

HighPoint SSD7540 Compatibility List

2024/12/26

This document was designed to serve as general reference for compatibility between the HighPoint SSD7540 and specific motherboards/SSDs described herein.

The motherboards included in this document are recommended for HighPoint SSD7540 x16 PCIE 4.0 configurations. Specific motherboards may have special requirements or restrictions. Please refer to the motherboard's PCIe Expansion slot settings.

Note: *Bifurcation is not required. HighPoint SSD series NVMe RAID controllers can be used with "Non-Bifurcation" motherboards.*

Motherboard Compatibility List
Notes:

The recommended PCIe slot we filled in are based on the description of the motherboard manual.

SSD7540 does not support Lenovo P620.

Manufacture	Product Name	Chipset	Recommended PCIe slot #	Data RAID support	Boot RAID support
ASUS	PRIME X299-DELUXE	Intel X299	PCIEX16_1, PCIEX16_3	✓	✓
ASUS	ROG STRIX X299-E	Intel X299	PCIEX16/X8_1, PCIEX16/X8_2	✓	✓
ASUS	TUF X299 MARK 1	Intel X299	PCIEX16_1, PCIEX16_2	✓	✓
ASUS	PRIME X299-A	Intel X299	PCIEX16_1, PCIEX16_2	✓	✓
ASUS	TUF X299 MARK 2	Intel X299	PCIEX16_1, PCIEX16_2	✓	✓
ASUS	WS X299 SAGE	Intel X299	PCIEX16_1, PCIEX16_3 PCIEX16_5, PCIEX16_7	✓	✓
ASUS	PRIME Z390 SERIES	Intel Z390	PCIEX16_1	✓	✓
ASUS	ROG ZENITH EXTREME	AMD X399	PCIEX16_1, PCIEX16_3	✓	✓
ASUS	PRIME X399-A	AMD X399	PCIEX16_1, PCIEX16_3	✓	✓
ASUS	ROG STRIX X399-E GAMING	AMD X399	PCIEX16_1, PCIEX16_3	✓	✓
ASUS	PRIME X570-P	AMD X570	PCIEX16_1	✓	✓
ASUS	PRIME X570-PRO	AMD X570	PCIEX16_1	✓	✓
ASUS	Pro WS X570-ACE	AMD X570	PCIEX16_1	✓	✓
ASUS	ROG Crosshair VIII Formula	AMD X570	PCIEX16_1	✓	✓
ASUS	ROG Crosshair VIII Hero (WI-FI)	AMD X570	PCIEX16_1	✓	✓
ASUS	ROG Crosshair VIII Impact	AMD X570	PCIEX16_1	✓	✓
ASUS	ROG Strix X570-E Gaming	AMD X570	PCIEX16_1	✓	✓
ASUS	ROG Strix X570-F Gaming	AMD X570	PCIEX16_1	✓	✓
ASUS	ROG Strix X570-I Gaming	AMD X570	PCIEX16_1	✓	✓
ASUS	TUF GAMING X570-PLUS	AMD X570	PCIEX16_1	✓	✓
ASUS	TUF GAMING X570-PLUS (WI-FI)	AMD X570	PCIEX16_1	✓	✓
ASUS	PRIME TRX40-PRO	AMD TRX40	PCIEX16_1, PCIEX16_2, PCIEX16_3	✓	✓
ASUS	PRIME TRX40-PRO S	AMD TRX40	PCIEX16_1, PCIEX16_2, PCIEX16_3	✓	✓
ASUS	ROG Strix TRX40-E Gaming	AMD TRX40	PCIEX16_1, PCIEX16_2, PCIEX16_3	✓	✓
ASUS	ROG STRIX TRX40-XE GAMING	AMD TRX40	PCIEX16_1, PCIEX16_2, PCIEX16_3	✓	✓
ASUS	Pro WS TRX50-SAGE WIFI	AMD TRX50	PCIEX16(G5)_1 PCIEX16(G5)_2 PCIEX16(G4)_2	✓	✓
ASUS	Pro WS WRX80E-SAGE SE WIFI	AMD WRX80	PCIE4.0/3.0 X16_1 PCIE4.0/3.0 X16_2 PCIE4.0/3.0 X16_3 PCIE4.0/3.0 X16_4 PCIE4.0/3.0 X16_5 PCIE4.0/3.0 X16_6 PCIE4.0/3.0 X16_7	✓	✓
ASUS	Pro WS WRX90E-SAGE SE	AMD WRX90	PCIE X16(G5)_1 PCIE X16(G5)_2 PCIE X16(G5)_3 PCIE X16(G5)_4 PCIE X16(G5)_5 PCIE X16(G5)_6 PCIE X16(G5)_7	✓	✓
ASUS	ROG MAXIMUS Z690 HERO	Intel Z690	PCIEX16(G5)_1	✓	✓
ASUS	ASUS Pro WS W790E-SAGE SE	Intel W790	PCIE X16(G5)_1 PCIE X16(G5)_2 PCIE X16(G5)_3 PCIE X16(G5)_4 PCIE X16(G5)_5 PCIE X16(G5)_7	✓	✓
ASUS	MAXIMUS Z790 DARK HERO	Intel Z790	PCIEX16(G5)_1	✓	✓
ASUS	Prime X870-P WiFi	AMD X870	PCIEX16(G5)	✓	✓
ASUS	ProArt X670E-CREATOR WIFI	AMD X670	PXIEX16_1 PCIEX16_2 PCIEX16_3	✓	✓
ASRock	Fatal1ty X299 Gaming K6	Intel X299	PCIE1, PCIE3	✓	✓
ASRock	Fatal1ty X299 Professional Gaming i9	Intel X299	PCIE1, PCIE3	✓	✓
ASRock	X299 Killer SLI/ac	Intel X299	PCIE1, PCIE3	✓	✓
ASRock	X299 Taiichi	Intel X299	PCIE1, PCIE3	✓	✓

ASRock	X99 WS	Intel X99	PCIE1, PCIE4	✓	✓
ASRock	Z790 PG Lightning	Intel Z790	PCIE1	✓	✓
ASRock	ROMED8-2T	AMD EPYC 7002/7003 Series	PCIE1, PCIE2, PCIE3, PCIE4, PCIE5, PCIE6, PCIE7	✓	✓
ASRock	WRX90 WS EVO	AMD WRX90	PCIE1 PCIE2 PCIE3 PCIE4 PCIE5 PCIE7	✓	✓
Dell	Precision T7920 Tower	Intel C621	PCIe3x16 75W (slot2) PCIe3x16 75W (slot4)	✓	✓
Dell	Precision 7960 Tower	Intel W790	PCIE5X16(SLOT1) PCIE4X16(SLOT4) PCIE5X16(SLOT5) PCIE4X16(SLOT8)	✓	✓
GIGABYTE	Z790M AORUS ELITE AX	Intel Z790	PCIEX16	✓	✓
GIGABYTE	X299 AORUS Gaming 9	Intel X299	PCIEX16_1, PCIEX16_2	✓	✓
GIGABYTE	X299 AORUS Gaming 7	Intel X299	PCIEX16_1, PCIEX16_2	✓	✓
GIGABYTE	X299 AORUS Gaming 3	Intel X299	PCIEX16_1, PCIEX16_2	✓	✓
GIGABYTE	X299 UD4	Intel X299	PCIEX16_1, PCIEX16_2	✓	✓
GIGABYTE	GA-X299 DESIGNARE EX	Intel X299	PCIEX16_1, PCIEX16_2	✓	✓
GIGABYTE	GA-Z390 AORUS XTREME	Intel Z390	PCIEX16	✓	✓
GIGABYTE	X399 AORUS PRO	AMD X399	PCIEx16_1, PCIEX16_2	✓	✓
GIGABYTE	X399 AORUS XTREME	AMD X399	PCIEx16_1, PCIEX16_2	✓	✓
GIGABYTE	X399 DESIGNARE EX	AMD X399	PCIEx16_1, PCIEX16_2	✓	✓
GIGABYTE	X399 AORUS Gaming 7	AMD X399	PCIEx16_1, PCIEX16_2	✓	✓
GIGABYTE	X570 AORUS MASTER	AMD X570	PCIEX16	✓	✓
GIGABYTE	X570 AORUS ELITE WIFI	AMD X570	PCIEX16	✓	✓
GIGABYTE	X570 AORUS XTREME	AMD X570	PCIEX16	✓	✓
GIGABYTE	X570 AORUS PRO WIFI	AMD X570	PCIEX16	✓	✓
GIGABYTE	X570 I AORUS PRO WIFI	AMD X570	PCIEX16	✓	✓
GIGABYTE	X570 GAMING X	AMD X570	PCIEX16	✓	✓
GIGABYTE	X570 UD	AMD X570	PCIEX16	✓	✓
HP	Z6 G5 A	AMD Pro 695	SLOT1 PCIe5X16 SLOT2 PCIe5X16 SLOT4 PCIe5X16 SLOT5 PCIe5X16 SLOT6 PCIe4X16	✓	✓
MSI	X299 GAMING M7 ACK	Intel X299	PCI_E1, PCI_E4	✓	✗
MSI	X299 GAMING PRO CARBON AC	Intel X299	PCI_E1, PCI_E4	✓	✗
MSI	X299 GAMING PRO CARBON	Intel X299	PCI_E1, PCI_E4	✓	✗
MSI	X299 TOMAHAWK ARCTIC	Intel X299	PCI_E1, PCI_E4	✓	✗
MSI	X299 TOMAHAWK AC	Intel X299	PCI_E1, PCI_E4	✓	✗
MSI	X299 TOMAHAWK	Intel X299	PCI_E1, PCI_E4	✓	✗
MSI	X299 SLI PLUS	Intel X299	PCI_E1, PCI_E4	✓	✗
MSI	X299 RAIDER	Intel X299	PCI_E1, PCI_E3	✓	✗
Supermicro	X11DPL-i	Intel C621	CPU1 SLOT5 PCI-E 3.0X16 CPU2 SLOT3 PCI-E 3.0X16	✓	✓
Supermicro	X11DPi-N	Intel C621	CPU1 Slot2 PCI-E 3.0X16 CPU2 Slot4 PCI-E 3.0X16 CPU2 Slot5 PCI-E 3.0X16 CPU2 Slot6 PCI-E 3.0X16	✓	✓
Supermicro	X11DPi-NT	Intel C622	CPU1 Slot2 PCI-E 3.0X16 CPU2 Slot4 PCI-E 3.0X16 CPU2 Slot5 PCI-E 3.0X16 CPU2 Slot6 PCI-E 3.0X16	✓	✓
Supermicro	X11DAi-N	Intel C621	CPU1 SLOT1 PCI-E 3.0X16 CPU1 SLOT2 PCI-E 3.0X16 CPU2 SLOT3 PCI-E 3.0X16 CPU2 SLOT5 PCI-E 3.0X16	✓	✓
Supermicro	X11DPX-T	Intel C621	JPCIE2(CPU1 SLOT2 PCI-E 3.0X16) JPCIE4(CPU1 SLOT4 PCI-E 3.0X16) JPCIE6(CPU2 SLOT6 PCI-E 3.0X16) JPCIE8(CPU2 SLOT8 PCI-E 3.0X16)	✓	✓
Supermicro	X11DPH-TQ	Intel C627	CPU2 SLOT2 PCI-E 3.0X16	✓	✓

			CPU2 SLOT4 PCI-E 3.0X16 CPU2 SLOT5 PCI-E 3.0X16		
Supermicro	X11DPH-I	Intel C621	CPU2 SLOT2 PCI-E 3.0X16 CPU2 SLOT4 PCI-E 3.0X16 CPU2 SLOT5 PCI-E 3.0X16	✓	✓
Supermicro	X11DPH-T	Intel C622	CPU2 SLOT2 PCI-E 3.0X16 CPU2 SLOT4 PCI-E 3.0X16 CPU2 SLOT5 PCI-E 3.0X16	✓	✓
Supermicro	X11DAC	Intel C621	CPU1 SLOT1 PCI-E 3.0X16 CPU2 SLOT3 PCI-E 3.0X16 CPU2 SLOT5 PCI-E 3.0X16	✓	✓
Supermicro	X11SPi-TF	Intel C622	CPU SLOT4 PCI-E 3.0X16 CPU SLOT6 PCI-E 3.0X16	✓	✓
Supermicro	X11SPM-TPF	Intel C622	CPU1 SLOT4 PCI-E 3.0X16 CPU1 SLOT6 PCI-E 3.0X16	✓	✓
Supermicro	X12DPi-N6	Intel C621A	CPU1 SLOT2 PCI-E 4.0 x16 CPU1 SLOT3 PCI-E 4.0 x16 CPU2 SLOT4 PCI-E 4.0 x16 CPU2 SLOT5 PCI-E 4.0 x16	✓	✓
Supermicro	X12DPi-NT6	Intel C621A	CPU1 SLOT2 PCI-E 4.0 x16 CPU1 SLOT3 PCI-E 4.0 x16 CPU2 SLOT4 PCI-E 4.0 x16 CPU2 SLOT5 PCI-E 4.0 x16	✓	✓
Supermicro	X12DPL-i6	Intel C621A	CPU2 SLOT1 PCI-E 4.0 x16 CPU1 SLOT2 PCI-E 4.0 x16 CPU1 SLOT3 PCI-E 4.0 x16 CPU1 SLOT4 PCI-E 4.0 x16	✓	✓
Supermicro	X12DPL-NT6	Intel C621A	CPU2 SLOT1 PCI-E 4.0 x16 CPU1 SLOT2 PCI-E 4.0 x16 CPU1 SLOT3 PCI-E 4.0 x16 CPU1 SLOT4 PCI-E 4.0 x16	✓	✓
Supermicro	H11DSi-NT	AMD EPYC 7001/7002 Series	CPU1 SLOT2 PCI-E 3.0 x16 CPU1 SLOT4 PCI-E 3.0 x16	✓	✓
Supermicro	H11DSi	AMD EPYC 7001/7002 Series	CPU1 SLOT2 PCI-E 3.0 x16 CPU1 SLOT4 PCI-E 3.0 x16	✓	✓
Supermicro	H11SSL-NC	AMD EPYC 7001/7002 Series	CPU SLOT2 PCI-E 3.0 x16 CPU SLOT4 PCI-E 3.0 x16 CPU SLOT6 PCI-E 3.0 x16	✓	✓
Supermicro	H11SSL-i	AMD EPYC 7001/7002 Series	CPU SLOT2 PCI-E 3.0 x16 CPU SLOT4 PCI-E 3.0 x16 CPU SLOT6 PCI-E 3.0 x16	✓	✓
Supermicro	H11SSL-C	AMD EPYC 7001/7002 Series	CPU SLOT2 PCI-E 3.0 x16 CPU SLOT4 PCI-E 3.0 x16 CPU SLOT6 PCI-E 3.0 x16	✓	✓
Supermicro	H12SSL-i	AMD EPYC 7002/7003 Series	CPU SLOT1 PCI-E 4.0 X16 CPU SLOT3 PCI-E 4.0 X16 CPU SLOT5 PCI-E 4.0 X16 CPU SLOT6 PCI-E 4.0 X16 CPU SLOT7 PCI-E 4.0 X16	✓	✓
Supermicro	H12SSL-NT	AMD EPYC 7002/7003 Series	CPU SLOT1 PCI-E 4.0 X16 CPU SLOT3 PCI-E 4.0 X16 CPU SLOT5 PCI-E 4.0 X16 CPU SLOT6 PCI-E 4.0 X16 CPU SLOT7 PCI-E 4.0 X16	✓	✓
Supermicro	H12SSL-C	AMD EPYC 7002/7003 Series	CPU SLOT1 PCI-E 4.0 X16 CPU SLOT3 PCI-E 4.0 X16 CPU SLOT5 PCI-E 4.0 X16 CPU SLOT6 PCI-E 4.0 X16 CPU SLOT7 PCI-E 4.0 X16	✓	✓
Supermicro	H12SSL-CT	AMD EPYC 7002/7003 Series	CPU SLOT1 PCI-E 4.0 X16 CPU SLOT3 PCI-E 4.0 X16 CPU SLOT5 PCI-E 4.0 X16 CPU SLOT6 PCI-E 4.0 X16 CPU SLOT7 PCI-E 4.0 X16	✓	✓
Supermicro	X13SEI-TF	Intel C741	JPCIE4 CPU SLOT4 PCIe 5.0 X16 JPCIE6 CPU SLOT6 PCIe 5.0 X16	✓	✓
Supermicro	SYS-2025HS-TNR	AMD EPYC 9004	Slot1 PCIe 5.0X16 Slot3 PCIe 5.0X16	✓	✓

			Slot5 PCIe 5.0X16 Slot7 PCIe 5.0X16 Slot8 PCIe 5.0X16		
Supermicro	SYS-741GE-TNRT	Intel C741	Slot2 PCIe 5.0X16 Slot4 PCIe 5.0X16 Slot5 PCIe 5.0X16 Slot7 PCIe 5.0X16 Slot9 PCIe 5.0X16 Slot10 PCIe 5.0X16 Slot11 PCIe 5.0X16	✓	✓

SSD Compatibility List

Manufacture	Model/Series	Form Factor	Capacity	Remark
PCIe Gen5 NVMe				
PHISON	PS5031-E31T	M.2 2280	1TB-8TB	
PHISON	PS5026-E26	M.2 2280	1000GB, 2000GB, 4000GB	
PCIe Gen4 NVMe				
Seagate	FireCuda520 SSD	M.2 2280	500GB, 1TB, 2TB	NVMe based on the Phison chip does not support the workstation motherboard and is recommended to be used on the server motherboard.
Seagate	FireCuda530 SSD	M.2 2280	500GB, 1TB, 2TB, 4TB	NVMe based on the Phison chip does not support the workstation motherboard and is recommended to be used on the server motherboard.
Sabrent	Rocket NVMe 4.0	M.2 2280	500GB, 1TB, 2TB	NVMe based on the Phison chip does not support the workstation motherboard and is recommended to be used on the server motherboard.
Sabrent	Rocket 4 PLUS	M.2 2280	500GB, 1TB, 2TB, 4TB, 8TB	
Samsung	980 PRO	M.2 2280	250GB, 500GB, 1TB, 2TB	
Samsung	990 EVO	M.2 2280	1TB, 2TB	
Samsung	990 PRO	M.2 2280	1TB, 2TB	
KIOXIA	XG8	M.2 2280	512GB, 1024GB, 2048GB, 4096GB	
Phison	PS5018-E18	M.2 2280 Double Side	2000GB, 2048GB, 4000GB, 4096GB, 8000GB, 8192GB	
Phison	PS5027-E27T	M.2 2280	512GB, 500GB, 1024GB, 1000GB, 2048GB, 2000 GB	
Western Digital	WD_BLACK SN850X	M.2 2280	1TB, 2TB, 4TB, 8TB	
PCIe Gen3 NVMe				
Samsung	970 EVO Plus	M.2 2280	250GB, 500GB, 1TB, 2TB	
Samsung	970 EVO	M.2 2280	250GB, 500GB, 1TB, 2TB	
Samsung	970 PRO	M.2 2280	512GB, 1TB	
KIOXIA	XG5	M.2 2280	256GB, 512GB, 1TB	
KIOXIA	XG6	M.2 2280	256GB, 512GB, 1024GB	
Western Digital	WD Blue SN500	M.2 2280	250GB,500GB	
Western Digital	WD Black SN750	M.2 2280	250GB,500GB,1TB,2TB	
HP	EX950	M.2 2280	512GB,1TB,2TB	

If you have any questions about NVMe compatibility, please contact us at Sales@highpoint-tech.com