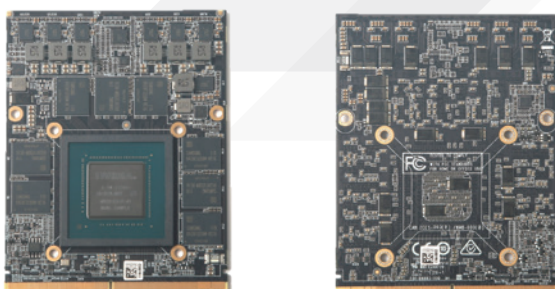


# NVIDIA RTX A4500 MXM 3.1 Type B module

The EMB-G663-A0 MXM 3.1 Type B module features a NVIDIA RTX A4500 embedded graphics processor based on NVIDIA Ampere architecture. It provides graphics intensive acceleration and real time ray-tracing capability for applications like scientific and medical visualization, digital content creation (DCC), artificial intelligence (AI) and machine learning (ML).



## SPECIFICATIONS

<b>GPU model</b>	NVIDIA RTX A4500
<b>SKU</b>	EMB-G663-A0
<b>GPU Product P/N</b>	EN20-E3-A1
<b>GPU architecture</b>	Ampere architecture with 5,888 CUDA parallel processor cores and 184 Gen3 Tensor cores
<b>GPU/Boost Clock</b>	1,020MHz, 1,575MHz
<b>Graphics Memory</b>	16 GBytes 256-bit GDDR6
<b>Memory Bandwidth</b>	512 GB/s
<b>ECC function</b>	Support ECC, default disabled, user configurable from Nvidia control panel
<b>Graphics Performance</b>	Max. FP 32 Pref. 17.66TF
<b>Form Factor</b>	MXM 3.1 Type B. 82mm(W) x 105mm (L)
<b>Weight</b>	61.6 grams
<b>Host interface</b>	PCI Express 4.0 x16 lanes. Also support x4 / x8 lanes
<b>Display output</b>	4 x DisplayPort 1.4a. Simultaneous 4 output. Maximum resolution of each port 8K UHD@60Hz (7690x4320) Support HDR, HDCP 1.2/1.4. (eDP, LVDS, VGA, USB-C display output are not supported)
<b>BIOS</b>	16 Mbit UEFI Serial ROM
<b>Input voltage</b>	DC 12-19V, 3.3V & 5V; +/-5%
<b>Power consumption</b>	125W Total Graphics Power (TGP)
<b>Cooling System</b>	Not included. Custom design available on request
<b>Ambient</b>	Operating: Temperature 0°C ~ 55°C with air flow. Humidity 10% ~ 90%, non-condensing (Ambient operating temperature range stated above is based on PC Partner's reference cooler. In customer's system the operating temperature range depends on thermal mechanical design.) Storage: Temperature -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, Windows 11 64-bit, Linux 64-bit
<b>Conformal Coating</b>	None. Available on request
<b>Packing</b>	Non-brand bulk pack
<b>Compliance</b>	RoHS 2
<b>MTBF</b>	Approximately 79,902 hours at 25°C