

# Storage XMC

## “Tech Refresh” Single-Site M.2 Conduction-Cooled XMC

The Technobox, Inc. P/N 10412 Single-Site Conduction-Cooled XMC is the “Tech Refresh” version of P/N 9079.

The Technobox P/N 9079 Quadruple M.2 Conduction cooled XMC allows connection of up to four M.2 cards on a single-wide XMC. Each M.2 site supports standard card lengths of 30 or 42 mm by 22 mm wide. The retaining hardware is installed at 42 mm to accommodate the longer length.

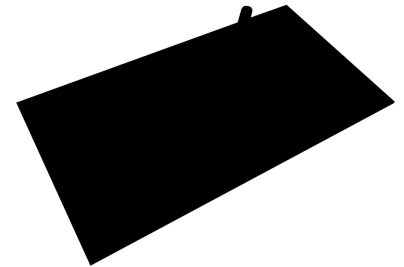
An onboard Gen2 PCI Express (PCIe) switch connects one 4-lane upstream PCIe port to four 1-lane downstream ports. Each downstream port connects to a single M.2 card. For this product, each site supports a 1-lane PCIe Gen2 connection which works with 1-lane, 2-lane or 4-lane M.2 cards. This should provide more than ample performance for most applications.

Note that only PCIe capable M.2 cards, such as a Western Digital

SDAPMUW-128G, will work with this product. SATA is not supported. Each site is keyed for “M” keyed boards in accordance with the M.2 specification.

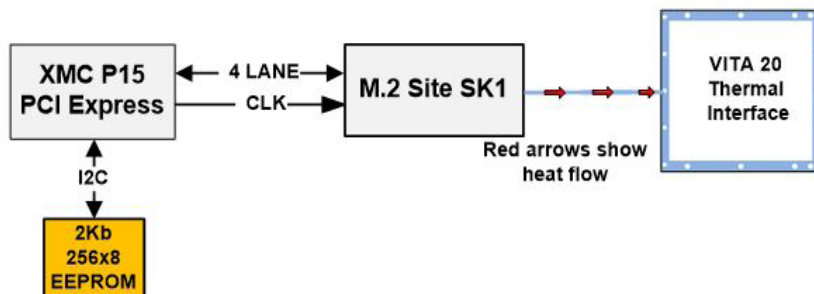
Technobox can install and test the carrier with M.2 cards as specified by the customer. Because M.2 cards can dissipate considerable power, the P/N 9079 couples the M.2 to surface power planes, which thermally couple to the VITA 20 conduction-cooling features. See also the thermal sections of this manual for a more detailed treatment of this topic.

Although this is a conduction-cooled XMC, it will also work with an air cooled host providing four M.2 cards for massive or redundant storage. For that application order an optional adapter kit. Technobox offers additional air-cooled M.2 XMCs as described elsewhere in this manual.

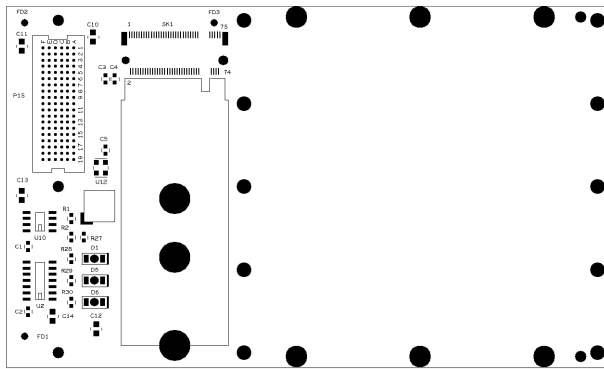


## 10412

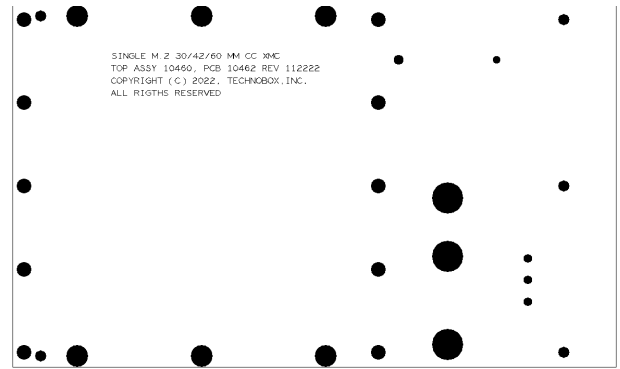
- Four M.2 PCIe Sites
- For “M” keyed M.2 Cards
- Accommodates 30- and 42-mm Long Cards (Hardware Pre-Installed for 42 mm)
- Optional Hardware Kit for Mounting Shorter Length M.2 Devices
- Advanced Thermal Design
- Onboard PCIe Switch
- 4-Lane PCIe Gen2 Up-Stream
- 1-Lane PCIe Gen2 Down-Stream Per Site
- Conduction-Cooled Design
- PCI Express Only (SATA Not Supported)
- Industrial Temperature Design
- Lead-Free



**Technobox<sup>®</sup>, inc.**



**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 - similar equip. 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

**Weight:** 59 grams, plus approx. 3 gram per drive

**PCI Express:** 4-lane, Gen. 2

**Voltages Required:** +3.3V

**Power:** 1.9 Amps on +3.3V with four M.2 cards in use

**Power:** 1.3 Amps on +3.3V with four M.2 cards idle

**Power:** 0.5 Amps on +3.3V with no M.2 cards populated

**Size:** 74mm x 143.76mm

## ORDERING INFORMATION

**10412:** "Tech Refresh" Single-Site Conduction-Cooled XMC

**9079:** Quad-site M.2 PCI express SSD adapter XMC

**8252:** Optional hardware kit for mounting a single 32 or 42mm M.2 card (hardware for 42mm site is pre-installed on the 9079); 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, Inc. carriers.

**6144:** Conduction-cooled to forced air-cooled conversion kit

