

AI Accelerator& GPU

MXM Module MX5000B-XA



Features

- NVIDIA® RTX PRO™ 5000 Blackwell Embedded GPU
- 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
- Up to 1824 TOPS AI performance

Specifications

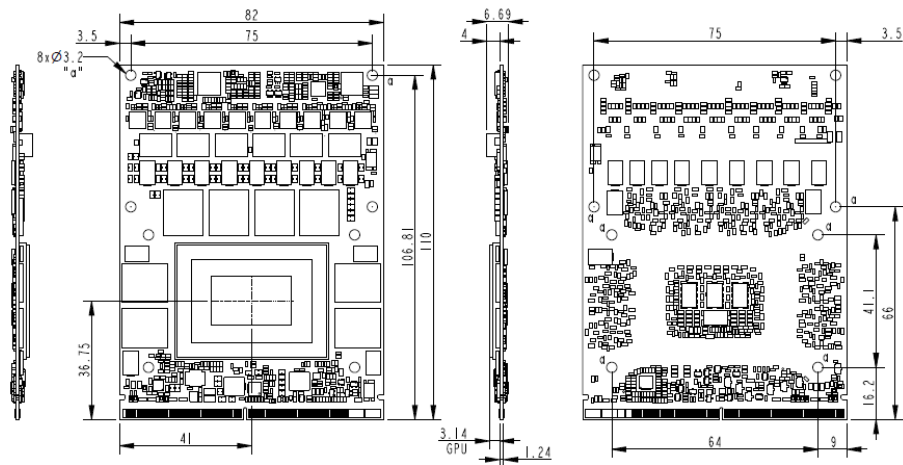
Model Number	MX5000B-XA	
GPU Engine Specs	NVIDIA RTX PRO 5000 Blackwell Embedded GPU Architecture: NVIDIA Blackwell CUDA Cores: 10,496 Tensor Cores: 320 RT Cores: 80 Floating Point Performance: 36.53 TFLOPS Core Clock (MHz): Base= 1095 / Boost= 1740	NVIDIA RTX PRO 5000 Blackwell Embedded GPU Architecture: 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 1.4	
Display	Resolution: 7680x4320 ⁽³⁾ Maximum resolution 8K@240Hz (7680x4320) Max: 4x DisplayPort 2.1a (DSC1.2a)	
Power Consumption	Total Graphics Power (TGP): 95 W	Total Graphics Power (TGP): Up to 115 W ⁽¹⁾
Form Factor	MXM Graphics Module Version 3.1, Type B* ⁽²⁾	
Dimensions (WxD)	82.0 x 110.0 mm (3.22" x4.33")	
Net Weight	0.0729 kg (0.1607 lb)	
Temperature	Standard: Operating Temp. :0 to + 55°C (32°F ~131°F)/ Extended Operating Temp. : -40 to + 70°C/ 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 10-64bit / Windows 11 / Linux 64-bit	
Certification	CE/FCC/UKCA	

1. TGP(W) marked as "Up to XXW" indicates the maximum TGP, subject to system power design and operating conditions.

2. TYPE-B* Extended PCB design (+5mm length vs. standard spec)

3. DP2.1a (DSC 1.2a): 4-Lane UHBR20/13.5/10, up to 76.98 Gbps per connector. Supports up to 8K@240Hz with DSC, depending on display configuration and display sink support.
HDMI 2.1b: In TMDS mode, supports up to 4096x2160 @ 60Hz. In FRL mode, supports up to 8K (7680x4320) @ 60Hz using YUV420 or DSC. 8K@60Hz requires two display tiles, and the display sink must support DSC or 4:2:0 pixel format through a single output port.
HDCP 1.4 / 2.2 / 2.3 supported. (eDP, LVDS, VGA, and USB-C display outputs are not supported.)
HDMI display connectivity depends on the carrier-board implementation. For direct Dual-Mode DisplayPort (DP++) output, a supported external DP AUX device is required on the carrier board.

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@19V , 0°C to +55°C
MX5000B-XAA-A2	MXM-B, NVIDIA RTX PRO 5000 Blackwell, Gen4.0 x16, 24GB GDDR7, 4xDP, 95W, 0°C to +55°C
MX5000B-XAG-A2	MXM-B, NVIDIA RTX PRO 5000 Blackwell, Gen4.0 x16, 24GB GDDR7, 4xDP, 95W, -40°C to +70°C

Accessory (Optional)

Part No.	Description
92-6MXM4H-1002	PCIE Carrier Board, MXM3.1, Gen4.0 x16, 4x HDMI, 0°C to +55°C
3906000018X100	MXM-B Cooler, For Blackwell, TWO BALL, 12V 4PIN
3901000004N000	MXM Type B Heat Spreader (for 4000B/5000B Blackwell)