

ECM40

PCIe 4.0 x16 to 4 x M.2 NVMe SSD Adapter Card



*The motherboard or add-on card must support PCIe bifurcation, allowing the PCIe x16/x8 slot to be split into 4x4 or 4x2 configurations.

- Support 4 x NVMe M.2 SSD (M Key) via PCIe x16 interface
- Supports M.2 SSDs in 2230, 2242, 2260, and 2280 form factors
- 40mm x 40mm dual ball bearing cooling fan
- Cooling fan On/Off power switch
- Data center-grade reliability
- Support USAP and TRIM

Model No.

SST-ECM40

Controller-IC

TPS56221DQPT

Interface

PCI-Express x 16

Number of Drives

4

Module Key

PCIe x 4 NVMe-based M key

Fan

Speed 7000 RPM $\pm 10\%$
Dimension 40mm(W) x 10mm(H) x 40mm(D)
Bearing Dual ball bearing

Thermal Pad

Thickness 1mm
operating temperature -25°C ~70°C
Thermal conductivity 3W/m.k
Quantity 4
Dimension 22mm (W) x 1mm (H) x 70mm (D)
 0.87" (W) x 0.04" (H) x 2.76" (D)

Dimension

147.74mm (W) x 21.59mm (H) x 181mm (D)
 5.82" (W) x 0.85" (H) x 7.13" (D)

Color

Black

PCB Level

UL 94-V0

SSD Interface

M.2 (NGFF) M Key

Support Length of M.2 SSD

22x30mm, 22x42mm, 22x60mm, 22x80mm

LED indicator

The indicator lights will have two modes :
 steady and blinking blue light, based on the signals from the motherboard and SSD.

Heatsink

Material Aluminum
Dimension 109.3mm (W) x 14.2mm (H) x 168mm (D)
 4.3" (W) x 0.56" (H) x 6.61" (D)

Environment

Operating Temperature 5°C~55°C
Operating Humidity 20%RH~80%RH
Storage Temperature -20°C~50°C
Storage Humidity 20%RH~80%RH

Net weight

501g



High-Speed Expansion

The ECM40 can accommodate a total of 4 NVMe M.2 SSDs (M Key), operating via a PCIe x16 lane transfer rate.

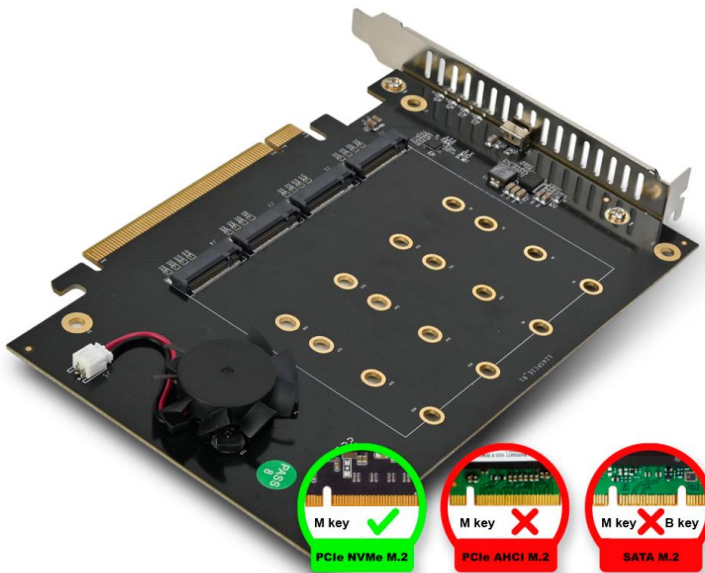
CrystalDiskMark 8.0.4 x64 [Admin]			
檔案內 設定(S) 設定檔內 作業主權(T) 說明(H) 語言(Language)			
All	5	1GiB	D: 1% (11/1863GiB)
		Read (MB/s)	Write (MB/s)
SEQ1M Q8T1		7351.64	6845.57
SEQ1M Q1T1		4705.00	5774.12
RND4K Q32T1		718.94	388.56
RND4K Q1T1		84.82	262.70

Test environment
CPU: AMD R9 5900X
MB: ASRock X570 Pro4
DRAM: Micron Crucial DDR4 2133/8G(4G*2)
SSD: Kingston Fury 2T



Supports Various Form Factor M.2 SSDs

Each M.2 SSD slot can accommodate 2230mm, 2242mm, 2260mm, or 2280mm.



Exceptional Cooling Efficiency

Running 4 M.2 SSDs can generate significant heat during operation, so an integrated 40mm dual ball-bearing fan, ensuring each drive maintains optimal operating temperatures.

