

# Quadro Performance and Features in an MXM 3.1 Form Factor.

The NVIDIA Quadro M5000 SE and M3000 SE MXM interface modules offer the same Quadro performance, features, SDK and API support, exacting build standards, rigorous quality assurance, and broad ISV application compatibility, as desktop PCIe based Quadro products.

Designed for the needs of embedded, ruggedized, or mobile system builders, these products make Quadro graphics and compute capabilities available to form factors unsuited for traditional PCI Express expansion cards, tolerate wide-ranging thermal and environmental conditions, are ideal for blade or other deployments where high GPU density is an important consideration, offer generous GPU memory capacity, extremely reasonable power requirements, and provide flexible display output options.

Whether you're developing revolutionary products ranging from advanced medical imaging to sophisticated signal processing, or breakthrough machine/deep learning technology, or mission-critical defense systems, Quadro gives you the ability to expand the boundaries of the possible.

### THE PNY ADVANTAGE

PNY provides unsurpassed service and commitment to its embedded and OEM graphics customers, including extensive pre-sales developmental and technical consulting by dedicated Quadro Field Application Engineers, access to specialized documentation required for systems integration (e.g. Thermal Design Guides), bug reporting, product lifecycle management information, and much more.

For additional information or other product inquiries email **gopny@pny.com**.

#### **MODULE FEATURES**

- > MXM 3.1 Type B form factor (82 mm x 105 mm)
- > MXM v 3.1 connector
- > N16E-Q5 GPU (M5000 SE) or N16E-Q1 GPU (M3000 SE)
- > 256-bit memory interface
- > 8GB GDDR5 (M5000 SE)
- > 4GB GDDR5 (M3000 SE)
- > 4 Mb Serial ROM
- > UEFI support
- > PCI Express Gen 3 with lane and polarity reversal support
- DisplayPort, HDMI, DVI SL or DL, VGA outputs available
- > 100 W power cap (M5000 SE)
- > 75 W power cap (M3000 SE)

## **ENVIRONMENTAL**

- Operating temperature range of 0 °C to 55 °C
- > Storage temperature -40 °C to 125 °C
- > Operating RH 5% to 90%
- > Storage RH 5% to 95%
- > MTBF (controlled and uncontrolled) avialable under binding NDA

## **WARRANTY AND SUPPORT**

- > 3-year warranty
- > Pre- and post-sales technical support
- Dedicated Quadro Field Application Engineers
- > U.S. based direct Quadro technical support hot line

PNY PART NUMBER	QM5000SE-KIT
	QM3000SE-KIT
Graphics APIs	Shader Model 5.1, OpenGL 4.5 <sup>4</sup> , DirectX 12.0 <sup>5</sup> , Vulkan 1.0 <sup>4</sup>
Compute APIs	CUDA, DirectCompute, OpenCL™
Compute Performance	M5000 SE 3.2 TFLOPS M3000 SE 1.9 TFLOPS



**QUADRO M5000 SE** 



QUADRO M3000 SE

NVIDIA QUADRO AUTHORIZED PARTNER

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