Mini-PCIe to M.2 Cellular Modem Adapter Cards

The GW16140/GW16141 are Mini-PCIe to M.2 Adapters designed to allow support of M.2 Cellular Modems on Gateworks single board computers. Embedded Cellular Modems come in many form factors, including Mini-PCIe and M.2. These adapters allow M.2 B-Key Cellular Modem cards to be plugged into a Mini-PCIe slot on a Gateworks Single Board Computer. The adapters feature dual Nano SIM slots for redundancy and switching between networks. Many Cellular Modems typically have pin signal conflicts with standard specifications, so these adapters only pass through the minimum required signalling to avoid these conflicts. The adapters come in different variants for different signalling. The GW16140 is used for modems that support USB 2.0 signals and the GW16141 is used for higher bandwidth modems that require USB 3.0 signalling. Please consult the SBC Mini-PCIe slots compatibility for USB 2.0 or 3.0 support. The adapters support M.2 cards in the following M.2 sizes: 2242 (22mm x 42mm), 3042 (30mm x 42mm), 3050 (30mm x 50mm), and 3052 (30mm x 52mm). The following sizes are also available: 1630, 2230, 3030.

FEATURES

- Mini-PCIe to M.2 Cellular Modem Adapter
- M.2 B-Key Support
- Supports M.2 Sizes:
   1630, 2230, 3030
   2242, 3042, 3050, 3052
- Dual Nano SIM Sockets on back side
- Minimal signalling to avoid pin conflicts
- GW16140 Supports USB 2.0 Modems
   Ventana/Venice Families - Verify Slot
- GW16141 Supports USB 3.0 Modems
   Newport Family - Verify Slot
- Customized variations also available to support other M.2 peripherals
- -40°C to +85°C Operating Temperature
- Made in USA
- 1 Year Warranty

SPECIFICATIONS

Electrical

Input Voltage
- 3.3V From Mini-PCIe Edge Connector

Operating Current
- Not Applicable

Mechanical

Dimensions
- 30.0x66x6.2mm (1.18x2.59x0.24in)

Weight
- .2 oz (5.7g)

Environmental

Operating Parameters
- Temperature: -40°C to +85°C
- Humidity (non-condensing): 20% to 90%
- MTBF: TBD Years at 55°C

Storage Parameters
- Temperature: -40°C to +85°C
- Humidity (non-condensing): 5% to 95%

ORDERING OPTIONS

Product Customization

The GW16140/1 can be customized for high volume applications. Contact the factory for information.
- Removing resistors to achieve compatibility
- Alternative M.2 Keys, A-Key, E-Key