

## 1.2 Specifications

<b>X570D4U</b> <b>X570D4U-2L2T</b> <b>X570D4U-2L2T/BCM</b>	
<b>Physical Status</b>	
Form Factor	Micro-ATX
Dimension	9.6" x 9.6" (244 mm x 244 mm)
<b>Processor System</b>	
CPU	AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Graphics AMD Ryzen™ 5000 and 3000 Series Desktop Processors AMD Ryzen™ PRO 5000, 4000 and 3000 Series Desktop Processors
Socket	1 Socket AM4 (PGA 1331)
Thermal Design Power (TDP)	105W
Chipset	AMD X570
<b>System Memory</b>	
Supported DIMM Quantity	4 DIMM slots (2DPC)
Supported Type	DDR4 288-pin ECC*/non-ECC UDIMM
Max. Capacity per DIMM	32GB
Max. DIMM Frequency	3200 MHz**
Voltage	1.2V
Note	*For AMD Ryzen™ Desktop Processors with Radeon Graphics, ECC support is only with Processors with PRO technologies. **AMD Ryzen™ 3000 G-Series Desktop Processors with Radeon™ Graphics support up to 2666 MHz
<b>Expansion Slot</b>	
SLOT6	PCIe4.0 x16 [CPU]
SLOT5	PCIe4.0 x1 [FCH]
SLOT4	PCIe4.0 x8 [CPU]
Note	-SLOT6 auto-switch to PCIe4.0 x8 when SLOT4 occupied -SLOT6 supports PCIe3.0 only when installing AMD Ryzen™ 5000, 4000 G-Series Desktop Processors with Radeon™ Graphics -SLOT6 supports PCIe3.0 x8 only when installing AMD Ryzen™ 3000 G-Series Desktop Processors with Radeon™ Graphics -SLOT5 supports PCIe3.0 only when installing AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Graphics -SLOT4 supports PCIe3.0 only when installing AMD Ryzen™ 5000, 4000 G-Series Desktop Processors with Radeon™ Graphics -SLOT4 will not function when installing AMD Ryzen™ 3000 G-Series Desktop Processors with Radeon™ Graphics"

Other PCIe Expansion Connectors	
M.2 slot	1 M-key (PCIe4.0 x4 or SATA 6Gb/s); support 22110/2280/2260/2242 form factor [CPU] 1 M-key (PCIe4.0 x4 or SATA 6Gb/s); support 2280/2260/2242 form factor [FCH]
Note	-M.2 supports PCIe3.0 only when installing AMD Ryzen™ 5000, 4000 and 3000 G-Series Desktop Processors with Radeon™ Graphics
SATA/SAS Storage	
FCH Built-in Storage	AMD X570 (Up to 10 SATA 6Gb/s): 7 SATA 7-pin, 1 SATA DOM, 2 M.2
Ethernet	
Additional Ethernet Controller	<b>X570D4U:</b> Intel® i210: 2 RJ45 (1GbE)  <b>X570D4U-2L2T:</b> Intel® X550-AT2: 2 RJ45 (10GbE) Intel® i210: 2 RJ45 (1GbE)  <b>X570D4U-2L2T/BCM:</b> Broadcom BCM57416: 2 RJ45 (10GbE) Intel® i210: 2 RJ45 (1GbE)
USB	
Controller/Hub	AMD X570
Connectors/headers	External: 2 Type-A (USB3.2 Gen2) Internal: 1 header (19-pin, 2 USB3.2 Gen1)
Graphics	
Controller	ASPEED AST2500: 1 DB15 (VGA), 1 (15-pin) header AMD Ryzen™ desktop processors with Radeon™ Graphics: 1 HDMI
Security	
TPM	1 (17-pin, LPC), 1 (13-pin, SPI)
Rear I/O	
UID button/LED	1 UID button w/ LED
Video output	1 DB15 (VGA), 1 HDMI
Serial port	1 DB9 (COM)
USB	2 Type-A (USB3.2 Gen2)
RJ45	<b>X570D4U:</b> 2 RJ45 (1GbE), 1 dedicated IPMI  <b>X570D4U-2L2T / X570D4U-2L2T/BCM:</b> 2 RJ45 (10GbE), 2 RJ45 (1GbE), 1 dedicated IPMI
Note:	-HDMI is only supported by AMD Ryzen™ with Radeon™ Graphics Processors

Hardware Monitor	
Temperature	CPU, FCH, DDR, MB, Card Side, LAN Temperature sensing
Fan	Fan Tachometer Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) Fan Multi-Speed Control"
Voltage	3VSB, 5VSB, VCPU, VSOC, VCCM, APU VDDP, PM VDD CLDO, PM VDDCR S5, PM VDDCR, BAT, 3V, 5V, 12V
Server Management	
BMC Controller	ASPEED AST2500: IPMI2.0 with iKVM and vMedia support
IPMI Dedicated GLAN	1 Realtek RTL8211E for dedicated management GLAN
System BIOS	
BIOS type	32MB AMI UEFI Legal BIOS
Features	Plug and Play, ACPI 2.0 compliance wake up events, SMBIOS 2.8, ASRock Rack instant flash
Internal Connectors/Headers	
PSU connector	1 (24-pin, ATX main power), 1 (8-pin, ATX 12V)
Auxiliary panel header	1 (includes chassis intrusion, location button & LED, front LAN LED, system fault, and BMC alert)
System panel header	1 (RST, PWRBTN, HDDLED, PWRLED)
LAN3/LAN4 LED header	<b>X570D4U:</b> N/A <b>X570D4U-2L2T / X570D4U-2L2T/BCM:</b> 1
VGA header	1
Speaker header	1 (4-pin)
Fan header	3 (6-pin), 3 (4-pin)
Thermal sensor header	1
Buzzer	1
TPM header	1 (17-pin, LPC), 1 (13-pin, SPI)
SMBus header	1
PMbus header	1
IPMB header	1
Clear CMOS	1 (contact pads)
LED Indicators	
Standby Power LED	1 (5VSB)
80 debug port LED	1
Fan Fail LED	6
BMC Heartbeat LED	1

Support OS	
OS	<p>Microsoft® Windows*:</p> <p>Windows 10 (64 bit)</p> <p>Linux*:</p> <ul style="list-style-type: none"> <li>- Ubuntu 18.04 (64 bit)</li> <li>- RedHat Enterprise Linux Server 8.1 (64bit)</li> </ul> <p>* Please refer to our website for the latest OS support list.</p> <p>* The Linux system doesn't support Raid mode.</p> <p>* Supports UEFI BOOT only.</p>
Enviroment	
Operating temperature	10 - 35°C (50 - 95 degF)
Non-operating temperature	-40 - 70°C (-40 - 158degF)

NOTE: Please refer to our website for the latest specifications.



This motherboard supports Wake from on Board LAN. To use this function, please make sure that the "Wake on Magic Packet from power off state" is enabled in Device Manager > Intel® Ethernet Connection > Power Management. And the "PCI Devices Power On" is enabled in UEFI SETUP UTILITY > Advanced > ACPI Configuration. After that, onboard LAN3&4 can wake up S5 under OS.



If you install Intel® LAN utility or Marvell SATA utility, this motherboard may fail Windows® Hardware Quality Lab (WHQL) certification tests. If you install the drivers only, it will pass the WHQL tests.