector<sup>4</sup>
- > NVIDIA GPUDirect™ Support
- > Quadro Sync II<sup>5</sup> Compatibility
- > NVIDIA Quadro View® Desktop Management Software
- > HDCP 2.2 Support
- > NVIDIA Mosaic<sup>6</sup>



### SPECIFICATIONS

Part Number	<b>TCSA40M-PB</b>
EAN code	<b>353640337</b>
GPU Memory	<b>48 GB GDDR6</b>
Memory Interface	<b>384-bit</b>
Memory Bandwidth	<b>696 GB/s</b>
ECC	<b>Yes</b>
NVIDIA CUDA Cores	<b>10752</b>
NVIDIA Tensor Cores	<b>336</b>
NVIDIA RT Cores	<b>84</b>
Single-Precision Performance	<b>TBD TFLOPS</b>
Tensor Performance	<b>TBD TFLOPS</b>
NVIDIA NVLink	<b>Connects 2 Quadro A40 GPUs<sup>1</sup></b>
NVIDIA NVLink bandwidth	<b>112,5 GB/s (bidirectional)</b>
System Interface	<b>PCI Express 4.0 x 16</b>
Power Consumption	<b>Total board power: 300 W</b>
Power Connector	<b>1x 8-pin CPU</b>
Thermal Solution	<b>Passive</b>
Form Factor	<b>111,76 H x 266,7 mm L, Dual Slot, Full Height</b>
Display Connectors	<b>3xDP 1.4, VirtualLink (1)</b>
Max Simultaneous Displays	<b>4x 3840 x 2160 @ 120 Hz, 4x 5120x2880 @ 60 Hz, 2x 7680x4320 @ 60 Hz</b>
Encode / Decode Engines	<b>1X Encode, 2X Decode</b>
VR Ready	<b>Yes</b>
Graphics APIs	<b>DirectX 12.0<sup>7</sup>, Shader Model 5.1<sup>7</sup>, OpenGL 4.5<sup>8</sup>, Vulkan 1.0<sup>8</sup></b>
Compute APIs	<b>CUDA, DirectCompute, OpenCL™</b>

To learn more about the NVIDIA A40 visit [www.pny.eu](http://www.pny.eu)

<sup>1</sup> NVIDIA NVLink sold separately | <sup>2</sup> Connecting two RTX A6000 cards with NVLink to scale performance and memory capacity to 96 GB is only possible if your application supports NVLink technology. Please contact your application provider to confirm their support for NVLink | <sup>3</sup> In preparation for the emerging VirtualLink standard, Turing GPUs have implemented hardware support according to the "VirtualLink Advance Overview". To learn more about VirtualLink, please see [www.virtualink.org](http://www.virtualink.org) | <sup>4</sup> Via adapter/connector/bracket | <sup>5</sup> Quadro Sync II card sold separately | <sup>6</sup> Windows 7, 8, 8.1, 10 and Linux | <sup>7</sup> GPU supports DX 12.0 API, Hardware Feature Level 12\_1 | <sup>8</sup> Product is based on a published Khronos Specification, and is expected to pass the Khronos Conformance Testing Process when available. Current conformance status can be found at [www.khronos.org/conformance](http://www.khronos.org/conformance)

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