

M3N1070-NN

Features

- Powered by GeForce® GTX 1070 energy-efficiency mobile GPU.
- 2048 New-Gen. Pascal architecture CUDA cores.
- DisplayPort 1.2 Certified, DisplayPort 1.3/1.4 Ready.
- Support NVIDIA CUDA™, Optimus™, DirectX® 12, OpenGL® 4.5, Vulkan and Direct Compute.
- Ideal for medical imaging, VR rendering, deep learning and defense applications.

Specifications

GPU Engine Specs

| | |
|----------------------------|-------------------------|
| GPU | NVIDIA GeForce GTX 1070 |
| GPU Clock (Base/Boost) | 1442/1645 MHZ |
| NVIDIA® CUDA™ Cores | 2048 |
| BIOS Version | TBD |
| Floating Point Performance | 5.90 TFLOPS |

Memory Specs

| | |
|---------------------------|-----------|
| Memory Size | 8GB GDDR5 |
| Memory Clock | 8.0 Gbps |
| Memory Interface Width | 256-bit |
| Memory Bandwidth (GB/sec) | 256 |

Feature Support

| | |
|-------------|-----------------|
| Bus Support | PCI Express 3.0 |
| Open GL | 4.5 |
| DirectX | 12 |
| Open CL | 1.2 |

| | |
|------------------|------------------------------|
| Operation System | Windows® 7 - 10 ¹ |
| | Linux |

Display Support

| | |
|---|---|
| Max. Digital Display Support ² | 7680x4320 |
| Max. Analog Display Support | Not Support |
| Display Interface | DP_A: DisplayPort1.2 ³ , HDMI2.0b DP_B: DisplayPort1.2 ³ DP_C: DisplayPort1.2 ³ , HDMI2.0b DP_D: Internal/eDP1.4 only ⁴ DP_E: DisplayPort1.2 ³ , DVI (Single Link or Dual Link with DP_F) DP_F: DisplayPort1.2 ³ , DVI (Dual Link with DP_E) |

Power Specs

| | |
|----------------------------------|-----------------|
| Max. Board Power Consumption (W) | 115 W |
| Supplementary Power Connector | 4-pins(PWR_SRC) |

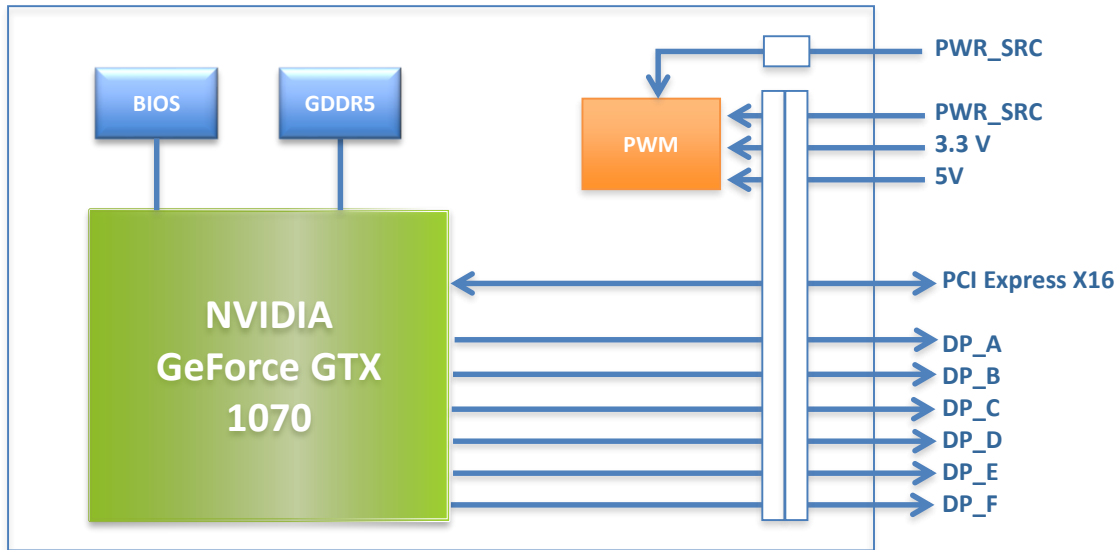
Dimensions

| | |
|-------------|---------------------|
| Form Factor | MXM graphics module |
| Length | 113 mm |
| Height | 82 mm |

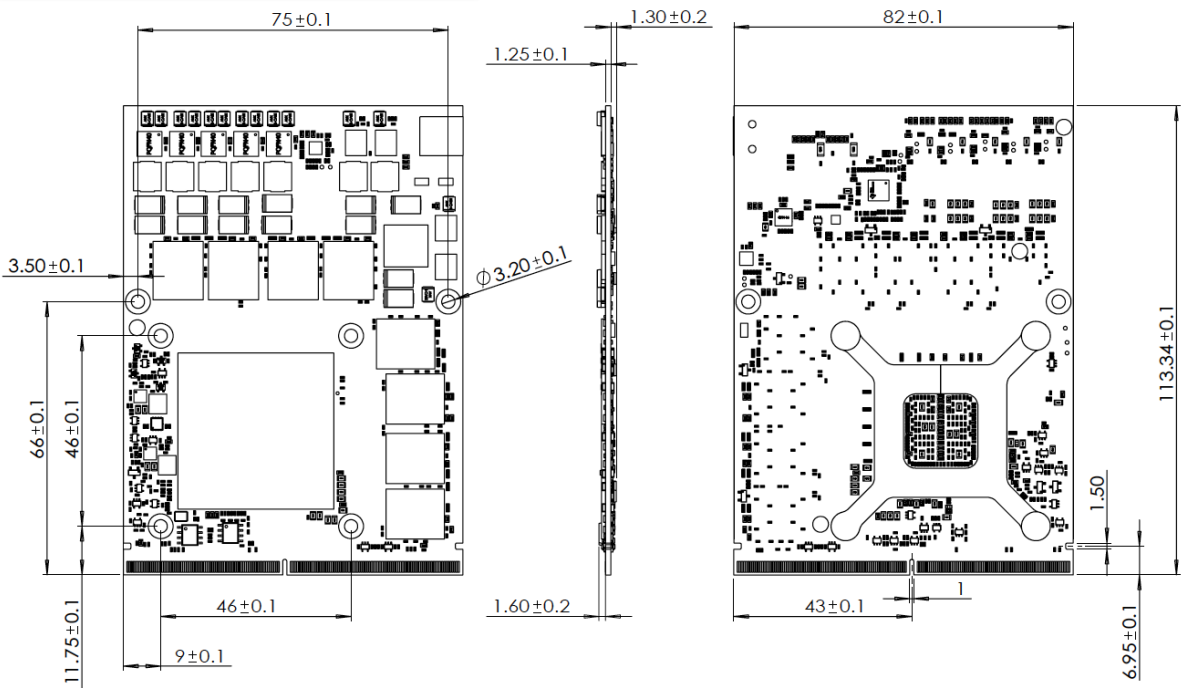


1. Windows10 requires November 2015 update or newer
2. 7680x4320 60Hz RGB 8-bit with dual-DisplayPort connector
7680x4320 60Hz YUV420 8-bit with one DisplayPort1.3 connector
3. DisplayPort 1.2 Certified and DisplayPort 1.3/1.4 Ready
4. DP_D cannot be used for driving an external display. Please contact Aetina sales for the eDP support.

Block Diagram



Mechanical



Ordering Information

| Module Number | Description |
|---------------|---|
| M3N1070-NN | MXM graphics module, NVIDIA GeForce GTX 1070, 8GB GDDR5, 0°C to +55°C |
| M3N1070-NN-G | MXM graphics module, NVIDIA GeForce GTX 1070, 8GB GDDR5, -20°C to +60°C |