

AI Accelerator& GPU Preliminary

MXM Module MX5000B-XA



Features

- NVIDIA RTX PRO 5000 Blackwell Generation Embedded GPU based on NVIDIA Blackwell architecture
- 10,496 CUDA cores, 80 RT cores and 320 Tensor cores, 24GB GDDR7 memory
- PCIe Gen 4 x16 interface via golden finger
- 40.62 TFLOPS peak FP32 performance

Specifications

Model Number	MX5000B-XA	
GPU Engine Specs	NVIDIA RTX PRO 5000 Blackwell Embedded GPU Architecture: NVIDIA Blackwell CUDA Cores: 10,496 Tensor Cores: 320 RT Cores: 80 Floating Point Performance: 36.53 TFLOPS Core Clock (MHz): Base= 1095 / Boost= 1740	NVIDIA RTX PRO 5000 Blackwell Embedded GPU Architecture: NVIDIA Blackwell CUDA Cores: 10,496 Tensor Cores: 320 RT Cores: 80 Floating Point Performance: 40.62 TFLOPS Core Clock (MHz): Base= 1402 / Boost= 1935
Memory Specs	Size: 24GB GDDR7 Speed: 28 Gbps Interface Width: 256-bit Bandwidth (GB/sec): 896	
Feature Support	PCI Express 4.0 x16 DirectX: 12 Ultimate Open GL 4.6 Vulkan 1.2	
Display	Resolution: 7680x4320 ¹ Maximum resolution 8K@240Hz (7690x4320) Max: 4x DisplayPort 2.1a (DSC1.2a)	
Power Consumption	Total Graphics Power (TGP): 95 W	Total Graphics Power (TGP): 115 W
Form Factor	MXM Graphics Module Version 3.1, Type B	
Dimensions (WxD)	82.0 x 110.0 mm (3.22" x4.33")	
Net Weight	0.06 kg (0.1323 lb) TBD	
Temperature	Standard: Operating Temp. :0 to + 55°C (32°F ~131°F) / Extended Operating Temp. :-40 to + 70°C (TBD) / Storage Temperature: -40 to + 85°C (- 40°F ~ 185°F)	Standard: Operating Temp. :0 to + 55°C (32°F ~131°F) / Storage Temperature: -40 to + 85°C (- 40°F ~ 185°F)
Humidity	40°C @ 95%, Non-condensing	
OS Support	Windows 11 IoT Enterprise LTSC 64-bit / Linux 64-bit	
Certification	CE/FCC/UKCA	

1. Up to 4k 12-bit HDR at 240Hz with DP1.4a+DSC. Up to 8k 12-bit HDR at 60Hz with DP 1.4a+DSC or HDMI2.0+DSC. With dual DP1.4a+DSC, up to 8K HDR at 120Hz. HDCP 1.2/1.4. (eDP, LVDS, VGA, USB-C display output are not supported)

System & Mounting Dimensions

Product Specifications are subject to change without prior notice

Ordering Information

Model name	Description
MX5000B-XAA-A1	MXM-B, NVIDIA RTX PRO 5000 BLACKWELL, Gen4.0 x16, 24GB GDDR7, 4xDP, 115W, 0°C to +55°C
MX5000B-XAA-A2 (TBD)	MXM-B, NVIDIA RTX PRO 5000 BLACKWELL, Gen4.0 x16, 24GB GDDR7, 4xDP, 95W, 0°C to +55°C

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Accessory (Optional)

Part No.	Description
92-6MXM4H-1002	PCIE Carrier Board, MXM3.1, Gen4.0 x16, 4x HDMI, 0°C to +55°C
TBD	MXM-B Cooler, TWO BALL, 12V 4PIN