

SKY-MXM-A4500 MXM 3.1 Type-B+ NVIDIA® Quadro® Embedded A4500 with DP 1.4a Startup Manual

Packing List

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

1. SKY-MXM-A4500 GPU Card x 1
2. China RoHS Doc x 1

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

Note: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: <https://get.adobe.com/reader> (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-A4500 series Rev. A1.

Part No. 2041A45000
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Standard Functions

Processor System

- **GPU:** Quadro® A4500
- **Graphics architecture:** NVIDIA® Ampere™ GA104-955
- **CUDA parallel-processing cores:** 5888 CUDA® cores
- **RT cores:** 46
- **Tensor cores:** 184
- **GPU base/boost clock:** 930 MHz / 1500 MHz
- **FP32 performance:** 17.66 TFLOPS
- **Bus:** MXM3.1, PCI Express Gen 3 x16 support
- **Max power consumption:** 115 W

Memory

- **Technology:** GDDR6 16GB memory with ECC
- **Interface width:** 256-bit
- **Bandwidth:** 512 GB/s

Physical

- **Dimensions:** 82(W) x 105(D) mm
- **Form factor:** MXM 3.1 Type-B+

Environment

- **Operating:** 0 ~ 55 °C
(Depending on the CPU and cooling solution)
- **Non-operating:** -40 °C ~ 85 °C

Operating Systems

- **Microsoft:** Windows 10/11, 64-bit
- **Linux:** Linux Drivers, 64-bit
- **Software support:**
 - CUDA toolkit 11.0 and higher
 - CUDA compute version 8.6
 - OpenCL™ 3.0
 - DirectX® 12
 - OpenGL 4.6
 - Vulkan 1.2
- **DisplayPort:** 4 x DP 1.4a, HDMI 2.0 4K at 120Hz or 8K at 60Hz (Requires DSC)

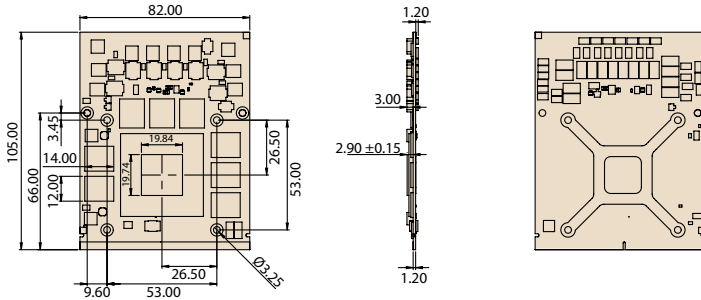
System BIOS Requirements

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



Block Diagram

