

HighPoint R7602L Compatibility List

2026/6/9

This document was designed to serve as general reference for compatibility between the HighPoint R7602L Gen5 NVMe RAID AIC and specific motherboards's described herein.

The motherboards included in this document are recommended for HighPoint R7602L x16 PCIE5.0 configurations. Specific motherboards may have special requirements or restrictions. Please refer to the motherboard's PCIe Expansion slot settings.

Note: *Bifurcation is required. The motherboard must be configured to PCIe Bifurcation mode to work with the R7602L.*

Motherboard Compatibility List

Notes:

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

This product supports a maximum of 2 disks, with an M.2 SSD quantity of 2.

R7602L only supports x16 slots.

● Intel Chipset

Intel Chipset	Model & CPU	Recommended PCIe Slot	PCIe bifurcation in PCIe slot
			M.2 SSD quantity
Intel C621A	Model: Supermicro X12DPi-N6 CPU: Intel® Xeon® Silver 4314*2	CPU1 SLOT2 PCIe4.0x16	2(x4+x4+x4+x4)
		CPU1 SLOT3 PCIe4.0x16	2(x4+x4+x4+x4)
		CPU2 SLOT4 PCIe4.0x16	2(x4+x4+x4+x4)
		CPU2 SLOT5 PCIe4.0x16	2(x4+x4+x4+x4)
Intel Z890	Model: ASUS PRIME Z890-P WIFI CPU: Intel Core Ultra 9 285K	PCIEX16(G5)	2(x8+x4+x4)
	Model: GIGABYTE Z890M AORUS ELITE WIFI7 CPU: Intel Core Ultra 9 285K	PCIEX16	2(x8+x4+x4)
Intel W790	Model: ASUS Pro WS W790E-SAGE SE CPU: Intel Xeon w5-3535X	PCIEX16(G5)_1	2(x4+x4+x4+x4)
		PCIEX16(G5)_2	2(x4+x4+x4+x4)
		PCIEX16(G5)_3	2(x4+x4+x4+x4)
		PCIEX16(G5)_4	2(x4+x4+x4+x4)
		PCIEX16(G5)_5	2(x4+x4+x4+x4)
		PCIEX16(G5)_7	2(x4+x4+x4+x4)
Intel C741	Model: Supermicro X13SEI-TF	CPU SLOT4 PCIe5.0X16	2(x4+x4+x4+x4)

	CPU: Intel Xeon silver 4510 Processor	CPU SLOT6 PCIe5.0X16	2(x4+x4+x4+x4)
	Model: Supermicro SYS-741GE-TNRT CPU: Intel Xeon silver 4410Y	P1 Slot2 PCIe 5.0x16	2(x4+x4+x4+x4)
		P1 Slot4 PCIe 5.0x16	2(x4+x4+x4+x4)
		P2 Slot5 PCIe 5.0x16	2(x4+x4+x4+x4)
		P2 Slot7 PCIe 5.0x16	2(x4+x4+x4+x4)
		P2 Slot9 PCIe 5.0x16	2(x4+x4+x4+x4)
		P1 Slot10 PCIe 5.0x16	2(x4+x4+x4+x4)
		P2 Slot11 PCIe 5.0x16	2(x4+x4+x4+x4)

● AMD Chipset

AMD Chipset	Model	Recommended PCIe Slot	PCIe bifurcation in PCIe slot
			M.2 SSD quantity
AMD EPYC 7002/7003 series	Model: Supermicro H12SSL-i CPU: AMD EPYC™ 7282	CPU SLOT1 PCI-E 4.0X16	2(x4+x4+x4+x4)
		CPU SLOT3 PCI-E 4.0X16	2(x4+x4+x4+x4)
		CPU SLOT5 PCI-E 4.0X16	2(x4+x4+x4+x4)
		CPU SLOT6 PCI-E 4.0X16	2(x4+x4+x4+x4)
		CPU SLOT7 PCI-E 4.0X16	2(x4+x4+x4+x4)
	Model: ASROCK ROMED8-2T CPU: AMD EPYC™ 7282	PCIE1	2(x4+x4+x4+x4)
		PCIE2	2(x4+x4+x4+x4)
		PCIE3	2(x4+x4+x4+x4)
		PCIE4	2(x4+x4+x4+x4)
		PCIE5	2(x4+x4+x4+x4)
		PCIE6	2(x4+x4+x4+x4)
		PCIE7	2(x4+x4+x4+x4)

AMD Pro 695	Model: HP Z6 G5 A CPU: AMD Ryzen™ Threadripper Pro 7945wx	SLOT1 PCIe5x16 CPU	2(x4+x4+x4+x4)
		SLOT2 PCIe5x16 CPU	2(x4+x4+x4+x4)
		SLOT4 PCIe5x16 CPU	2(x4+x4+x4+x4)
		SLOT5 PCIe5x16 CPU	2(x4+x4+x4+x4)
		SLOT6 PCIe4x16 CPU	2(x4+x4+x4+x4)
AMD TRX50	Model: ASUS Pro WS TRX50-SAGE WIFI CPU: AMD Ryzen™ Threadripper™ Pro 7960X	PCIEX16(G5)_1	2(x4+x4+x4+x4)
		PCIEX16(G5)_2	2(x4+x4+x4+x4)
		PCIEX16(G4)_2	2(x4+x4+x4+x4)
AMD WRX80	Model: ASUS Pro WS WRX80E-SAGE SE WIFI CPU: AMD Ryzen™ Threadripper™ Pro 5965WX	PCIEX16_1	2(x4+x4+x4+x4)
		PCIEX16_2	2(x4+x4+x4+x4)
		PCIEX16_3	2(x4+x4+x4+x4)
		PCIEX16_4	2(x4+x4+x4+x4)
		PCIEX16_5	2(x4+x4+x4+x4)
		PCIEX16_6	2(x4+x4+x4+x4)
		PCIEX16_7	2(x4+x4+x4+x4)
AMD WRX90	Model: ASUS Pro WS WRX90E-SAGE SE CPU: AMD Ryzen™ Threadripper™ Pro 7965WX	PCIEX16(G5)_1	2(x4+x4+x4+x4)
		PCIEX16(G5)_2	2(x4+x4+x4+x4)
		PCIEX16(G5)_3	2(x4+x4+x4+x4)
		PCIEX16(G5)_4	2(x4+x4+x4+x4)
		PCIEX16(G5)_5	2(x4+x4+x4+x4)
		PCIEX16(G5)_7	2(x4+x4+x4+x4)
	Model: ASROCK WRX90 WS EVO CPU: AMD Ryzen™ Threadripper™ Pro 7965WX	PCIE1	2(x4+x4+x4+x4)
		PCIE2	2(x4+x4+x4+x4)
		PCIE3	2(x4+x4+x4+x4)

		PCIe4	2(x4+x4+x4+x4)
		PCIe5	2(x4+x4+x4+x4)
		PCIe7	2(x4+x4+x4+x4)
X670	Model: ASUS PROART X670E - creator CPU: AMD Ryzen™ 9 7950X	PCIEX16_1	2(x4+x4+x4+x4)
X870	Model: ASUS PRIME X870-P WIFI CPU: AMD Ryzen™ 5 9600X	PCIEX16(G5)	2(x4+x4+x4+x4)

NVMe SSD Compatibility List

Notes:

None of the M.2 disks on the compatibility list have heat sinks. Disks with heatsinks are not supported.

“Double Side” indicates a double-sided SSD. Designs may vary by capacity within the same model; confirm with the drive manufacturer.

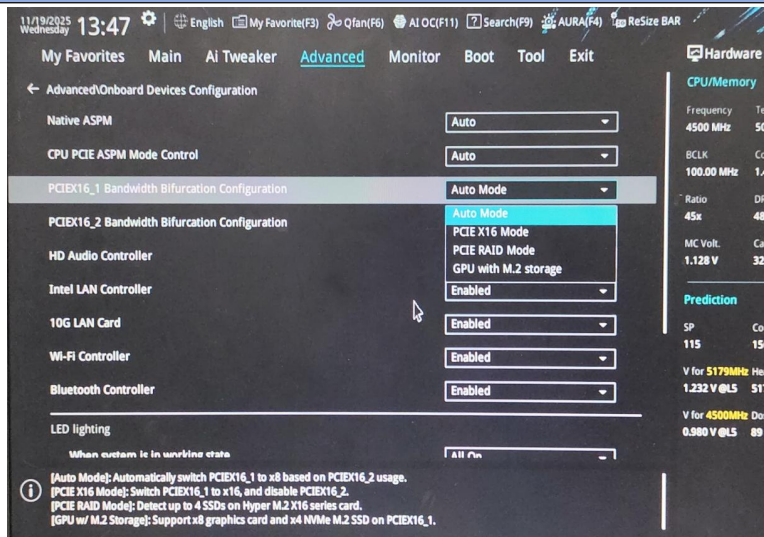
Manufacture	Model/Series	Form Factor	Capacity	Remark
PCIe Gen4				
Samsung	980 PRO	M.2 2280	250GB, 500GB, 1TB, 2TB	
Samsung	990 PRO	M.2 2280	1TB, 2TB, 4TB	
Samsung	990 EVO	M.2 2280	1TB, 2TB	
Seagate	FireCuda 530	M.2 2280	500GB, 1TB, 2TB, 4TB	
Sabrent	Rocket NVMe 4.0	M.2 2280, Double Side	500GB, 1TB, 2TB	
Sabrent	Rocket 4 Plus	M.2 2280, Double Side	500GB, 1TB, 2TB, 4TB, 8TB	
KIOXIA	XG8 Series	M.2 2280, Double Side	512GB, 1024GB, 2048GB, 4096GB	
Western Digital	SN850X	M.2 2280	1TB, 2TB, 4TB, 8TB	
PCIe Gen5				
Crucial	Crucial T700	M.2 2280, Double Side	1TB, 2TB, 4TB	
Crucial	Crucial T705	M.2 2280, Double Side	1TB, 2TB, 4TB	
Phison	PS5026-E26	M.2 2280, Double Side	1TB, 2TB, 4TB	
Samsung	9100 PRO	M.2 2280, Double Side	1TB, 2TB, 4TB, 8TB	
Western Digital	SN8100	M.2 2280	1TB, 2TB, 4TB, 8TB	

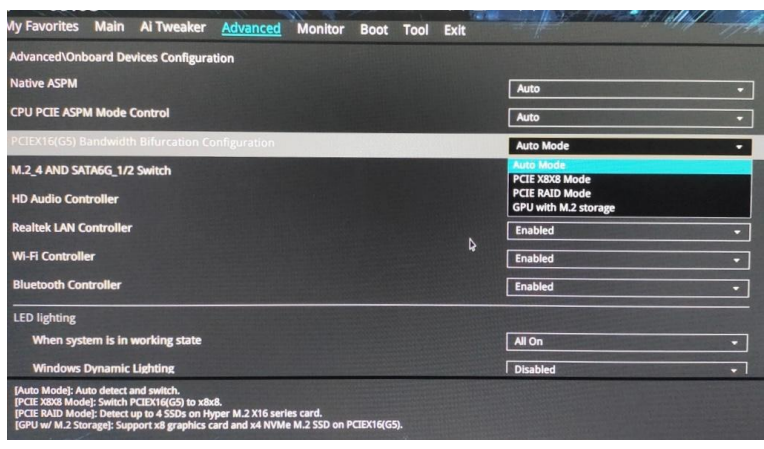
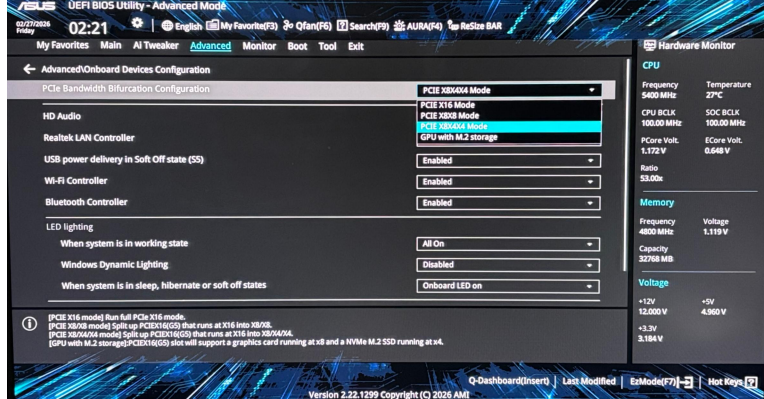
If you have any questions about compatibility, please contact us at Sales@highpoint-tech.com

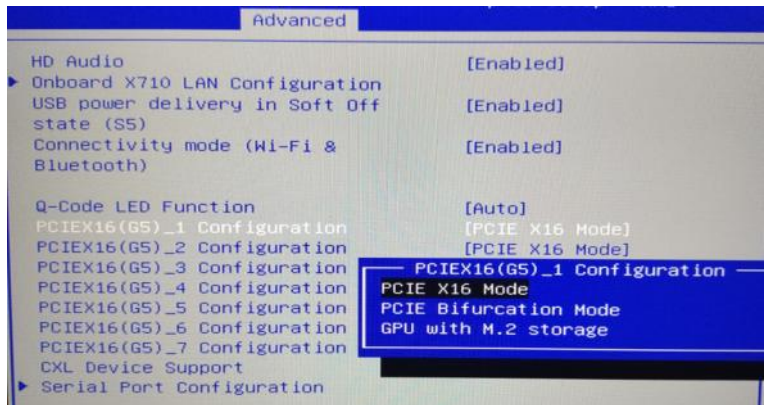
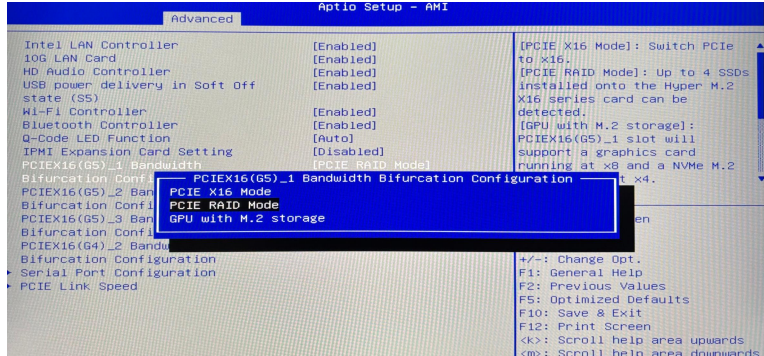
Appendix

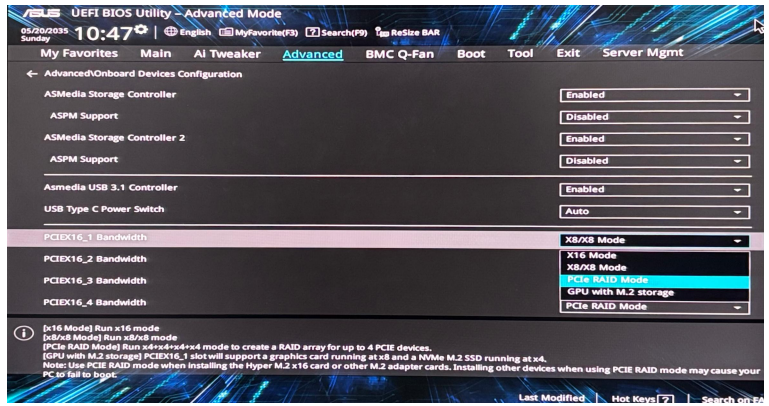
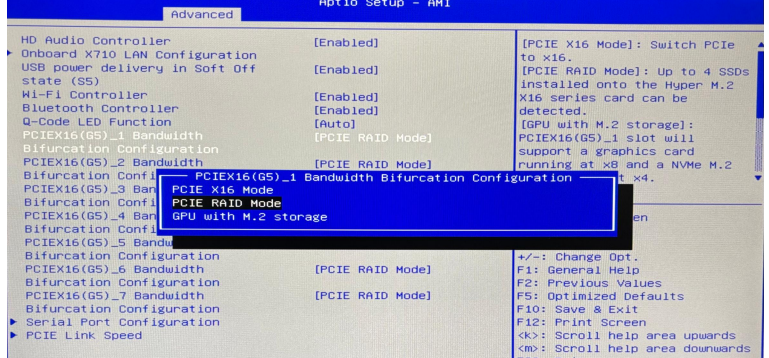
Note: The BIOS setup path is derived from HighPoint test results and is provided for customer reference.

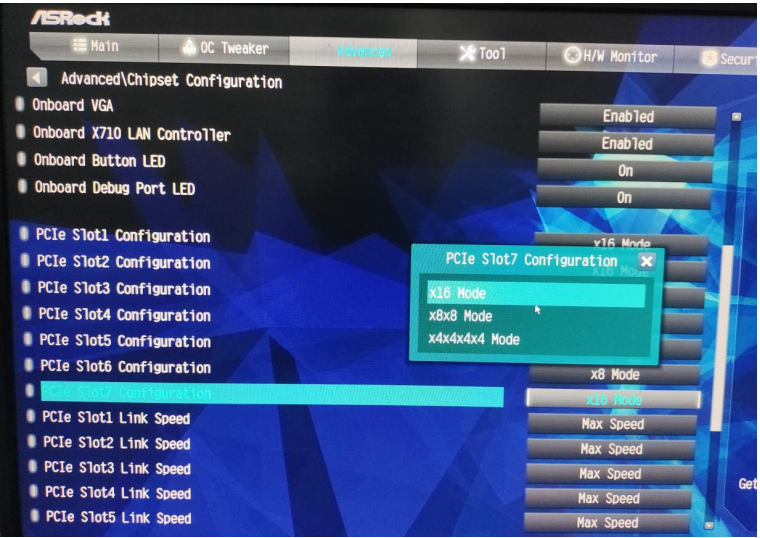
1. ASUS

Classification	Motherboard	BIOS Setup Path	Support for Motherboard Bifurcation Mode
Desktop	ASUS PROART X670E - creator	Advanced → Onboard Devices Configuration → PCEX16_1 Bandwidth Bifurcation Configuration	 The screenshot shows the ASUS BIOS 'Advanced' tab, specifically the 'Onboard Devices Configuration' section. The 'PCIEX16_1 Bandwidth Bifurcation Configuration' is set to 'Auto Mode'. The 'PCIEX16_2 Bandwidth Bifurcation Configuration' is also set to 'Auto Mode', with a dropdown menu open showing options: 'Auto Mode', 'PCIEX16 Mode', 'PCIEX16 RAID Mode', and 'GPU with M.2 storage'. Other settings like 'HD Audio Controller', 'Intel LAN Controller', '10G LAN Card', 'Wi-Fi Controller', and 'Bluetooth Controller' are all set to 'Enabled'. The 'LED lighting' is set to 'All On'. A note at the bottom explains the bifurcation modes. [Auto Mode]: Automatically switch PCIe16_1 to x8 based on PCIe16_2 usage. [PCIEX16 Mode]: Switch PCIe16_1 to x16, and disable PCIe16_2. [PCIEX16 RAID Mode]: Detect up to 4 SSDs on Hyper M.2 X16 series card. [GPU w/ M.2 Storage]: Support x8 graphics card and x4 NVMe M.2 SSD on PCIe16_1.

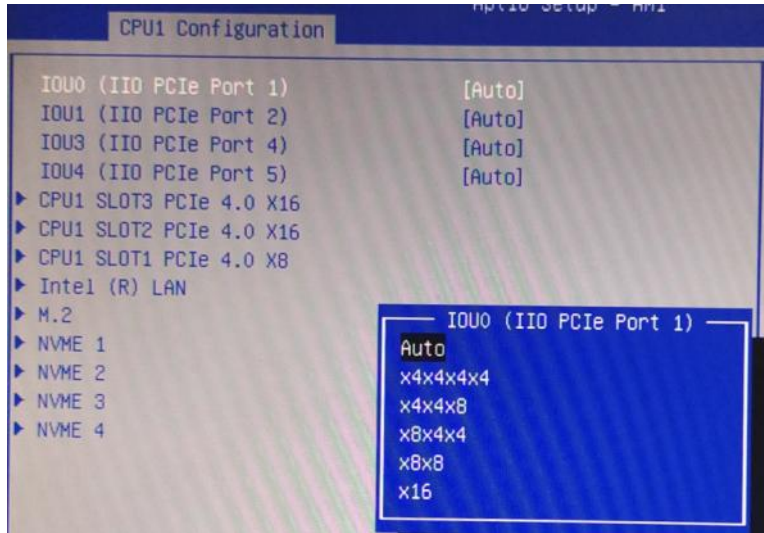
	ASUS PRIME X870-P WIFI	Advanced → Onboard Devices Configuration → PCIe16 (G5) Bandwidth Bifurcation Configuration	
	ASUS PRIME Z890-P WIFI	Advanced → Onboard Devices Configuration → PCIe Bandwidth Bifurcation Configuration	

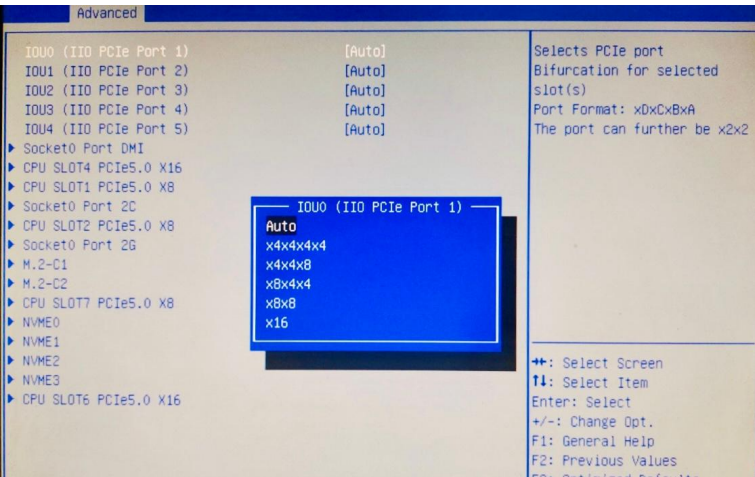
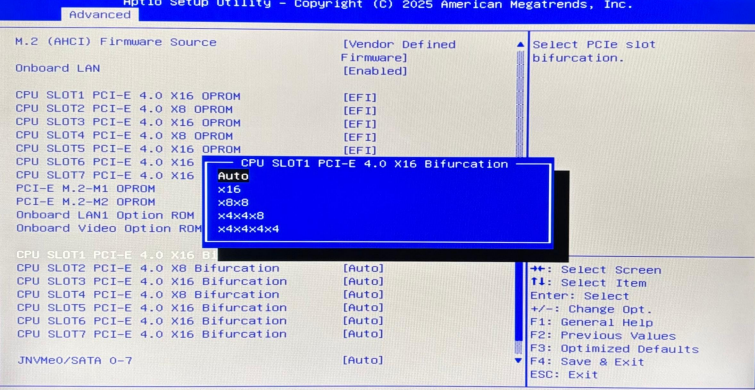
WorkStation	ASUS Pro WS W790E-SAGE SE	Advanced → Onboard Devices Configuration → PCIe16(G5)_1 Configuration	
	ASUS Pro WS TRX50-SAGE WIFI	Advanced → Onboard Devices Configuration → PCIe16(G5)_1 Bandwidth Bifurcation Configuration	

	ASUS Pro WS WRX80E-SAGE SE WIFI	Advanced → Onboard Devices Configuration → PCIE16_1 Bandwidth	 UEFI BIOS Utility - Advanced Mode 10:47 My Favorites Main AI Tweaker Advanced BMC Q-Fan Boot Tool Exit Server Mgmt Advanced/Onboard Devices Configuration - ASMedia Storage Controller: Enabled - ASPM Support: Disabled - ASMedia Storage Controller 2: Enabled - ASPM Support: Disabled - ASMedia USB 3.1 Controller: Enabled - USB Type-C Power Switch: Auto - PCIE16_1 Bandwidth: X8/X8 Mode - PCIE16_2 Bandwidth: X16 Mode - PCIE16_3 Bandwidth: X8/X8 Mode - PCIE16_4 Bandwidth: PCIE RAID Mode - PCIE16_5 Bandwidth: PCIE RAID Mode ① [x16 Mode] Run x16 mode [x8/x8 Mode] Run x8/x8 mode [PCIE RAID Mode] Run x4+x4+x4+x4 mode to create a RAID array for up to 4 PCIe devices. [GPU with M.2 storage] PCIE16_1 slot will support a graphics card running at x8 and a NVMe M.2 SSD running at x4. Note: Use PCIE RAID mode when installing the Hyper M.2 x16 card or other M.2 adapter cards. Installing other devices when using PCIE RAID mode may cause your PC to fail to boot. Last Modified: Hot Keys [F7] Search on F2
	ASUS Pro WS WRX90E-SAGE SE	Advanced → Onboard Devices Configuration → PCIE16(G5)_1 Bandwidth Bifurcation Configuration	 Advanced AD16 Setup - ARI - HD Audio Controller: [Enabled] - Onboard X710 LAN Configuration: [Enabled] - USB power delivery in Soft Off state (SS): [Enabled] - W1-Fi Controller: [Enabled] - Bluetooth Controller: [Enabled] - Q-Code LED Function: [Auto] - PCIEX16(G5)_1 Bandwidth Bifurcation Configuration: [PCIE RAID Mode] - PCIEX16(G5)_2 Bandwidth Bifurcation Configuration: [PCIE RAID Mode] - PCIEX16(G5)_3 Bandwidth Bifurcation Configuration: [PCIE X16 Mode] - PCIEX16(G5)_4 Bandwidth Bifurcation Configuration: [PCIE RAID Mode] - PCIEX16(G5)_5 Bandwidth Bifurcation Configuration: [PCIE RAID Mode] - PCIEX16(G5)_6 Bandwidth Bifurcation Configuration: [PCIE RAID Mode] - PCIEX16(G5)_7 Bandwidth Bifurcation Configuration: [PCIE RAID Mode] - Serial Port Configuration: [PCIE RAID Mode] - PCI Link Speed: [PCIE RAID Mode] PCIEX16(G5)_1 Bandwidth Bifurcation Configuration - PCIE X16 Mode - PCIE RAID Mode - GPU with M.2 storage [PCIE X16 Mode]: Switch PCIe to x16. [PCIE RAID Mode]: Up to 4 SSDs installed onto the Hyper M.2 X16 series card can be detected. [GPU with M.2 storage]: PCIE16(G5)_1 slot will support a graphics card running at x8 and a NVMe M.2 SSD running at x4. +/-: Change Opt. F1: General Help F2: Previous Values F5: Optimized Defaults F10: Save & Exit F12: Print Screen ↑↓: Scroll help area upwards/downwards ESC: Exit

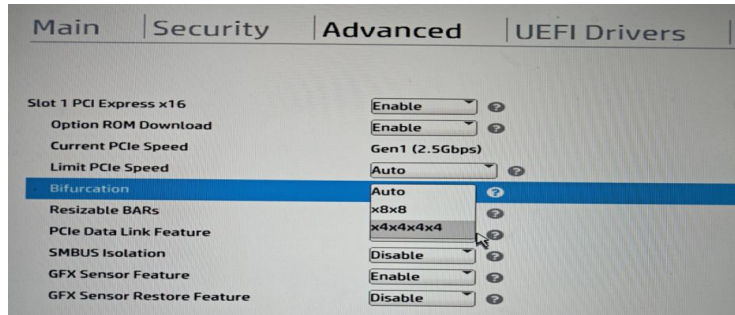
	ASROCK WRX90 WS EVO	Advanced Configuration → Chipset Configuration → PCIe Slot7 Configuration	 The screenshot shows the ASRock BIOS interface. The 'Advanced' tab is selected, and the 'Chipset Configuration' menu is open. A sub-menu for 'PCIe Slot7 Configuration' is displayed, showing the mode set to 'x16 Mode'. Other options include 'x8x8 Mode' and 'x4x4x4x4 Mode'. The background of the BIOS is a blue geometric pattern.
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2. Supermicro

Classification	Motherboard	BIOS Setup Path	Support for Motherboard Bifurcation Mode
Server	Supermicro X12DPi-N6	Advanced → Chipset Configuration → North Bridge → IIO Configuration → CPU1 Configuration → IOU0(IIO PCIe Port 1)	

	Supermicro X13SEI-TF	Advanced → Chipset Configuration → North Bridge → IIO Configuration → CPU1 Configuration → IOU0(IIO PCIe Port 1)	
	Supermicro H12SSL-i	Advanced → PCIe/PCI/PnP Configuration → CPU SLOT1 PCI-E 4.0 X16 Bifurcation	

3. HP

Classification	Motherboard	BIOS Setup Path	Support for Motherboard Bifurcation Mode
WorkStation	HP Z6 G5 A	Advanced → Slot Setting → slot1 PCI Express x16 → Bifurcation	 The screenshot shows the HP BIOS Advanced tab with the following settings: - Slot 1 PCI Express x16: Enable - Option ROM Download: Enable - Current PCIe Speed: Gen1 (2.5Gbps) - Limit PCIe Speed: Auto - Bifurcation: Auto (dropdown menu is open showing x8x8 and x4x4x4x4) - Resizable BARs: x8x8 - PCIe Data Link Feature: x4x4x4x4 - SMBUS Isolation: Disable - GFX Sensor Feature: Enable - GFX Sensor Restore Feature: Disable