

Embedded MXM Modules based on NVIDIA Ampere Architecture

Mobile PCI Express Modules with NVIDIA Embedded GPUs

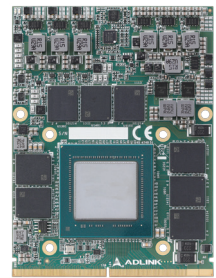
Preliminary



• EGX-MXM-A1000



• EGX-MXM-A2000



• EGX-MXM-A4500



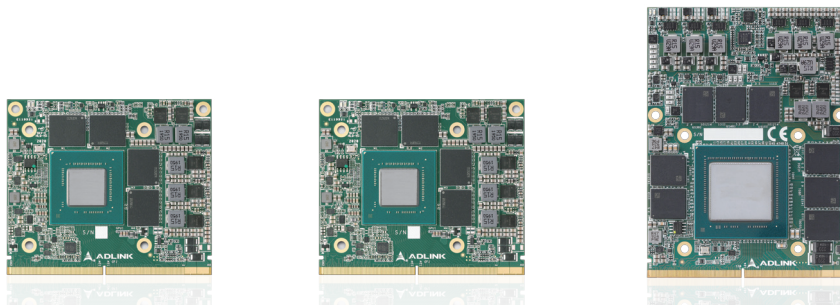
Features

- NVIDIA embedded graphics based on Ampere architecture
- Standard MXM 3.1 Type A/B form factor
- PCIe Gen 4 up to x16 interface
- Up to 5120 CUDA® cores, 40 RT Cores, and 160 Tensor Cores
- Up to 17.8 TFLOPS peak FP32 performance
- Up to 16GB GDDR6 memory, 256-bit
- Up to 384GB/s maximal memory bandwidth
- Support up to 4 DP 1.4a displays, 115W TGP
- 5-year availability

Ordering Information

EGX-MXM-A1000	Embedded NVIDIA® RTX™ A1000, MXM 3.1 type A, 82 x 70mm, PCIe Gen4 x8
EGX-MXM-A2000	Embedded NVIDIA® RTX™ A2000, MXM 3.1 type A, 82 x 70mm, PCIe Gen4 x8
EGX-MXM-A4500	Embedded NVIDIA® RTX™ A4500, MXM 3.1 type B, 82 x 105mm, PCIe Gen4 x16

Specifications



Model Name	EGX-MXM-A1000	EGX-MXM-A2000	EGX-MXM-A4500
Graphic Core			
GPU	NVIDIA RTX™ A1000 GA107-950 GPU	NVIDIA RTX™ A2000 GA107-980 GPU	NVIDIA RTX™ A4500 GA104-955 GPU
Memory	4GB GDDR6 memory, 128-bit, Bandwidth: 192 GB/s	4GB/8GB GDDR6 memory, 128-bit, Bandwidth: 192 GB/s	8GB/16GB GDDR6 memory, 256-bit, Bandwidth: 384 GB/s
GPGPU Computing			
CUDA Cores	2048 CUDA cores, 7.4 TFLOPS peak FP32 performance	2560 CUDA cores, 9.3 TFLOPS peak FP32 performance	5120 CUDA cores, 17.8 TFLOPS peak FP32 performance
Tensor Cores	64 Tensor Cores	80 Tensor Cores	160 Tensor Cores
RT Cores	16 Tensor Cores	20 Tensor Cores	40 Tensor Cores
Compute API	CUDA Toolkit 8.0 and above, CUDA Compute version 8 and above, OpenCL™ 1.2		
Graphics API	DirectX® 12, OpenGL 4.6		
Display			
Display Outputs	4x DisplayPort 1.4a, HDMI 2.1 4K at 120Hz or 8K at 60Hz with 10-bit color depth		
Interface	MXM 3.1, PCI Express Gen4 x8 support		MXM 3.1, PCI Express Gen4 x16 support
Mechanicals			
Dimensions	82 (W) x 70 (D) x 4.8 (H) mm		82 (W) x 105 (D) x 4.8 (H) mm
Form Factor	Standard MXM 3.1 Type A		Standard MXM 3.1 Type B
Environmental			
Operating Temperature	Standard: 0°C to 55°C Extended Temperature: -20°C to 70°C (TBD)		
Storage Temperature	-40°C to 85°C		
Module Power Consumption	35W or 60W TGP		80W or 115W TGP
SW Support			
OS Support	Windows 10 & Linux Drivers, 64-bit		