

[How To] Upgrade M.2 PCIe SSD on MSI notebook and create RAID volume

This document applies to MSI notebooks with M.2 PCIe Gen 4x4 SSD that support RAID technology.

Starting from TGL-H processor, laptops are able to support M.2 PCle Gen 4x4 SSD. This guide provides guidance to check the upgradability of SSD, the location of different M.2 PCle SSD slots (Gen3x4 or Gen4x4) together with how to create a RAID volume for the installed SSD.

*Note:

- Contact MSI local service center or support team to get the SSD upgrade service or information to have the guaranteed performance on the upgrade.
- An unsymmetrical RAID volume (different brands, capacity, or interfaces like PCIe Gen3 & Gen4) cannot be guaranteed, and it's strongly not recommended doing so as such combination in RAID cannot be guaranteed for the stability nor the compatibility for the system.

A. Confirm the Upgradability

To upgrade the M.2 PCIe SSD for MSI notebooks, confirm the upgrade option for the related notebook model.

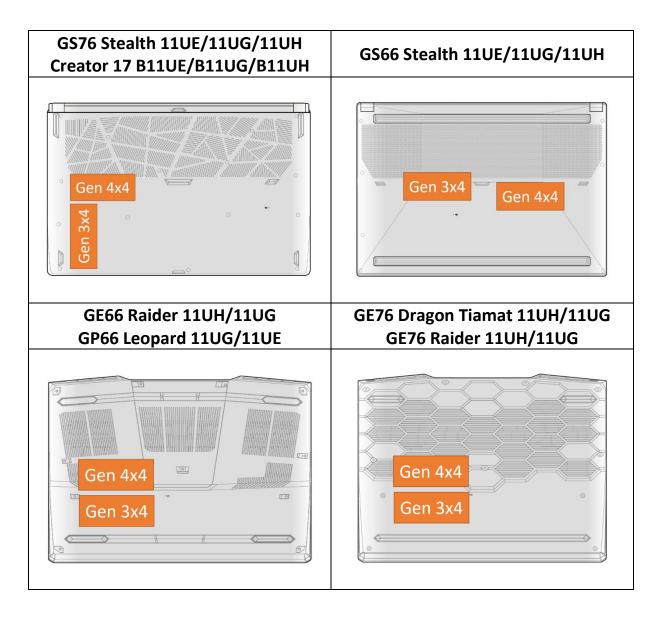
MSI notebooks listed below support RAID technology and are equipped with both Gen 3x4 and Gen 4x4 M.2 PCIe SSD slots. (Due to the compatibility concern, models below is suggested to run without RAID.)

Notebook	Graphics	Chipset	M.2 SSD Max Slot(s)	M.2 SSD Interface
Creator 17 B11UE	RTX™ 3060	Intel® HM570	2xM.2 Socket for M Key Type 2280	1x M.2 SSD slot (NVMe PCIe Gen3) + 1x M.2 SSD slot (NVMe PCIe Gen4)
Creator 17 B11UG	RTX™ 3070			
Creator 17 B11UH	RTX™ 3080			
GS76 Stealth 11UE	RTX™ 3060	Intel® HM570	2xM.2 Socket for M Key Type 2280	1x M.2 SSD slot (NVMe PCIe Gen3) + 1x M.2 SSD slot (NVMe PCIe Gen4)
GS76 Stealth 11UG	RTX™ 3070			
GS76 Stealth 11UH	RTX™ 3080			
GS66 Stealth 11UE	RTX™ 3060		2xM.2 Socket for M Key Type 2280	1x M.2 SSD slot (NVMe PCIe Gen3) + 1x M.2 SSD slot (NVMe PCIe Gen4)
GS66 Stealth 11UG	RTX™ 3070			
GS66 Stealth 11UH	RTX™ 3080			
GP66 Leopard 11UG	RTX™ 3070	Intel® HM570	2xM.2 Socket for M Key Type 2280	1x M.2 SSD slot (NVMe PCle Gen3) +
GP66 Leopard 11UE	RTX™ 3060			1x M.2 SSD slot (NVMe PCIe Gen4)
GE66 Raider 11UH	RTX™ 3080	Intel® HM570	2xM.2 Socket for M Key Type 2280	1x M.2 SSD slot (NVMe PCle Gen3) +
GE66 Raider 11UG	RTX™ 3070			1x M.2 SSD slot (NVMe PCIe Gen4)
GE76 Dragon Tiamat 11UH	RTX™ 3080	Intel® HM570	2xM.2 Socket for M Key Type 2280	1x M.2 SSD slot (NVMe PCle Gen3) +
GE76 Dragon Tiamat 11UG	RTX™ 3070			1x M.2 SSD slot (NVMe PCIe Gen4)
GE76 Raider 11UH	RTX™ 3080	Intel® HM570	2xM.2 Socket for M Key Type 2280	1x M.2 SSD slot (NVMe PCle Gen3) +
GE76 Raider 11UG	RTX™ 3070			1x M.2 SSD slot (NVMe PCIe Gen4)

B. Install the compatible SSD to the related SSD slot.

Refer to the images below showing where the PCIe Gen 3x4 and PCIe Gen 4x4 M.2 SSD slots are located respectively on the motherboard.





- C. Create RAID volume in BIOS menu and install the system onto the SSD and load the VMD drivers during the system installation process.
 - [How To] Set Up RAID in BIOS
 - [How To] Load IRST/VMD driver during Windows installation