

SKY-MXM-500B MXM 3.1 Type A NVIDIA® Quadro® Embedded 500B with DP 2.1a Startup Manual

Packing List

Before you begin installing your card, please make sure that the following items have been shipped:

- 1 x SKY-MXM-500B GPU card
- 1 x China RoHS Doc

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

Note 1: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: <https://www.adobe.com/downloads.html> (Acrobat is a trademark of Adobe)

Input Voltage Requirements

Input voltage to the GPU must strictly follow the ranges listed in the below table (reference to GND). Operating outside the required voltage range will cause permanent damage to the GPU.

Power Rail	Min.	Typ.	Max.
PWR_SRC	6.5V	7-20V	22V
5V	4.7V	5V	5.3V
3V3	3.1V	3.3V	3.5V

For more information on this and other Advantech products, please visit our website at:

<http://www.advantech.com>

For technical support and service, please visit our support website at:

<http://www.advantech.com/support>

This manual is for the SKY-MXM-500B series Rev.A1.

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Standard Functions

Processor System

- **GPU:** RTX PRO 500B
- **Graphic architecture:** NVIDIA® Blackwell
- **CUDA parallel-processing cores:** 1792 CUDA® cores
- **RT cores:** 14
- **Tensor cores:** 56
- **GPU base/boost clock:** 2160 MHz/2565 MHz
- **FP32 performance:** 9.2 TFLOPS
- **Bus:** MXM3.1, PCI Express Gen5 x 8 supports
- **Max power consumption:** 60 W

Memory

- **Technology:** GDDR7 6GB memory
- **Interface width:** 96-bit
- **Bandwidth:** 288 GB/s

Physical

- **Dimensions:** 82(W) x 70(D) MM
- **Form factor:** MXM 3.1 Type-A

Environment

- **Operating:** 0 ~ 55°C
(Depend on CPU and cooler solution)
- **Non-operating:** -40 ~ 85°C

Operating Systems

- **Microsoft:** Windows 10/11, 64-bit
- **Linux:** Linux Drivers, 64-bit
- **Software support:**
 - CUDA toolkit 11.8 and higher
 - CUDA compute capability 12.0
 - OpenCL™ 3.0
 - DirectX® 12
 - OpenGL 4.6
 - Vulkan 1.4
- **Display port:**
 - 3x DisplayPort 2.1a (UHBR20/13.5/10)
 - 4K at 240Hz or 8K at 60Hz
 - support DP++ to HDMI 2.1b

System BIOS Requirements

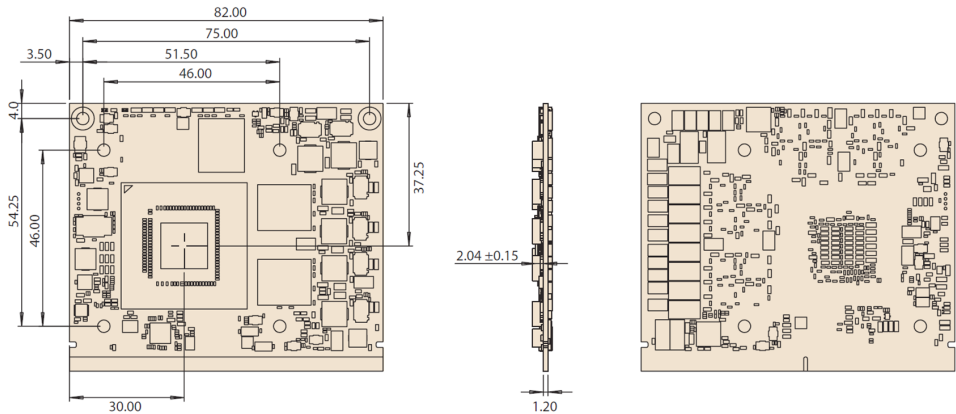
Before you install the MXM module, please make sure your system BIOS is configured with the following settings:

- 1. CSM Support [Disabled].
- 2. Above 4G Decoding [Enabled].

Note: Option names may vary depending on system architecture.

Dimensions

Unit: mm



Block Diagram

