

Storage XMC

Triple-Site M.2 PCI Express SSD Adapter XMC

The P/N 7971 Triple Site M.2 Adapter XMC allows connection of up to three M.2 cards on a single-wide XMC. Each site supports standard M.2 lengths of 30, 42, 60 and 80 mm. All are 22 mm wide. The default is 80 mm to accommodate the most common length for M.2 SSDs. Accordingly, retaining hardware is pre-installed at the 80 mm position.

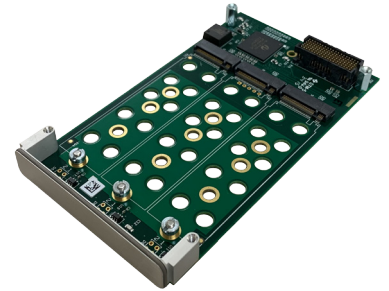
Using an arbor press and correct tooling, end users can remove the press-fit standoff and reposition it for shorter length M.2 devices. If an arbor press is unavailable, an optional hardware kit (Technobox P/N 8252) is available that includes a standoff, screw, and round nut for a single site. The kit can be installed without an arbor press. Three hardware kits are needed if users need to change from all sites from 80 mm to a shorter length.

An onboard Gen2 PCI Express (PCIe) switch connects one 4-lane upstream PCIe port to three 1-lane downstream ports. Each downstream port connects to a single M.2 card.

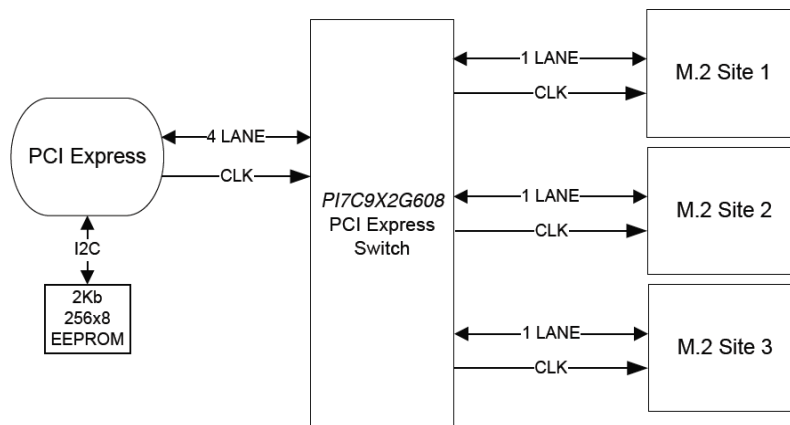
For this product, each site supports a 1X PCIe Gen2 connection which will work with 1X, 2X or 4X M.2 cards. This should provide more than ample performance for most applications. However, for performance-critical applications, Technobox, Inc. offers a single-site M.2 Adapter XMC (P/N 7673) that allows up to Gen3 speeds with 4X lane connection to the M.2 card, with no intervening PCIe switch.

Note that only PCIe capable M.2 cards, such as a Samsung XP941/951, will work with this product. SATA is not supported. Each site is keyed for "M" keyed boards, in accordance with the M.2 specification.

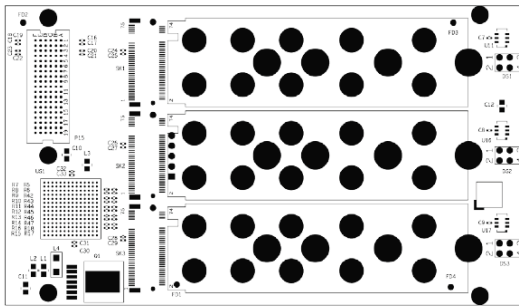
Because M.2 cards can dissipate considerable power, the 7971 has a unique array of ventilation holes. This design feature allows air to be pulled through the M.2 cards, thereby facilitating forced-air cooling parallel to the plane of the XMC. Forced air cooling is highly recommended if the 7971 will be used with high-power M.2 devices.



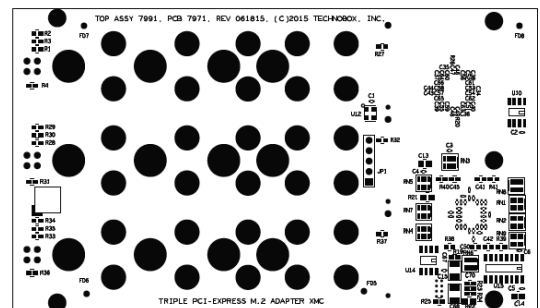
- Three M.2 PCIe Sites
- For "M" Keyed Boards
- Accommodates 30, 42, 60 & 80 mm Long Cards (Hardware Pre-Installed for 80 mm)
- Optional Hardware Kit for Mounting Shorter Length M.2 Devices
- Onboard PCIe Switch
- 4X Lane Gen2 Upstream
- 1X Lane Gen2 Downstream Per Site
- Unique Ventilation Feature for Optimum Cooling
- PCI Express only (SATA not Supported)
- Industrial Temperature Design
- Lead-free



BLOCK DIAGRAM



COMPONENT PLACEMENT VIEW - SIDE #1



COMPONENT PLACEMENT VIEW - SIDE #2

SPECIFICATIONS

Temperature (Operating): -40 to +85 degrees C

Temperature (Storage): -55 to +105 degrees C

Altitude: Not specified or characterized. Typical similar equipment is at 15,000 ft.

Humidity (Operating/Storage): 5% to 95% non-condensing.

Vibration: Not specified or characterized

Shock: Not specified or characterized

MTBF: Can be calculated upon request

PCI Express: Gen2 (5 Gb/s)

Voltages Required: +3.3V

Power: Application dependent

Weight: 49.9 grams

ORDERING INFORMATION

7971: Triple Site M.2 PCI Express SSD Adapter XMC

8252: Optional hardware kit for mounting a single 30, 42, or 60 mm M.2 card (hardware for 80 mm site is preinstalled on the 7971); kit includes one standoff, one screw, and one round nut

8257: #10 spanner bit with instruction sheet, used for securing M.2 cards to M.2 Technobox carriers

9092: P/N 7971 populated with VITA 61 connector instead of VITA 42

9395: Triple M.2 XMC w/ Vita 61 Connector (No Front-Panel)

