

## TOOL-LESS M.2 NVMe SERIES

PCIe 3.0/ 4.0 M.2 in 2230 2242 2260 2280

### M.2 NVMe SSD Mobile Rack

Support PCIe3.0 / PCIe4.0

Model	RW1M2-PCIeX4
SSD Type	1 x M.2 NVMe SSD(PCIe 3.0/4.0)
SSD Spec	M Key in 2230 / 2242 / 2260 / 2280
LED	Power: Green / Access: Orange
M.2 SSD Installation	Tool-less installation or Built-in Screw installation
Security	Tri-angle Keylock
PCB	Optimized layout for PCIe4.0
Dimension	155.9(L) x 120.8(W) x 19mm(H)

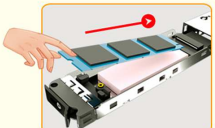


RW1M2-PCIeX4

**TOOL-LESS**

The easiest way to enjoy the very high PCIe3.0 or PCIe 4.0 performance via the mainboard PCIe Bus (x4, x8 or x16).

### Tool-Less Installation of M.2 NVMe SSD



Insert the M.2 SSD at 45° angle



M Key & Connector matches in the same way



Push the front angle hook and press downward the M.2 SSD



The installation of M.2 SSD is finished easily.



A fastened screw is also provided for some extreme anti-vibration concern



### The Latest PCIe4.0 M.2 NVMe Mobile Rack

Support 1 x PCIe 3.0 / PCIe 4.0 M.2 NVMe SSD with M key (PCIe 3.0/4.0 x4) or B+M Key (PCIe 3.0 x2) and in length of 2230 / 2242 / 2260 / 2280.

### Security Tri-angle Keylock

The front Tri-angle Metal Keylock help you lock the bezel and protect your confidential data.



### Made by Stainless & Aluminum

Stainless material frame, aluminum heat sink, aluminum bezel & stainless tray with anti-vibration springs --- All make it solid and reliable to swap in/out the installed M.2 NVMe SSD.

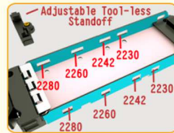
### LED Indication

The high brightness of LED light is directed to the front, easy to know the status of M.2 SSD from the outside. (Better visual solution, comparing to the M.2 installation on the mainboard)

Power\_ON : Solid Green / Access : Orange blinking / No indication when M.2 NVMe SSD is not installed



### Adjustable Tool-Less Standoff, Easy for 2230, 2242, 2260, 2280 Installation



Check the size of M.2 SSD for the corresponding square holes



Insert the left bump into the left square hole at 45° angle, press side angle hook, the right bump is fixed



Make sure the both bumps are all fixed



### EMI Grounding Design

- \* The stainless spring can conduct the EMI to the frame and grounded with the case to avoid the static interference.
- \* In the meantime, the spring can also reduce the vibration during the operation and/or the transportation on the set of the device.

### Full Height & Low-Profile PCIe Slot Bracket

- \* Equipped with 1 x full height and also with 1 x half-height PCIe Slot bracket.
- \* easy installation on the desktop, server, Mini-ITX ...etc.



### PCB Upgrade, New Optimized Design Much Faster and More Stable Transmission

### + Much Faster +

### New Layout, Tested Performance Upto 7200MBps

Tested(Read):	7200MBps(57.3Gbps)
Tested(Write):	6800MBps(53.9Gbps)
PCIe4.0	64Gbps
PCIe3.0	
SATA	

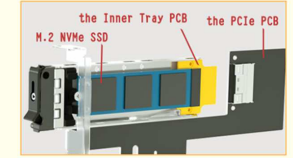
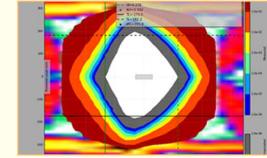
- \* New optimized PCB layout for PCIe4.0, supports PCIe3.0 or 4.0 M.2 NVMe SSD.
- \* We tested the new PCB and the performance is reading: 7163MBps / writing: 6732MBps, almost reaching the limit speed of PCIe4.0 M.2 SSD.

\*The actual performance may differ from Motherboard and M.2 NVMe SSD, please contact us for details

\*Testing detail:

Motherboard: GigaByte M272-HB0 V1.1; CPU: AMD EPYC 7502 32-Core Processor; test software: Iometer; SSD: Seagate FireCuda 530 PCIe4.0 SSD(2TB) ; System: Microsoft Windows Server 2019

### + More Stable +



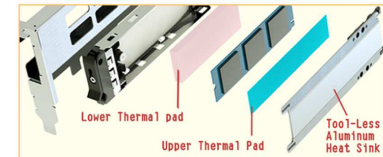
### No Interference & Signal Leakage

The diagram shows the Eye Pattern Test is fully passed under the PCIe 3.0 and PCIe 4.0 environment without error from ISI. \*Different test conditions lead to various results. contact with us for detail

### Inner Tray PCB, Protect M.2 SSD

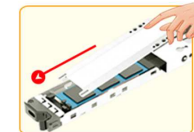
The gold fingers of M.2 SSD are precise and not sustained for multiple insertions. So, we use the Inner Tray PCB to insert with the PCIe PCB to protect and reduce the worn-out of the M.2 NVMe SSD.

### Best Heat Dissipation



- \* The M.2 NVMe SSD is covered by the Upper Thermal Pad and the Lower Thermal Pad, transferring the heat quickly from M.2 SSD to the Tool-less Aluminum Heat Sink and the Stainless Tray. This new design controls temperature by the metal heat conductivity and maintains the performance.
- \* Other design such as Air ventilated holes on the stainless frame, stainless tray and aluminum bezel are also for the best air-vented heat dissipation.

### Tool-Less Aluminum Heat Sink



Insert the heat sink at 45° angle



Press down the rear side till the latch is fastened, the installation is finished



Press the plastic holders and release the heat sink

### M.2 NVMe Hot-Swap Function depends on Mainboard

GP-101M2-Br connects the M.2 via PCIe bus, and the NVMe Hot-Swap function is determined by the Motherboard.

If your system environment does not support NVMe hot-plugging, you must turn off the power of the hardware system before you pull out the M.2 SSD to avoid the unexpected system problems.

容許公差: TOLERANCES:	.XXX ±.025 .XX ±.100 .X ±.250
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投影法: PROJECTION:	第三角法
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材料規格: MATERIAL:	
核准者: APPROVE BY:	Robert Roan
審核者: CHECK BY:	Andrew Wu
繪圖者: DRAW BY:	Tammy Lin

日期:	February 21, 2023
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日期:	February 21, 2023

品名: MODEL NO:	1 Full/Low profile X4 slot to 1 x M.2 SSD Removable Cage M.2 NVMe 64G
料號: PART NO:	RW1M2-PCIeX4
圖號: DRAW NO:	檔號: FILE NO:
單位: UNITS:	mm
版次: REV. NO:	0.0
規格: SPEC.:	檔號: FILE NO:
編號: SHEET:	OF

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