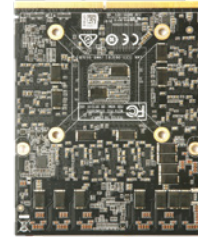


# NVIDIA RTX 5000 MXM 3.1 Type B module

The EMB-G721-B0 MXM 3.1 Type B module features a NVIDIA RTX 5000 embedded graphics processor based on NVIDIA Ada Lovelace Architecture. The Ada GPU architecture has been designed to provide revolutionary performance for ray tracing and AI-based neural graphics. It delivers a dramatically higher baseline of GPU performance and marks the tipping point for ray tracing and neural graphics. It delivers outstanding gaming and creating, professional graphics, AI, and compute performance.



## SPECIFICATIONS

<b>GPU model</b>	NVIDIA RTX 5000
<b>SKU</b>	EMB-G721-B0
<b>GPU Product P/N</b>	EN21-X11, 40x 40mm, 2714-ball BGA (GB5B-256) package
<b>GPU Architecture</b>	Ada Lovelace architecture w/ 9,728 CUDA parallel processor cores, 76 Gen3 RT Core & 304 Gen4 Tensor cores
<b>Host interface</b>	PCI Express 4.0 x16 lanes. Also support x8 lanes
<b>GPU/Boost Clock</b>	1,425MHz, 2,115MHz @ 115W TGP
<b>Graphics Memory</b>	256-bit, 16 GB GDDR6
<b>Memory Bandwidth</b>	576 GB/s
<b>ECC Function</b>	Support ECC, default disabled, user configurable from Nvidia control panel or nvidia-smi command
<b>Max. Single Perf.</b>	Max. Single precision perf. FP 32 Pref. 42.6 TFLOPS
<b>Form Factor</b>	MXM 3.1 Type B. 82mm (W) x 105mm (L)
<b>Weight</b>	60.2g
<b>Display output</b>	4 DisplayPort 1.4a. Simultaneous 4 output. Maximum single resolution 8K UHD@60Hz (7690x4320) Support HDR, HDCP 1.2/1.4. (eDP, LVDS, VGA, USB-C display output are not supported)
<b>BIOS</b>	16Mbit Serial ROM
<b>Input voltage</b>	DC 12-19V, 3.3V & 5V; +/-5%
<b>Power consumption</b>	115 Watts Total Graphics Power (TGP)
<b>Cooling System</b>	Not included. Custom design available on request
<b>Ambient</b>	Temperature Operating: 0°C - 55°C with air flow. Humidity 10% - 90%, non-condensing Temperature Storage: -25°C - 80°C. Humidity 10 - 90%, non-condensing
<b>Supported API</b>	DirectX 12 Ultimate, Shader Model 7.0, OpenGL 4.6, Vulkan
<b>Supported OS</b>	Windows 10 IoT LTSC 64-bit, Windows 11, Linux 64-bit
<b>Conformal Coating</b>	None. Available on request
<b>Packing</b>	Non-brand bulk pack, Two screws included. 20pcs/carton
<b>Compliance</b>	RoHS 2
<b>MTBF</b>	Approximately 95,196 hours at 25°C