

## 1.2 Specifications

EPYCD8-2T / EPYCD8 / EPYCD8-2T/R32 / EPYCD8/R32	
MB Physical Status	
Form Factor	ATX
Dimension	12" x 9.6" (30.5 cm x 24.4 cm)
Processor System	
CPU	<b>EPYCD8-2T / EPYCD8:</b> AMD EPYC™ 7000 series processor family (Naples) <b>EPYCD8-2T/R32 / EPYCD8/R32:</b> AMD EPYC™ 7000 series processor family (Naples & Rome)
Socket	Single Socket SP3 (LGA4094)
Chipset	N/A
System Memory	
Type	- Eight Channel DDR4 memory technology - Supports DDR4 RDIMM and LRDIMM
DIMM Size Per DIMM	<b>EPYCD8-2T / EPYCD8 :</b> - RDIMM: 32GB, 16GB, 8GB - LRDIMM: 128GB, 64GB  <b>EPYCD8-2T/R32 / EPYCD8/R32:</b> - RDIMM: 64GB*, 32GB, 16GB, 8GB - LRDIMM: 256GB*, 128GB, 64GB <i>*Supported only for Rome CPU.</i>
DIMM Frequency	<b>EPYCD8-2T / EPYCD8 :</b> - RDIMM: 2666/2400MHz - LRDIMM: 2666/2400MHz  <b>EPYCD8-2T/R32 / EPYCD8/R32:</b> - RDIMM: 3200*/2666/2400MHz - LRDIMM: 3200*/2666/2400MHz <i>*Supported only for Rome CPU.</i>
Voltage	1.2V
Expansion Slot	
PCIe 3.0 x 16	PCIe1: Gen3 x16 link PCIe3: Gen3 x16 link PCIe5: Gen3 x16 link PCIe7: Gen3 x16 link
PCIe 3.0 x 8	PCIe2: Gen3 x8 link PCIe4: Gen3 x8 link PCIe6: Gen3 x8 link

<b>Storage</b>	
SATA Controller	9 x SATA3 6.0 Gb/s (from 2x mini SAS HD and 1x SATA DOM port)
M.2 Slot	2(2230/2242/2260/2280/22110, SATA/PCIE(X4))
<b>Ethernet</b>	
Interface	<b>EPYCD8-2T / EPYCD8-2T/R32:</b> 10000/1000 /100 Mbps by Intel X550  <b>EPYCD8 / EPYCD8/R32:</b> 1000 /100 /10 Mbps by Intel i350
LAN Controller	<b>EPYCD8-2T / EPYCD8-2T/R32:</b> - 2 x RJ45 10G base-T by Intel® X550 - 1 x RJ45 Dedicated IPMI LAN port by RTL8211E  <b>EPYCD8 / EPYCD8/R32:</b> - 2 x RJ45 GLAN by Intel® i350 - 1 x RJ45 Dedicated IPMI LAN port by RTL8211E  - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports Dual LAN with Teaming function - Supports PXE - LAN1 supports NCSI
<b>Management</b>	
BMC Controller	ASPEED AST2500
IPMI Dedicated GLAN	1 x Realtek RTL8211E for dedicated management GLAN
Features	Watch Dog NMI
<b>Graphics</b>	
Controller	ASPEED AST2500
VRAM	DDR4 256MB
<b>Rear Panel I/O</b>	
VGA Port	1 x D-Sub
Serial port	1 x COM port
USB 3.0 Port	2
LAN Port	- 2+1 RJ45 Gigabit Ethernet LAN port - LAN Ports with LED (ACT/LINK LED and SPEED LED)
UID	1
<b>Internal Connector</b>	
Auxiliary Panel Header	1 (includes chassis intrusion, location button & LED, and front LAN LED)
TPM Header	1

IPMB Header	1
Fan Header	7 Fans x 6-pin (1CPU/4Front/2Rear)
ATX Power	1 x (24-pin) + 1 x (8-pin) + 1 x (4-pin) + 1 x (6-pin)(6 pin for GPU for PCIE Slot)
USB 3.0 Header	1 (supports 2 USB 3.0 ports)
M.2	2(M2_1: 2230/2242/2260/2280, SATA/PCIE(X4); M2_2:2230/2242/2260/2280/22110, SATA/PCIE(X4))
SATA DOM	1
OCulink	2
BMC SMB	1
SATA SGPIO	1
PSU SMB	1
TR	1
80 debug port LED	1
Speaker(4pin)	1
ClearCMOS	1
OH/FanFail LED	1 (only Fan Fail LED)
Front LED	1
<b>System BIOS</b>	
BIOS Type	<b>EPYCD8-2T / EPYCD8 :</b> 16MB AMI UEFI Legal BIOS  <b>EPYCD8-2T/R32 / EPYCD8/R32 :</b> 32MB AMI UEFI Legal BIOS
BIOS Features	- Plug and Play (PnP) - ACPI 2.0 Compliance Wake Up Events - SMBIOS 2.8 Support - ASRock Rack Instant Flash
<b>Hardware Monitor</b>	
Temperature	- CPU Temperature Sensing - MB/TR1/Card side 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	Voltage Monitoring: Vsoc,Vcpu, VCCM, VPPM, 3V/5V/12V, +BAT, 3VSB, 5VSB

Support OS	
OS	<div>Microsoft® Windows®<ul style="list-style-type: none"><li>- Server 2012 R2 (64 bit)</li><li>- Server 2016 (64 bit)</li></ul></div> <div>Linux®<ul style="list-style-type: none"><li>- RedHat Enterprise Linux Server 6.9 (64 bit) / 7.3 (64 bit)</li><li>- CentOS 6.9 (64 bit) / 7.3 (64 bit)</li><li>- SUSE Enterprise Linux Server 11 SP4 (64 bit) / 12 SP2 (64 bit)</li><li>- Ubuntu 16.04 (64 bit) / 17.04 (64 bit)</li><li>- CITRIX XenServer 7.5</li></ul></div> <div>Virtual:<ul style="list-style-type: none"><li>- VMWare ESXi 6.5 u1</li><li>- vSphere 6.5 u1</li></ul></div> <div><i>* Please refer to our website for the latest OS support list.</i></div>
Environment	
Temperature	<div>Operation temperature: 10°C ~ 35°C / Non operation</div> <div>temperature: -40°C ~ 70°C</div>

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 LAN1&2 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.