

EGX-MXM-P1000

Mobile PCI Express Module with NVIDIA® Quadro® Embedded P1000

Features

- MXM 3.1 Type A form factor (82 x 70 mm)
- 512 NVIDIA® CUDA® cores
- 1.8 TFLOPS SP peak performance
- 4GB GDDR5 memory
- 96GB/s maximum memory bandwidth
- Support up to 4 FHD displays, 50W TDP
- 5-year availability





Introduction

The EGX-MXM-P1000 features advanced NVIDIA Quadro GPU with NVIDIA Pascal™ Architecture technology in MXM 3.1 Type A form factor. The EGX-MXM-P1000 has 512 NVIDIA CUDA cores and a peak single-precision floating-point performance of 1.8 TFLOPS. The EGX-MXM-P1000 has 4GB of GDDR5 memory and supports NVIDIA GPUDirect™ RDMA which helps increase data throughput by up to 80% and consequently system responsiveness by up to 60%*. Additionally, 4 FHD display outputs and an extended operating temperature range of -40°C to 85°C are supported. The embedded graphics product is suitable for mission-critical harsh-environment edge computing applications with size, weight, and power (SWaP) and network connectivity constraints.

Ordering Information

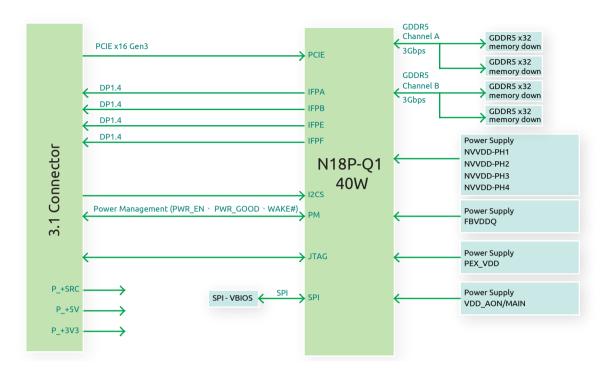
• EGX-MXM-P1000 NVIDIA Quadro Embedded P1000, MXM 3.1 type A, 82 x 70mm, PCIe x16 Gen3

Specifications

	EGX-MXM-P1000
Graphic Core	
Graphic Architecture	NVIDIA Pascal GP107
GPU	Quadro P1000
	4x DisplayPort 1.4 digital video outputs
Display Outputs	Support for High Dynamic Range (HDR) video
	4K at 120Hz or 5K at 60Hz with 10-bit color depth
Signal Interface	MXM 3.1, PCI Express Gen3 x16 supports
GPGPU Computing	
	512 CUDA cores, 1.8 TFLOPS SP Peak
CUDA Supports	CUDA Toolkit 8.0, CUDA Compute version 6.1
	OpenCL™ 1.2, DirectX [®] 12, OpenGL 4.5, Vulcan 1.0
Memory	GDDR5 4GB memory, memory width: 128-bit, bandwidth: 96 GB/s
Mechanicals	
Dimensions	82 (W) x 70 (D) x 4.8 (H) mm
Locking Mechanism	Standard MXM 3.1 Type A
Environmental	
Operating Temp.	Standard: 0°C to 55°C, ETT: -40°C to 85°C
Storage Temp.	-40°C to 85°C
SW	
OS Support	Windows 7/10 & Linux Drivers, 64-bit

^{*} The software and workloads used in performance tests were optimized for performance on ADLINK platforms. Performance tests are measured using specific computer systems, components, software, operations and functions. Any changes to these factors may cause the results to vary. Contact ADLINK for more complete information about performance and benchmark results.

Block Diagram



Mechanical Drawing

