

SKY-MXM-A2000 MXM 3.1 Type-A NVIDIA® Quadro® Embedded A2000 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-A2000 GPU card x 1
2. China RoHS document 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: www.adobe.com/Products/acrobat/readstep2.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 (with 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-A2000 series Rev. A1.

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Standard Functions

Processor System

- **GPU:** Quadro® A2000
- **Graphics Architecture:** NVIDIA® Ampere™ GA107-980-A1
- **CUDA Parallel-Processing Cores:** 2560 CUDA® cores
- **RT Cores:** 20
- **Tensor Cores:** 80
- **GPU Base/Boost Clock:** 1117 MHz / 1612 MHz
- **FP32 Performance:** 8.25 TFLOPS
- **Bus:** MXM3.1, PCI Express Gen3 x 8 support
- **Max Power Consumption:** 60 W

Memory

- **Technology:** GDDR6 4/8 GB memory
- **Interface Width:** 128-bit
- **Bandwidth:** 224 GB/s

Physical

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

Environment

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

Operating Systems

- **Microsoft:** Windows 10/11, 64-bit
- **Linux:** Linux Drivers, 64-bit
- **Software Support:**
 - CUDA Toolkit 8.0 and higher
 - CUDA compute version 6.1 and higher
 - OpenCL™ 1.2
 - DirectX® 12
 - OpenGL 4.6
 - Vulkan 1.0
- **DisplayPort:** 4 x DP 1.4A, HDMI 2.0 4K at 120Hz or 8K at 60Hz (Requires DSC)

System BIOS Requirements

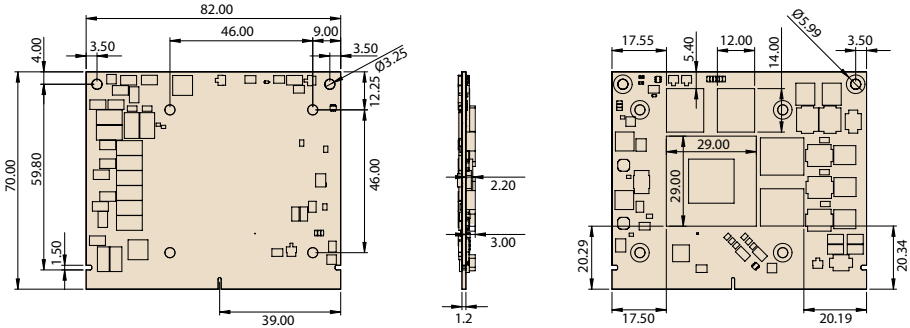
Before you install the MXM module, please make sure your system BIOS is configured with the following settings:

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

Note: Option names may vary depending on system architecture.

Dimensions

Unit: mm



Block Diagram

