

SKY-MXM-RTX3000 MXM 3.1 Type-B NVIDIA® Quadro® Embedded RTX 3000 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-RTX3000 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-RTX3000 Series Rev. A1.

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Standard Functions

Processor System

- **GPU:** Quadro® RTX3000
- **Graphics Architecture:** NVIDIA® Turing™ TU106
- **CUDA Parallel-Processing Cores:** 1920 CUDA® cores
- **RT Cores:** 30
- **Tensor Cores:** 240
- **GPU Base/Boost Clock:** 945 MHz / 1380 MHz
- **FP32 Performance:** 5.3 TFLOPS
- **Bus:** MXM3.1, PCI Express Gen3 x16 support
- **Max Power Consumption:** 80 W

Memory

- **Technology:** GDDR6 6GB memory
- **Interface Width:** 192-bit
- **Bandwidth:** 336 GB/s

Physical

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

Environment

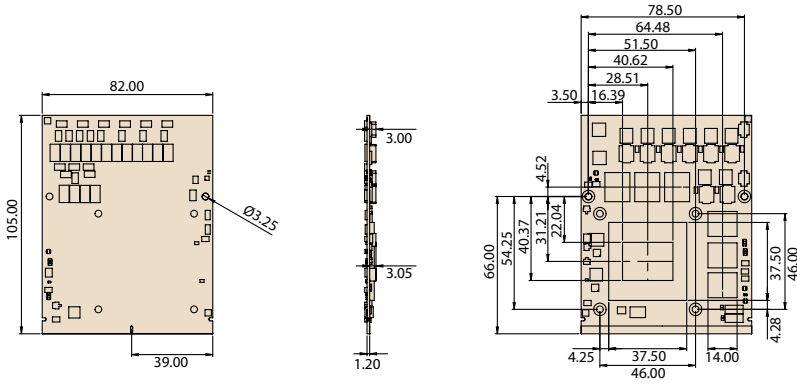
- **Operating Temperature:** 0 ~ 55 °C (Depending on CPU and cooler solution)
- **Non-Operating Temperature:** -40 °C ~ 85 °C

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)

Dimensions

Unit: mm



Block Diagram

