



## WRX80D8-2T

- ATX (12" x 9.6")
- Supports AMD Ryzen™ Threadripper™ PRO 5000WX/3000WX
- 8 DIMM slots (1DPC), supports ECC/non-ECC UDIMM, RDIMM, LRDIMM, RDIMM-3DS
- 7 PCIe4.0 x16
- 2 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s)
- Supports 2 M.2 (PCIe4.0 x4)
- 12 SATA 6Gb/s
- 2 RJ45 (10GbE) by Intel® X710-AT2
- Remote Management (IPMI)

### Specifications

Physical Status	
Form Factor	ATX
Dimensions	12" x 9.6" (305 mm x 244 mm)
Processor System	
CPU	Supports AMD Ryzen™ Threadripper™ PRO 5000WX/3000WX
Socket	Single Socket sWRX8 (LGA4094)
Chipset	AMD WRX80
System Memory	
Supported DIMM Quantity	8 DIMM slots (1DPC)
Supported Type	Supports DDR4 288-pin ECC/non-ECC UDIMM, RDIMM, LRDIMM, RDIMM-3DS
Max. Capacity per DIMM	ECC/non-ECC UDIMM, RDIMM, LRDIMM: up to 128GB RDIMM-3DS*: up to 256GB *RDIMM-3DS Max. memory capacity is to be validated
Max. DIMM Frequency	ECC/non-ECC UDIMM, RDIMM, LRDIMM, RDIMM-3DS*: max. 3200MHz *RDIMM-3DS Max. memory frequency is to be validated
Voltage	1.2V
PCIe Expansion Slots (SLOT7 close to CPU)	
PCIe x 16	SLOT7: PCIe4.0 x16 [CPU] SLOT6: PCIe4.0 x16 [CPU] SLOT5: PCIe4.0 x16 [CPU] SLOT4: PCIe4.0 x16 [CPU] SLOT3: PCIe4.0 x16 [CPU] SLOT2: PCIe4.0 x16 [CPU] SLOT1: PCIe4.0 x16 [CPU]
Other PCIe Expansion Connectors	
M.2 slot	2 M-key (PCIe4.0 x4), supports 22110/2280/2260/2242/2230 form factor [FCH]
OCuLink	2 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s) [FCH]
SATA/SAS Storage	
PCH Built-in Storage	AMD WRX80 (12 SATA 6Gb/s): 2 OCuLink, 4 SATA 7-pin
Ethernet	
Additional GbE Controller	Intel® X710-AT2: 2 RJ45 (10GbE)
Server Management	
BMC Controller	ASPEED AST2500

IPMI Dedicated GLAN	1 x Realtek RTL8211E for dedicated management GLAN
<b>Graphics</b>	
Controller	ASPEED AST2500
VRAM	DDR4 512MB
<b>Rear I/O</b>	
UID Button/LED	1
VGA Port	1 DB15
Serial Port	1 DB9
USB 3.2 Gen1 Port	2 Type-A (USB3.2 Gen1)
RJ45	2 RJ45 (10GbE) 1 dedicated IPMI
<b>Internal Connector/Headers</b>	
Power Connector	1 (24-pin, ATX main power), 2 (8-pin, ATX 12V)
Auxiliary Panel Header	1 (18-pin): chassis intrusion, system fault LED, LAN1/LAN2 activity LED, locate, SMBus
System Panel	1 (9-pin): RSTBTN, PWRBTN, HDDLED, PWRLED
Speaker Header	1 (4-pin)
Fan Header	7 (6-pin)
Thermal Sensor Header	2
TPM Header	1 (13-pin, SPI), 1 (17-pin, LPC)
HSBP	1
SMBus header	1
PMBus header	1
IPMB Header	1
Clear CMOS	1 (contact pads)
USB 3.2 (Gen1) Header	1 (19-pin, 2 USB3.2 Gen1)
USB 3.2 (Gen2) Header	1 (Type-C, 1 USB3.2 Gen2)
NMI Header	1
<b>LED Indicators</b>	
Standby PWR LED 5vsb	1
80 Debug Port LED	1
Fan Fail LED	7
BMC heartbeat LED	1
<b>System BIOS</b>	
BIOS Type	AMI 256 Mb SPI Flash ROM
BIOS Features	Plug and Play (PnP), ACPI 2.0 Compliance Wake Up Events, SMBIOS 2.8.0, ASRock Rack Instant Flash
<b>Hardware Monitor</b>	
Temperature	CPU, DRAM, MB, Card Side, Chipset Temperature Sensing
Fan	CPU/Rear/Front Fan Tachometer CPU Quiet Fan (Allow CPU Fan Speed Auto-Adjust by CPU Temperature) CPU/Rear/Front Fan Multi-Speed Control
Voltage	3VSB, 5VSB, VCPU, VSOC, VCCM, APU VDDP, 1.05V_PROM_S5, 2.5V_PROM, 1.05V_PROM_RUN, BAT, 3V, 5V, 12V
<b>Environment</b>	
Temperature	Operation temperature: 10°C ~ 35°C / Non operation temperature: -40°C ~ 70°C
Humidity	Non operation humidity: 20% ~ 90% ( Non condensing)

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