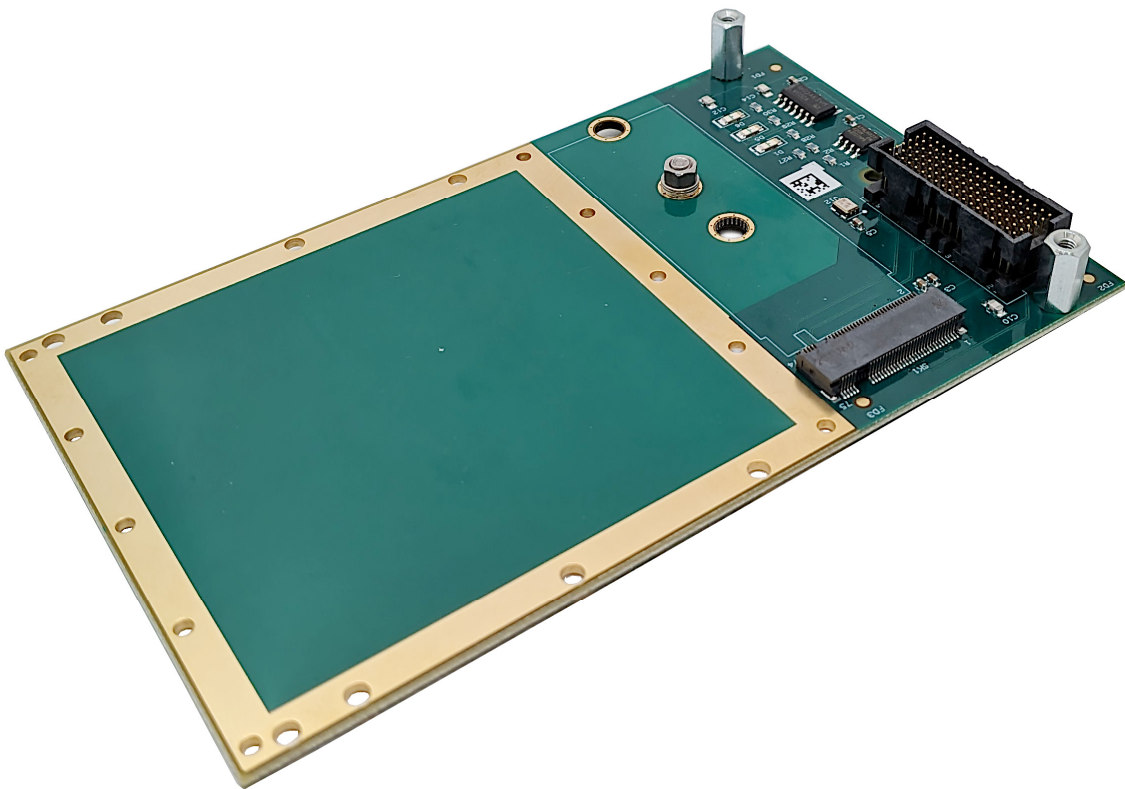


Single Site M.2
Conduction-Cooled XMC
Technobox P/N 10460
Datasheet



Technobox[®], inc.

www.technobox.com

Introduction

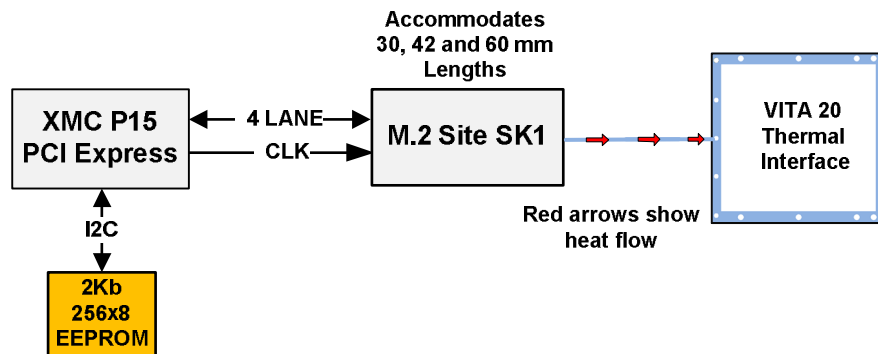


Figure 1 - Block diagram

The Technobox P/N 10460 Single Site M.2 Conduction cooled XMC allows connection of four PCI express lanes to a single M.2 card on a single-wide Conduction Cooled XMC.

P/N 10460 uses a VITA 42 XMC connector.

P/N 10496 uses a VITA 61 XMC connector.

The M.2 site supports standard card lengths of 30, 42 or 60 mm by 22 mm wide. The retaining hardware is movable from one length to another. However Technobox will ship the standoffs in the position desired if the customer adds that information to their Purchase Order or is included in the accompanying email.

Note that only PCIe capable M.2 cards will work with this product. SATA is not supported. The 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, P/N 10460 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. For that application order an optional adapter kit. Technobox offers additional air-cooled M.2 XMCs as described elsewhere in this manual.

Features

- **Conduction-Cooled**
- **Advanced Thermal Design**
- **One M.2 PCIe Sites**
- **For “M” Keyed Boards**
- **Accommodates 30 & 42 & 60 mm Long Cards**
- * **Hardware Pre-Installed per customer preference**
- **Optional Hardware Kit for Changing mounting hardware length**
- **Optional Adapter Kit for Air-Cooling Available**
- **4 Lane Gen2 Upstream**
- **4 Lane Gen2 Downstream**
- **PCI Express Only (SATA) Not Supported)**
- **Industrial Temp Design**
- **Lead-Free**

Specifications

- Temperature (Operating): -40 to +85 degrees C (*1)
- 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: Estimate 59 grams, plus approx. 3 gram per drive
- PCI Express: 4-lane
- Voltages Required: +3.3V
- Power: TBD, 0.5 Amps on +3.3V M.2 card active (*2)
- Power: TBD, 0.3 Amps on +3.3V M.2 card idle (*2)
- Power: TBD, should be minimal with no M.2 cards
- Size: 74mm x 123mm

***1** - The M.2 drives should also have a temperature range adequate for the application environment

***2** - Measured values, from prior Technobox M.2 XMC designs, could change somewhat when tested