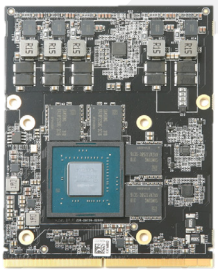
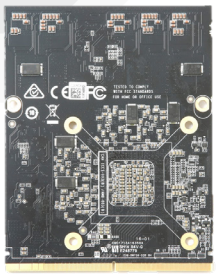
PCP SOLUTIONS

NVIDIA RTX

# NVIDIA RTX 2000 MXM 3.1 Type B module

The EMB-G736 MXM 3.1 Type B module features a NVIDIA RTX 2000 embedded graphic 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

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|---|---|
| **GPU model** | NVIDIA RTX 2000 |
| **SKU** | EMB-G736-A0 |
| **NVIDIA Product P/N** | EN21-X4, 29x 29mm, 1358-ball BGA (GB5C-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** | 2,295MHz, 2,395MHz @ 115W TGP |
| **Graphics Memory** | 128-bit, 256 GB/s, 8 GB GDDR6 |
| **ECC Function** | Support ECC, default disabled, user configureable from Nvidia control panel or nvidia-smi command |
| **Max. Single Perf.** | Maximum FP 32 single precison pref. 14.5 TFLOPS |
| **Form Factor** | MXM 3.1 Type B. 82mm(W) x 105mm(L), 10 layers PCB |
| **Weight** | 49.3 grams |
| **Display output** | 3 DisplayPort 1.4a. Simultaneous 3 output. Maximum single resolution 8K UHD@60Hz (7690x4320)<br>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** | 115 Watts Total Graphics Power (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<br>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 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** | 130,029 hours at 25°C |