

## 1U2S-B650



- 1U Rackmount with 1, 80-PLUS Gold, 315W PSU
- Single Socket AM5 (LGA 1718), supports AMD Ryzen 7000 series processors
- 4 DIMM slots (2DPC), supports DDR5 ECC/non-ECC UDIMM
- 2 hot-swap 2.5" SATA drive bays
- 1 fixed 3.5" SATA drive bay or 1 Slim ODD
- 1 FHHL PCIe4.0 x16
- Supports 1 M.2 (PCIe5.0 x4), 1 M.2 (PCIe4.0 x4)
- 2 RJ45 (1GbE) by Intel® i210
- 1 HDMI, 1 DisplayPort
- Remote Management (IPMI)



### HDMI™ (High-Definition Multimedia Interface)



This motherboard supports HDMI™ (High-Definition Multimedia Interface) which is an interface standard for transferring uncompressed video data and delivering multi-channel audio through a single cable. Both video and audio data signals transferred through the HDMI™ interface are digital without being converted into analog, therefore it delivers the richest pictures and the most realistic sounds.

## Specifications

System	
Form Factor	1U Rackmount
Dimensions	393.2 x 430 x 43.5 mm (15.5" x 16.93" x 1.71")
Support MB	B650D4U
Front Panel	
Buttons	Power, System Reset
LEDs	Power, HDD Activity, LANs, System Event
I/O Ports	2 Type-A (USB3.2 Gen1)
External Drive Bay / Storage	
Front Side Drive Bay	External: 2 hot-swap 2.5" SATA drive bays Internal: 1 fixed 3.5" SATA drive bay or 1 Slim ODD
Internal Side	1 M-key (PCIe5.0 x4), supports 2280/2242 form factor [CPU] 1 M-key (PCIe4.0 x4), supports 2280/2242 form factor [FCH]
Power Supply	
Type	Single PSU
Output Watts	315W
Efficiency	80-PLUS Gold
System Fan	
Fan	3 PWM Hot-swap 40x56 mm fans, 1 PWM Hot-swap 40x28 mm fans
Processor System	
CPU	Supports AMD Ryzen 7000 series Processors
Socket	Single Socket AM5 (LGA 1718)
Thermal Design Power	Up to 120W
Chipset	AMD B650
System Memory	
Supported DIMM Quantity	4 DIMM slots (2DPC)
Supported Type	DDR5 288-pin ECC/non-ECC UDIMM
Max. Capacity per DIMM	48GB
Max. DIMM Frequency	5200 MHz (1DPC); 3600 MHz (2DPC)
Voltage	1.1V
PCIe Expansion Slots (SLOT7 close to CPU)	

PCIe x 16	Rear: 1 FHHL PCIe4.0 x16 via RB1UX16_G4
<b>Ethernet</b>	
Additional GbE Controller	Intel® i210: 2 RJ45 (1GbE)
<b>Server Management</b>	
BMC Controller	ASPEED AST2600
IPMI Dedicated GLAN	1 Realtek RTL8211F for dedicated management GLAN
<b>Graphics</b>	
Controller	ASPEED AST2600: 1 DB15 (VGA), 1 (15-pin) header AMD Processors with Graphics: 1 HDMI, 1 DisplayPort
<b>Rear I/O</b>	
UID Button/LED	1 UID button w/ LED
VGA Port	1 DB15 (VGA), 1 DisplayPort, 1 HDMI
Serial Port	1 DB9 (COM)
USB 3.2 Gen1 Port	4 Type-A (USB3.2 Gen1)
RJ45	2 RJ45 (1GbE) 1 dedicated IPMI
<b>System BIOS</b>	
BIOS Type	AMI UEFI BIOS; 256Mb (32MB) SPI Flash ROM
BIOS Features	Plug and Play, ACPI 6.4 compliance wake up events, SMBIOS 3.5
<b>Hardware Monitor</b>	
Temperature	CPU, DDR, MB, Card Side, Chipset, 10G LAN, M.2 slot
Fan	Fan Tachometer, Multi-Speed Control, CPU Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature)
Voltage	VOLT_3VSB, VOLT_5VSB, VOLT_P0_VCORE, VOLT_P0_VSOC, VOLT_VMEM, VOLT_VMISC, VOLT_1.8V_PT21, VOLT_VSUS10, VOLT_VDD10, VOLT_V10_PHY_DIG, VOLT_VDD_1P8, VOLT_MD_VDDO, VOLT_BAT, VOLT_3V, VOLT_5V, VOLT_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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