Deep Learning Accelerator

NVIDIA QUADRO CERTIFIED
- EMBEDDED

The IoT is progressing from simple devices feeding data to the cloud for analysis to smart devices performing sophisticated inferencing and pattern-matching themselves. Processing AI algorithms locally on a smart device in the field provides many benefits, including faster response, enhanced security, improved mobility, and lower communications cost.

To bring AI to the edge, ADLINK takes a heterogeneous approach and offers a comprehensive deep learning solution portfolio including deep learning accelerators, inference platforms, and training servers.

ADLINK's deep learning accelerators provide GPU-accelerated inferencing in embedded and standard form factors and offer high performance, power efficiency and longevity support required of edge AI applications, delivering actionable insights at the right place at the right time for industrial automation, transportation, smart city, military and aerospace applications and more.

- 5-year longevity support
- Deep learning inferencing and highly task-parallel workloads with CUDA cores
- High I/O throughput and system performance with NVIDIA GPUDirect RDMA
- NVIDIA Video Codec SDK with NVEncode and NVDecode

ADLINK® Leading EDGE COMPUTING

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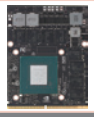
Model Name	EGX-MXM-P1000	EGX-MXM-P2000	EGX-MXM-P3000	EGX-MXM-P5000
				
Graphic Core				
Graphic Architecture	NVIDIA® Pascal™ GP107		NVIDIA® Pascal™ GP104	
GPU	Quadro® P1000	Quadro® P2000	Quadro® P3000	Quadro® P5000
Display Outputs	4x DisplayPort 1.4 digital video outputs Support for High Dynamic Range (HDR) video 4K at 120Hz or 5K at 60Hz with 10-bit color depth		Up to 1 internal display plus 5 external display outputs 5x DisplayPort 1.4 digital video outputs (DP++) 1x HDMI, 2x DVI, 1x eDP	
Signal Interface	MXM 3.1, PCI Express Gen3 x16 supports			
GPGPU Computing				
CUDA Supports	512 CUDA® cores, 1.8 TFLOPS SP Peak	768 CUDA® cores, 2.3 TFLOPS SP Peak	1280 CUDA cores, 3.9 TFLOPS peak FP32 Performance	2048 CUDA cores, 6.4 TFLOPS peak FP32 performance
Memory	GDDR5 4GB memory, memory width: 128-bit, bandwidth: 96 GB/s	GDDR5 4GB memory, memory width: 128-bit, bandwidth: 96 GB/s	GDDR5 6GB memory, memory width: 192-bit, bandwidth: 168.2 GB/s	GDDR5 16GB memory, memory width: 256-bit, bandwidth: 192.2 GB/s
Compute API	CUDA Toolkit 8.0, CUDA Compute version 6.1, OpenCL™ 1.2		CUDA Toolkit 8.0, CUDA Compute version 6.1, OpenCL™ 1.2, Direct Compute	
Graphic API	DirectX® 12, OpenGL 4.5, Vulcan 1.0		DirectX® 12, OpenGL 4.5, Vulkan 1.0 Shader Model 5.1	
NVIDIA Technology	-	-	NVIDIA® Mosaic Technology, NVIDIA® nView® Display Management Technology	NVIDIA® VR Ready, NVIDIA® Mosaic Technology, NVIDIA® nView® Display Management Technology
Mechanicals				
Dimensions	82 (W) x 70 (D) x 4.8 (H) mm		87 (W) x 105 (D) x 4.8 (H) mm	
Locking Mechanism	Standard MXM 3.1 Type A		Standard MXM 3.1 Type B	
Environmental				
Operating Temp.	Standard: 0˚C to 55˚C, ETT: -20˚C to 70˚C		0 to 55˚C	
Storage Temp.	-40˚C to 85˚C		-40˚C to 125˚C	
Module Power Consumption	48W	58W	75W	100W
SW supports				
OS Support	Windows 7/10 & Linux drivers, 64-bit			

Model	Quadro-E PEG P620	Quadro-E PEG P1000	Quadro-E PEG P2000	Quadro-E PEG P4000
				
Graphic Core				
Graphic Architecture	NVIDIA® Pascal™ GP107		NVIDIA® Pascal™ GP106	NVIDIA® Pascal™ GP104
GPU	Quadro® P620	Quadro® P1000	Quadro® P2000	Quadro® P4000
Display Output	4x mDP 1.4, 4096x2160 @ 60Hz/5120x2880 @ 60Hz HDCP 2.2 support * VGA/DVI/HDMI support via adapter/connector/bracket			4x DP 1.4, 7680×4320 @120 Hz/ 7680×4320 @ 60 Hz/ 5120×2880 @ 60 Hz HDCP 2.2 support * VGA/DVI/ HDMI support via adapter/ connector/bracket
Signal Interface	PCI Express Gen3 x16 support			
GPGPU Computing				
CUDA Support	512 CUDA cores, 1.38 TFLOPS peak FP32 performance	640 CUDA cores, 1.89 TFLOPS peak FP32 performance	1024 CUDA cores, 3.0 TFLOPS peak FP32 performance	1792 CUDA cores, 5.3 TFLOPS peak FP32 performance
Memory	GDDR5 2GB memory, memory width: 128-bit, bandwidth: 80 GB/s	GDDR5 4GB memory, memory width: 128-bit, bandwidth: 80 GB/s	GDDR5 5GB memory, memory width: 160-bit, bandwidth: 130 GB/s	GDDR5 8GB memory, memory width: 256-bit, bandwidth: 243 GB/s
Compute API	CUDA Toolkit 8.0, CUDA Compute version 6.1, OpenCL™ 1.2, Direct Compute			
Graphic API	DirectX® 12, OpenGL 4.5, Vulkan 1.0 Shader Model 5.1			
NVIDIA Technology	NVIDIA® Mosaic Technology, NVIDIA® nView® Display Management Technology			
Mechanicals				
Dimensions	2.713" × 5.7", single slot	2.713" × 5.7", single slot	4.4" H x 7.9" L, single slot	4.4" H x 9.5" L, single slot
Weight	129g	129g	260g	475g
Environmental				
Operating Temp.	0 to 55˚C			
Storage Temp.	-40˚C to 75˚C			
Module Power Consumption	40W	47W	75W	105W
SW supports				
OS Support	Windows 7/10 & Linux drivers, 64-bit			