# HighPoint Rocket 1604L Compatibility List

**2026/2/27**

This document was designed to serve as general reference for compatibility between the HighPoint Rocket 1604L Gen5 NVMe Switch AIC and specific motherboards's described herein.

The motherboards included in this document are recommended for HighPoint Rocket 1604L 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 R1604L.*

# Motherboard Compatibility List

**Notes:**

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

**The maximum number of supported M.2 SSDs is dependent on the specific CPU model.**

- **Intel Chipset**

| Intel Chipset | Model & CPU | Recommended PCIe Slot | PCIe bifurcation in PCIe slot<br>M.2 SSD quantity |
|---|---|---|---|
| Intel C621A | Model: Supermicro X12DPi-N6<br>CPU: Intel® Xeon® Silver 4314*2 | CPU1 SLOT1 PCIe4.0x8 | 2(x4+x4) |
| | | CPU1 SLOT2 PCIe4.0x16 | 4(x4+x4+x4+x4) |
| | | CPU1 SLOT3 PCIe4.0x16 | 4(x4+x4+x4+x4) |
| | | CPU2 SLOT4 PCIe4.0x16 | 4(x4+x4+x4+x4) |
| | | CPU2 SLOT5 PCIe4.0x16 | 4(x4+x4+x4+x4) |
| | | CPU2 SLOT6 PCIe4.0x8 | 2(x4+x4) |
| Intel® Xeon® 6511P | Model: Supermicro X14SBI-F<br>CPU: Intel® Xeon® 6511P | CPU SLOT1 PCIe5.0X16 | 4(x4+x4+x4+x4) |
| | | CPU SLOT2 PCIe5.0X8 | 2(x4+x4) |
| | | CPU SLOT3 PCIe5.0X16 | 4(x4+x4+x4+x4) |
| | | CPU SLOT4 PCIe5.0X8 | 2(x4+x4) |
| | | CPU SLOT5 PCIe5.0X8 | 2(x4+x4) |
| | | CPU SLOT6 PCIe5.0X16 | 4(x4+x4+x4+x4) |
| Intel Z890 | Model: ASUS PRIME Z890-P WIFI<br>CPU: Intel Core Ultra 9 285K | PCIEX16(G5) | 3(x8+x4+x4) |
| | Model: GIGABYTE Z890M AORUS ELITE WIFI7<br>CPU: Intel Core Ultra 9 285K | PCIEX16 | 3(x8+x4+x4) |

| | | | |
|---|---|---|---|
| Intel W790 | Model: ASUS Pro WS W790E-SAGE SE<br>CPU: Intel Xeon w5-3535X | PCIEX16(G5)_1 | 4(x4+x4+x4+x4) |
| | | PCIEX16(G5)_2 | 4(x4+x4+x4+x4) |
| | | PCIEX16(G5)_3 | 4(x4+x4+x4+x4) |
| | | PCIEX16(G5)_4 | 4(x4+x4+x4+x4) |
| | | PCIEX16(G5)_5 | 4(x4+x4+x4+x4) |
| | | PCIEX16(G5)_6 | 2(x4+x4) |
| | | PCIEX16(G5)_7 | 4(x4+x4+x4+x4) |
| Intel C741 | Model: Supermicro X13SEI-TF<br>CPU: Intel Xeon silver 4510 Processor | CPU SLOT1 PCIe5.0X8 | 2(x4+x4) |
| | | CPU SLOT2 PCIe5.0X8 | 2(x4+x4) |
| | | CPU SLOT4 PCIe5.0X16 | 4(x4+x4+x4+x4) |
| | | CPU SLOT6 PCIe5.0X16 | 4(x4+x4+x4+x4) |
| | | CPU SLOT7 PCIe5.0X8 | 2(x4+x4) |
| | Model: GIGABYTE MS03-6L0<br>CPU: Intel Xeon silver 4410Y | PCIE_2 | 4(x4+x4+x4+x4) |
| | | PCIE_3 | 4(x4+x4+x4+x4) |
| | | PCIE_4 | 4(x4+x4+x4+x4) |
| | | PCIE_5 | 4(x4+x4+x4+x4) |
| | | PCIE_6 | 4(x4+x4+x4+x4) |
| | Model: Supermicro SYS-741GE-TNRT<br>CPU: Intel Xeon silver 4410Y | P1 Slot2 PCIe 5.0x16 | 4(x4+x4+x4+x4) |
| | | P1 Slot4 PCIe 5.0x16 | 4(x4+x4+x4+x4) |
| | | P2 Slot5 PCIe 5.0x16 | 4(x4+x4+x4+x4) |
| | | P2 Slot7 PCIe 5.0x16 | 4(x4+x4+x4+x4) |
| | | P2 Slot9 PCIe 5.0x16 | 4(x4+x4+x4+x4) |
| | | P1 Slot10 PCIe 5.0x16 | 4(x4+x4+x4+x4) |
| | | P2 Slot11 PCIe 5.0x16 | 4(x4+x4+x4+x4) |

- **AMD Chipset**

| AMD Chipset | Model | Recommended PCIe Slot | PCIe bifurcation in PCIe slot<br>M.2 SSD quantity |
|---|---|---|---|
| AMD EPYC 7002/7003 series | Model: Supermicro H12SSL-i<br>CPU: AMD EPYC™ 7282 | CPU SLOT1 PCI-E 4.0X16 | 4(x4+x4+x4+x4) |
| | | CPU SLOT2 PCI-E 4.0X8 | 2(x4+x4) |
| | | CPU SLOT3 PCI-E 4.0X16 | 4(x4+x4+x4+x4) |
| | | CPU SLOT4 PCI-E 4.0X8 | 2(x4+x4) |
| | | CPU SLOT5 PCI-E 4.0X16 | 4(x4+x4+x4+x4) |
| | | CPU SLOT6 PCI-E 4.0X16 | 4(x4+x4+x4+x4) |
| | | CPU SLOT7 PCI-E 4.0X16 | 4(x4+x4+x4+x4) |
| | Model: ASROCK ROMED8-2T<br>CPU: AMD EPYC™ 7282 | PCIE1 | 4(x4+x4+x4+x4) |
| | | PCIE2 | 4(x4+x4+x4+x4) |
| | | PCIE3 | 4(x4+x4+x4+x4) |
| | | PCIE4 | 4(x4+x4+x4+x4) |
| | | PCIE5 | 4(x4+x4+x4+x4) |
| | | PCIE6 | 4(x4+x4+x4+x4) |
| | | PCIE7 | 4(x4+x4+x4+x4) |
| AMD EPYC 9004/9005 series | Model: Supermicro 2025HS-TNR<br>CPU: AMD EPYC 9124*2 | SLOT1 PCIE 5.0X16 | 4(x4+x4+x4+x4) |
| | | SLOT2 PCIE 5.0X8 | 2(x4+x4) |
| | | SLOT3 PCIE 5.0X16 | 4(x4+x4+x4+x4) |
| | | SLOT4 PCIE 5.0X8 | 2(x4+x4) |
| | | SLOT5 PCIE 5.0X16 | 4(x4+x4+x4+x4) |
| | | SLOT6 PCIE 5.0X8 | 2(x4+x4) |
| | | SLOT7 PCIE 5.0X16 | 4(x4+x4+x4+x4) |
| | | SLOT8 PCIE 5.0X16 | 4(x4+x4+x4+x4) |

| | | | |
|---|---|---|---|
| AMD Pro 695 | Model: HP Z6 G5 A<br>CPU: AMD Ryzen™ Threadripper Pro 7945wx | SLOT1 PCIe5x16 CPU | 4(x4+x4+x4+x4) |
| | | SLOT2 PCIe5x16 CPU | 4(x4+x4+x4+x4) |
| | | SLOT4 PCIe5x16 CPU | 4(x4+x4+x4+x4) |
| | | SLOT5 PCIe5x16 CPU | 4(x4+x4+x4+x4) |
| | | SLOT6 PCIe4x16 CPU | 4(x4+x4+x4+x4) |
| AMD TRX50 | Model: ASUS Pro WS TRX50-SAGE WIFI<br>CPU: AMD Ryzen™ Threadripper™ Pro 7960X | PCIEX16(G5)_1 | 4(x4+x4+x4+x4) |
| | | PCIEX16(G5)_2 | 4(x4+x4+x4+x4) |
| | | PCIEX16(G5)_3 | 2(x4+x4) |
| | | PCIEX16(G4)_2 | 4(x4+x4+x4+x4) |
| AMD WRX80 | Model: ASUS Pro WS WRX80E-SAGE SE WIFI<br>CPU: AMD Ryzen™ Threadripper™ Pro 5965WX | PCIEX16_1 | 4(x4+x4+x4+x4) |
| | | PCIEX16_2 | 4(x4+x4+x4+x4) |
| | | PCIEX16_3 | 4(x4+x4+x4+x4) |
| | | PCIEX16_4 | 4(x4+x4+x4+x4) |
| | | PCIEX16_5 | 4(x4+x4+x4+x4) |
| | | PCIEX16_6 | 4(x4+x4+x4+x4) |
| | | PCIEX16_7 | 4(x4+x4+x4+x4) |
| AMD WRX90 | Model: ASUS Pro WS WRX90E-SAGE SE<br>CPU: AMD Ryzen™ Threadripper™ Pro 7965WX | PCIEX16(G5)_1 | 4(x4+x4+x4+x4) |
| | | PCIEX16(G5)_2 | 4(x4+x4+x4+x4) |
| | | PCIEX16(G5)_3 | 4(x4+x4+x4+x4) |
| | | PCIEX16(G5)_4 | 4(x4+x4+x4+x4) |
| | | PCIEX16(G5)_5 | 4(x4+x4+x4+x4) |
| | | PCIEX16(G5)_6 | 2(x4+x4) |
| | | PCIEX16(G5)_7 | 4(x4+x4+x4+x4) |
| | Model: ASROCK WRX90 WS EVO<br>CPU: AMD Ryzen™ Threadripper™ | PCIE1 | 4(x4+x4+x4+x4) |
| | | PCIE2 | 4(x4+x4+x4+x4) |

| | | | |
|---|---|---|---|
| | Pro 7965WX | PCIE3 | 4(x4+x4+x4+x4) |
| | | PCIE4 | 4(x4+x4+x4+x4) |
| | | PCIE5 | 4(x4+x4+x4+x4) |
| | | PCIE6 | 2(x4+x4) |
| | | PCIE7 | 4(x4+x4+x4+x4) |
| X670 | Model: ASUS PROART X670E - creator<br>CPU: AMD Ryzen™ 9 7950X | PCIEX16_1 | 4(x4+x4+x4+x4) |
| | | PCIEX16_2 | 2(x4+x4) |
| X870 | Model: ASUS PRIME X870-P WIFI<br>CPU: AMD Ryzen™ 5 9600X | PCIEX16(G5) | 4(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.**

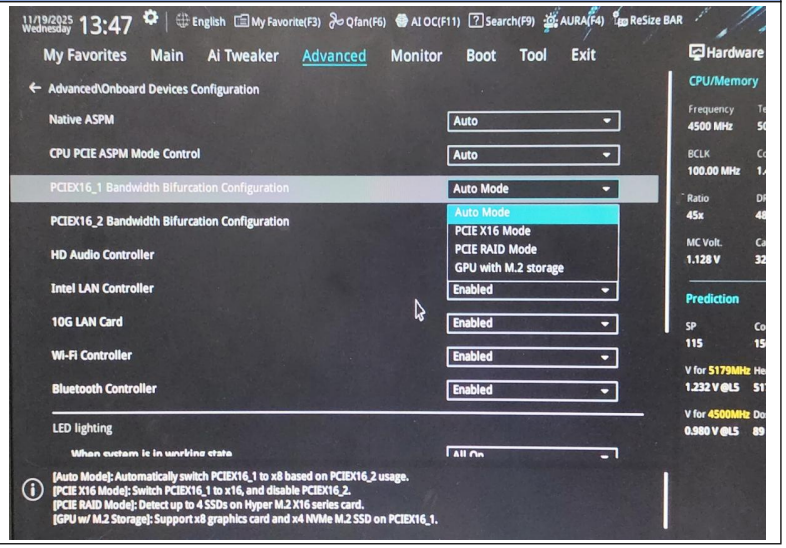
| Manufacture | Model/Series | Form Factor | Capacity | Remark |
|---|---|---|---|---|
| **PCIe Gen4** | | | | |
| Samsung | 980 PRO | M.2 2280 | 250GB, 500GB, 1TB, 2TB | |
| Samsung | 990 PRO | M.2 2280 | 1TB, 2TB, 4TB | |
| Samsung | 990 EVO | M.2 2280 | 1TB, 2TB | |
| Seagate | FireCuda 530 | M.2 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 | |

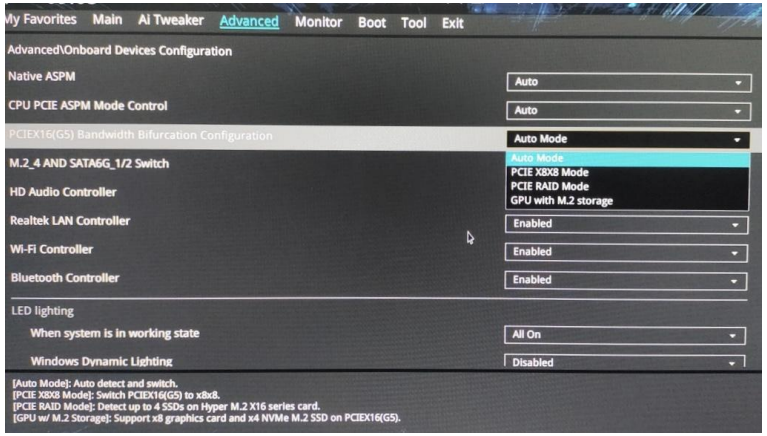
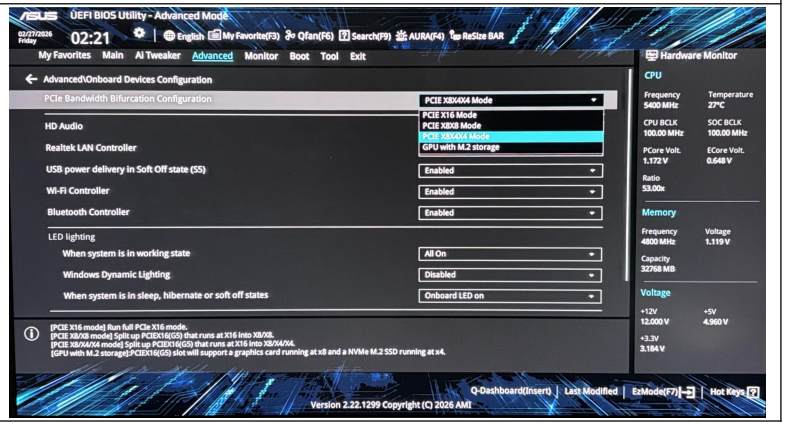
If you have any questions about compatibility, please contact us at Sales@highpoint-tech.com

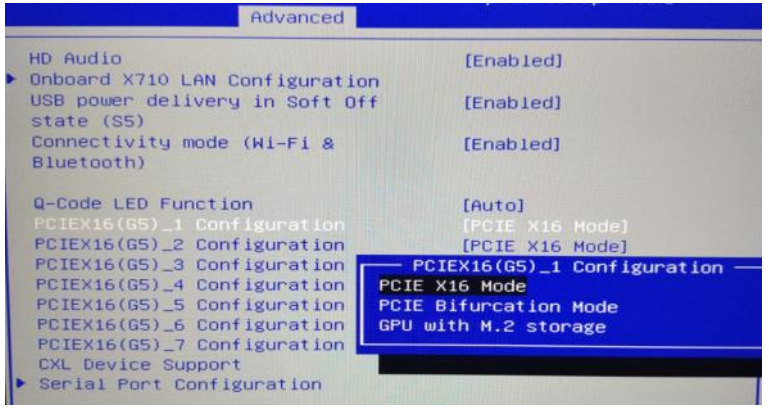
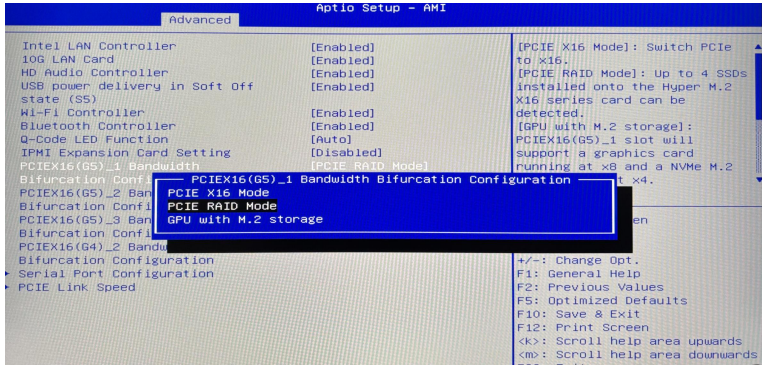
## Appendix

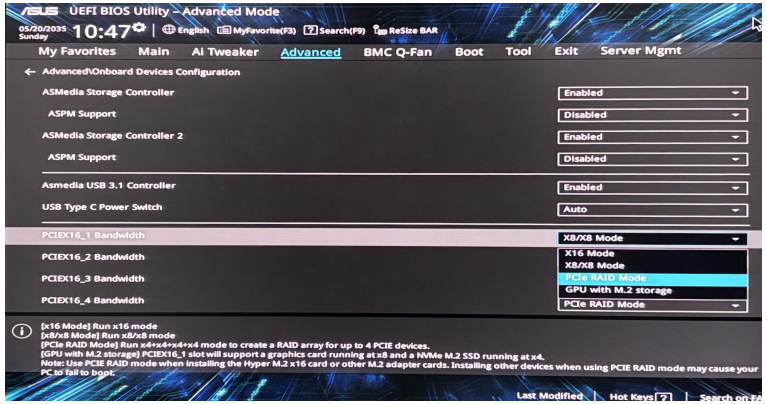
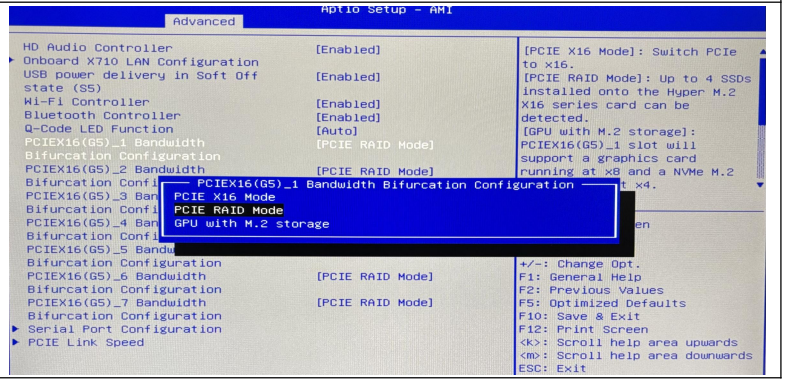
**Note: The BIOS setup path is derived from HighPoint test results and is provided for customer reference.**

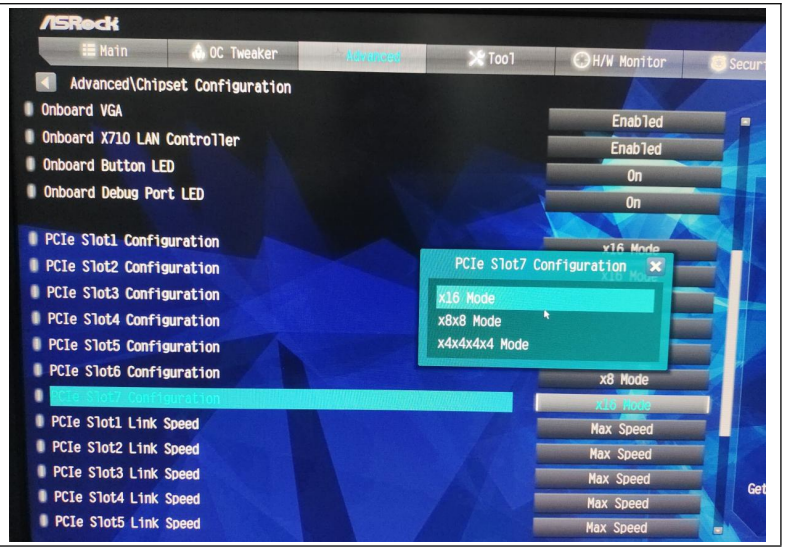
### 1. ASUS

| Classification | Motherboard | BIOS Setup Path | Support for Motherboard Bifurcation Mode |
|---|---|---|---|
| Desktop | ASUS PROART X670E - creator | Advanced → Onboard Devices Configuration → PCEX16_1 Bandwidth Bifurcation Configuration |  |

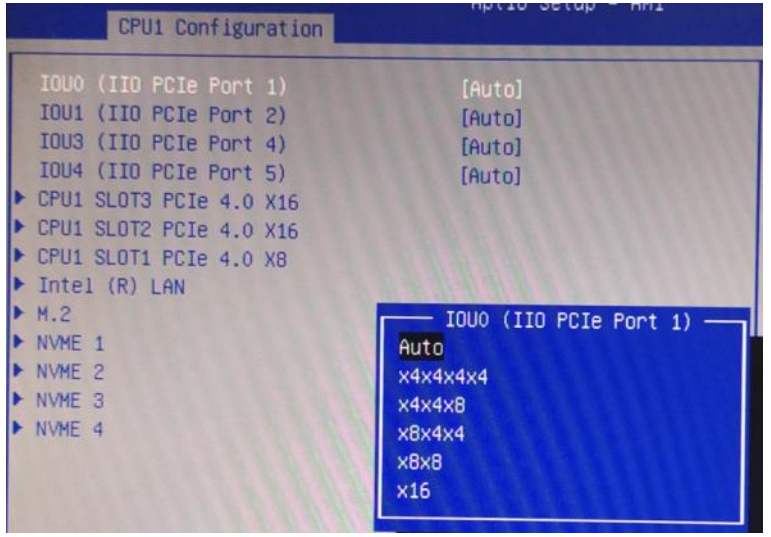
| | | | |
|---|---|---|---|
| | ASUS PRIME X870-P WIFI | Advanced → Onboard Devices Configuration → PCIEX16 (G5) Bandwidth Bifurcation Configuration |  |
| | ASUS PRIME Z890-P WIFI | Advanced → Onboard Devices Configuration → PCIe Bandwidth Bifurcation Configuration |  |

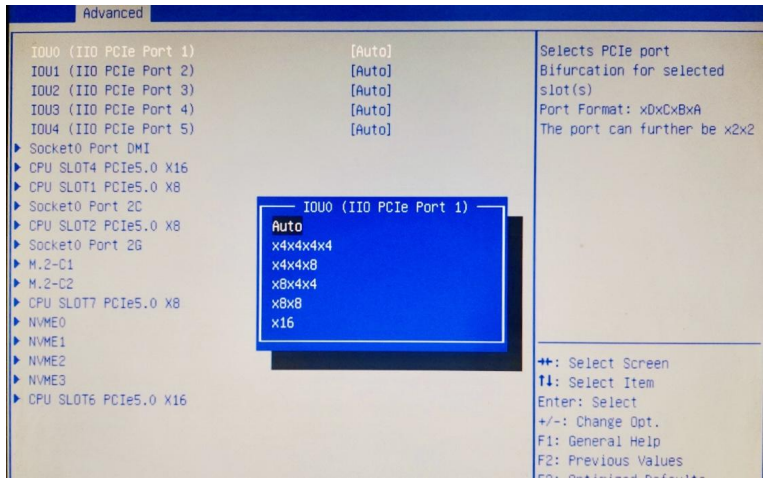
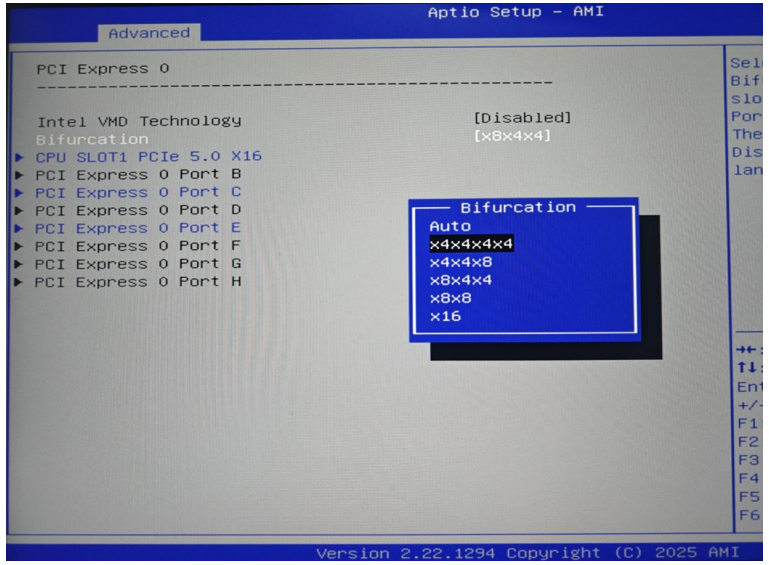
| | | | |
|---|---|---|---|
| **WorkStation** | ASUS Pro WS W790E-SAGE SE | Advanced → Onboard Devices Configuration → PCIEX16(G5)_1 Configuration |  |
| | ASUS Pro WS TRX50-SAGE WIFI | Advanced → Onboard Devices Configuration → PCIEX16(G5)_1 Bandwidth Bifurcation Configuration |  |

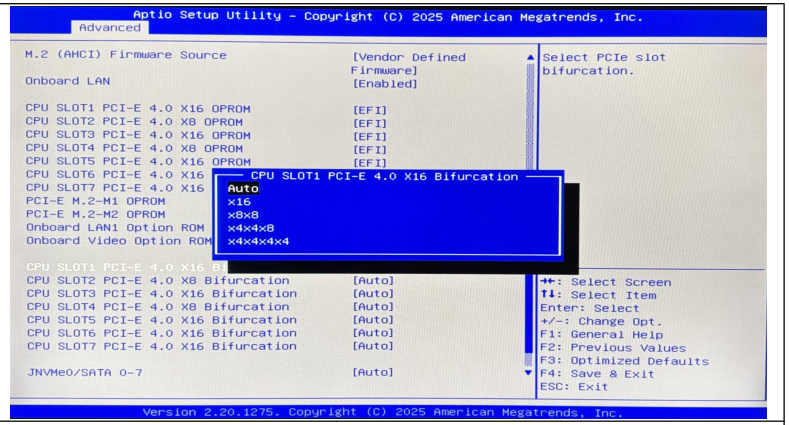
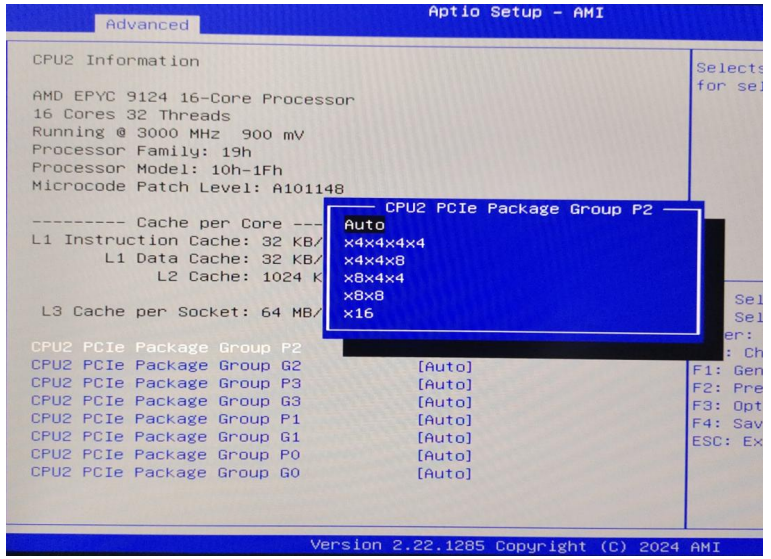
| | | | |
|---|---|---|---|
| | ASUS Pro WS WRX80E-SAGE SE WIFI | Advanced → Onboard Devices Configuration → PCIEX16_1 Bandwidth |  |
| | ASUS Pro WS WRX90E-SAGE SE | Advanced → Onboard Devices Configuration → PCIEX16(G5)_1 Bandwidth Bifurcation Configuration |  |

| | | | |
|---|---|---|---|
| | ASROCK WRX90 WS EVO | Advanced → Chipset Configuration → PCIe Slot7 Configuration |  |

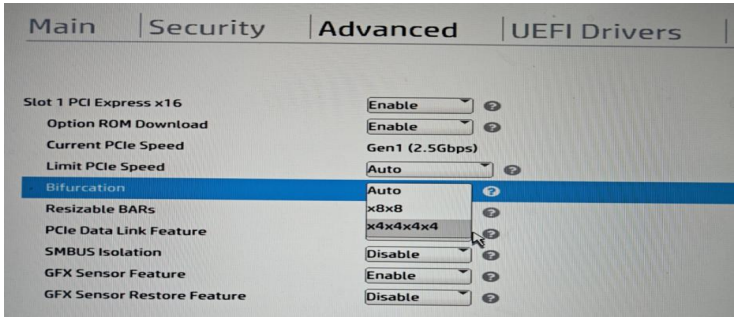
## 2. Supermicro

| 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 X14SBI-F | Advanced → Chipset Configuration → IIO Configuration → CPU Configuration → PCI Express → Bifurcation |  |

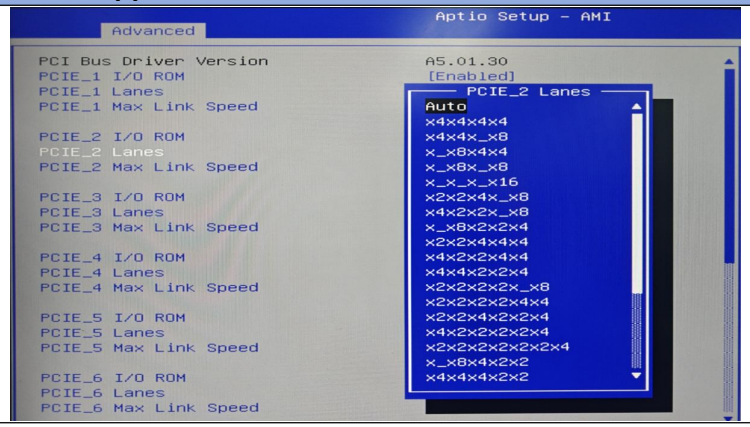
| | | | |
|---|---|---|---|
| | Supermicro H12SSL-i | Advanced → PCIe/PCI/PnP Configuration → CPU SLOT1 PCI-E 4.0 X16 Bifurcation |  |
| | Supermicro 2025HS-TNR | Advanced → CPU Configuration → CPU1/2 Information → CPU PCIe Package Group P2 |  |

## 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 |  |



## 4. GIGABYTE

| Classification | Motherboard | BIOS Setup Path | Support for Motherboard Bifurcation Mode |
|---|---|---|---|
| Server | GIGABYTE MS03-6L0 | Advanced → PCI Subsystem Settings → PCIE_x Lanes |  |