

4 Bay Thunderbolt 3 NVMe Enclosure, For M.2 NVMe SSD Drives, 1x DisplayPort Video/ 2x TB3 Downstream Ports, 40Gbps, 72W Power Supply, External Hard Drive Enclosure

Product ID: M2E4BTB3



This Thunderbolt 3 to 4x M.2 PCIe SSD enclosure enables you to turn four M-Key PCI-Express based M.2 NVMe or AHCI solid state drives (SSDs) into a high-performance external storage solution.

The SSD enclosure is self-powered with an included 72W EPS power supply that powers the enclosure, the connected drives, and provides up to 15W of power to any downstream Thunderbolt 3 devices. A 2.3 ft. (70 cm) Thunderbolt 3 Certified host cable is also included, to connect the enclosure to your computer.

The enclosure is compatible with 80mm M.2 PCIe based (M-Key) single/double-sided SSDs. Create an external storage solution that utilizes the high-performance bandwidth available to your Thunderbolt 3 port, providing combined data transfer speeds of up to 40Gbps for up to four drives. The vented metal enclosure features thermal pads and a cooling fan to ensure your SSDs are operating at optimal temperatures.

A single 8 Gbps PCIe lane is dedicated to each connected drive. This ensures consistent read/write performance across the entire enclosure, regardless of individual drive activity. The enclosure also supports software RAID with storage management systems like Storage Spaces (Microsoft), RAID Assistant (macOS), or mdraid/mdadm (Linux). The support for software RAID, combined with exceptional drive performance, makes this the ideal enclosure for creative professionals working with large files such as high-resolution graphics, video, and CAD files.

This enclosure is Thunderbolt Certified to ensure an optimal user experience and compatibility when connected to a Thunderbolt 3 host device, such as a MacBook Pro 16, 13, Air, Lenovo ThinkPad X1 Carbon / T Series, Dell XPS / Latitude / Precision or HP EliteBook. The external drive enclosure is also forward compatible with Thunderbolt 4 devices (at Thunderbolt 3 performance).

The enclosure features a DisplayPort output port, enabling you to connect a DisplayPort monitor to your computer through the Thunderbolt 3 enclosure, with resolutions up to 4K 60Hz. The enclosure also features a downstream Thunderbolt 3 port for daisy chaining an additional TB3 device or connect an additional TB3 compatible display (up to 5K 60Hz).

M2E4BTB3 is backed by a 2-year StarTech.com warranty, with free lifetime North American based multilingual technical support.



Certifications, Reports and Compatibility



Applications

• Build a software RAID array with a storage management system like Storage Spaces (Microsoft), RAID Assistant (macOS), or mdraid/mdadm (Linux)

• Ideal for creative professionals working with large files such as high-resolution graphics, video, and CAD files

Features

• HIGH PERFORMANCE M.2 STORAGE VIA THUNDERBOLT 3 : Turn up to 4 PCIe 80mm M.2 SSDs (M-Key) into an external TB3 storage solution; Data transfer speeds up to 40Gbps; Downstream TB3 port; DisplayPort video output; Vented metal enclosure w/thermal pads & fan

• MAXIMIZE DRIVE SPEED: Connect up to four M.2 PCIe NVMe and/or AHCI drives with an 8Gbps PCIe lane dedicated to each SSD; Supports software RAID with storage management systems like Storage Spaces (Microsoft), RAID Assistant (macOS), mdraid/mdadm (Linux)

• FLEXIBLE PORT OPTIONS: DisplayPort output to connect to a display with resolutions up to 4K 60Hz; Downstream TB3 port to daisy chain additional TB3 devices or a compatible TB3 display (up to 5K 60Hz); Connected devices share bandwidth with connected SSDs

• THUNDERBOLT 3 CERTIFIED: Works w/TB3 & TB4 host devices like MacBook Pro 16/13/Air (Dual displays on Mac w/Intel & M1 Pro/Max Processor; Dual display not supported on M1 Mac), Lenovo ThinkPad X1 Carbon/T Series, Dell XPS/Latitude/Precision & HP EliteBook

• POWER ADAPTER & THUNDERBOLT 3 CABLE INCLUDED: Self powered with an included 72W EPS power supply that powers the enclosure, the connected drives and provides 15W to TB3 port; Includes 2.3 ft (70cm) TB3 certified passive cable; NOT COMPATIBLE WITH SATA SSD

Hardware		
	Warranty	2 Years
	Fan(s)	Yes
	Fans	1 - 40 mm



Interface	Thunderbolt 3
Bus Type	Thunderbolt 3
Number of Drives	4
Drive Size	80 mm - M.2 PCIe
Compatible Drive Types	M.2 (PCIe, NVMe, M-Key, NGFF)
	M.2 (PCIe, AHCI, M-Key, NGFF)
Drive Installation	Fixed
Supported Drive Height(s)	2280
Fan Bearing Type	Sleeve Bearing
Chipset ID	Intel - JHL6540
	TI - TPS65983B
Noise Level	34.5dB @ 50cm

Performance

	Noise Level	34.5dB @ 50cm
	Maximum Data Transfer Rate	40 Gbps
	Type and Rate	Thunderbolt 3 - 40 Gbit/s
	TRIM Support	Yes
	4Kn Support	Yes
	S.M.A.R.T. Support	Yes
	Type and Rate	NVMe (PCIe x1 Gen 3; 8Gbps)
	MTBF	50,000 Hours
Connector(s)		
	Drive Connectors	4 - M.2 (PCIe, M-Key, AHCI/NVMe, NGFF)
	Host Connectors	1 - Thunderbolt 3 USB-C (24-pin) (40Gbps)
	Other Interface(s)	1 - Thunderbolt 3 USB-C (24-pin) (40Gbps)
		1 20 pin DisplayPort Fomale

1 - 20 pin DisplayPort Female



Software		
	OS Compatibility	OS Independent; No Software or Drivers Required
Special Notes / Requirements		
	Note	Displays Supported: 2
		Maximum Digital Resolutions:
		Thunderbolt 3 - 5120 x 2880 at 60Hz
		DisplayPort - 4086x2160 at 60Hz
		- This M.2 enclosure does not provide full power delivery but will provide 15W of power, resulting in a slow charge to some laptops, such as MacBook Pro. When the dock is connected to your host laptop, a charging icon may appear on the screen. This is only sufficient to charge your laptop in sleep state, and charging will require an extended time period.
		 - 5K support can only be achieved using a Thunderbolt 3 5K monitor. DisplayPort 5K monitors will not work at 5K with this M.2 enclosure
		- A 4K-capable display is required to achieve 4K resolution (4K is also known as 4K x 2K).
		- Certain monitors may be limited to 4K at 30Hz when connecting through DisplayPort. These monitors include the following models: Dell P2715Q, Viewsonic VX2475Smhl-4K, Philips 288P6LJEB, LG 31MU97C-B, and Asus PB287Q (these models must be set to 4K at 30Hz).
		- When connecting a display to one of the Thunderbolt 3 USB-C ports, a USB-C video adapter may be required, depending on the input of your display.
		- Secondary Thunderbolt 3 port can also be used to connect USB 3.2 Gen 2 (10 Gbps) USB-Type C devices, such as USB 3.2 Gen 2 Hubs. Backwards compatible with USB 3.2 Gen 1 (5 Gbps), and USB 2.0.
		- Not Compatible with SATA Based M.2 Drives.
Indicators		
	LED Indicators	1 - Power (Illuminates when powered on)
		4 - Drive Activity (Flashes when drive activity is detected)
Power		
	Power Source	AC Adapter Included
	Input Voltage	110 ~ 120 AC



	Input Current	2 A
	Output Voltage	12V DC
	Output Current	6 A
	Center Tip Polarity	Positive
	Plug Type	Ν
	Power Consumption (In Watts)	72
Environmental		
	Operating Temperature	5C to 45C (41F to 113F)
	Storage Temperature	-20C to 50C (-4F to 122F)
	Humidity	20% ~ 80% RH
Physical Characteristics		
	Color	Black
	Material	Metal
	Product Length	4.7 in [12.0 cm]
	Product Width	6.3 in [16.0 cm]
	Product Height	0.8 in [2.0 cm]
	Weight of Product	1.3 lb [0.6 kg]
Packaging Information		
	Package Quantity	1
	Package Length	6.2 in [15.7 cm]
	Package Width	9.2 in [23.4 cm]
	Package Height	5.2 in [13.2 cm]
	Shipping (Package) Weight	1.4 lb [0.6 kg]

What's in the Box



Included in Package 1 - 4 Bay NVMe TB3 SSD Enclosure 1 - 2.3 ft (70 cm) Certified Thunderbolt 3 Passive Cable 1 - Manual 1 - Universal Power Adapter (NA/JP, UK, EU, ANZ)

*Product appearance and specifications are subject to change without notice.

