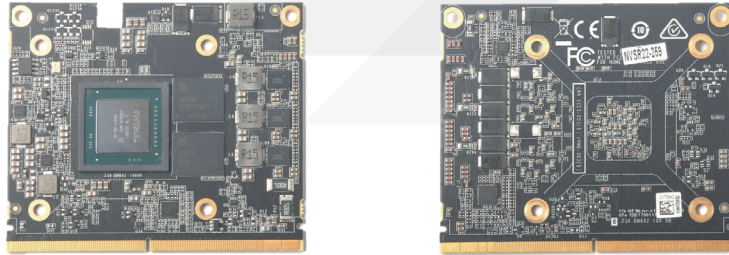# NVIDIA RTX A500 MXM 3.1 Type A module

The EMB-G692-A0 MXM 3.1 Type A module features a NVIDIA RTX A500 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

GPU model	NVIDIA RTX A500
SKU	EMB-G692-A0
GPU Product P/N	EN20-M2-A1
GPU architecture	Ampere architecture with 2,048 CUDA cores and 64 Gen3 Tensor cores
GPU/Boost Clock	1,155Mhz, 1,777MHz at 45W TGP
Graphics Memory	4 GBytes GB3 64-bit GDDR6
Memory Bandwidth	112 GB/s
Graphics Performance	Max. FP 32 Pref. 7.28TF
Form Factor	MXM 3.1 Type A. 82mm(W) x 70mm(L)
Weight	Approximately 34.8 grams
Host interface	PCI Express 3.0 x4 lanes
Display output	Support graphic acceleration output through system integrated graphic with NVIDIA Optimus technology
BIOS	16Mbit Serial ROM
Input voltage	DC 12-19V, 3.3V & 5V; +/-5%
Power consumption	45 Watts Total Graphics Power (45W TGP)
Cooling System	Not included. Custom design available on request
Ambient	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
Supported API	DirectX 12 Ultimate, Shader Model 7.0, OpenGL 4.6, Vulkan
Supported OS	Windows 10, Windows 11 64-bit, Linux 64-bit
Conformal Coating	None. Available on request
Packing	Non-brand bulk pack. Net weight: 34.8 grams
Compliance	RoHS 2
MTBF	Approximately 133,785 hours at 25°C