



## **NVIDIA RTX 2000 MXM 3.1 Type A module**

The EMB-G733-A0 MXM 3.1 Type A module features a NVIDIA RTX 2000 embedded graphics processor based on NVIDIA Ada Lovelace Architecture. The Ada GPU architecture has been designed to provide revolutionary performance for ray tracing and Al-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, Al, and compute performance.





## **SPECIFICATIONS**

GPU model NVIDIA RTX 2000

SKU EMB-G733-A0

GPU Product P/N EN21-X4, 29x 29mm, 1358-ball BGA (GB5B-128) package

**GPU Architecture** Ada Lovelace architecture w/ 3,072 CUDA parallel processor cores, 24 Gen3 RT Core & 96 Gen4 Tensor cores

Host interface PCI Express 4.0 x4 lanes. Also support x8 lanes

GPU/Boost Clock 1,635MHz, 2,115MHz @ 60W TGP

Graphics Memory 128-bit, 8 GB GDDR6

Memory Bandwidth 256 GB/s

ECC Function Support ECC, default disabled, user configureable from Nvidia control panel or nvidia-smi command

Max. Single Perf. Max. Single precison pref. FP 32 Pref. 13 TFLOPS

Form Factor MXM 3.1 Type A. 82mm(W) x 70mm(L)

Weight t.b.c

Display output 3 DisplayPort 1.4a. Simultaneous 3 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)

BIOS 16Mbit Serial ROM

**Input voltage** DC 12~19V, 3.3V & 5V; +/-5%

**Power consumption** 60 Watts Total Graphics Power (TGP)

Cooling System Not included. Custom design available on request

**Ambient** 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

Supported API DirectX 12 Ultimate, Shader Model 7.0, OpenGL 4.6, Vulkan

Supported OS Windows 10 IoT LTSC 64-bit, Windows 11, Linux 64-bit

Conformal Coating None. Available on request

Packing Non-brand bulk pack, Two screws included. 20pcs/carton.

Compliance RoHS 2

MTBF ~132,451 hrs