

# R133-C13 (rev. AAB1) | (rev.AAG1)

Rack Server - AMD Ryzen™ 7000 - 1U UP 4-Bay SATA | Application: [Networking](#)

- Supports 1 x Dual slot Gen5 GPU card
- AMD Ryzen™ 7000 series processors
- AMD Ryzen™ 7000 series processors with AMD 3D V-Cache™ Technology
- Single processor, 5nm technology
- Dual Channel ECC/Non-ECC DDR5 Unbuffered DIMM, 4 x DIMMs
- 2 x 1Gb/s LAN ports (Broadcom® BCM5720)
- 1 x Dedicated management port
- 4 x 3.5"/2.5" SATA hot-swappable bays
- 1 x M.2 slot with PCIe Gen4 x4 interface
- 1 x FHFL PCIe Gen5 x16 slot for GPUs
- 1 x FHHL PCIe Gen4 x4 slot
- 1+1 800W (240V) 80 PLUS Platinum redundant power supplies



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## Dimensions (WxHxD, mm)

1U  
438 x 43.5 x 710

## Motherboard

MC13-BL1

## CPU

AMD Ryzen™ 7000 series processors  
AMD Ryzen™ 7000 series processors with AMD 3D V-Cache™ Technology  
Single processor, 5nm technology  
TDP up to 170W

[\\*Overclocking not supported due to thermal limitation.](#)

## Socket

AM5

## Chipset

AMD B650E

## Memory

4 x DIMM slots  
DDR5 memory supported only  
Dual Channel memory architecture  
DIMM modules up to 32GB supported  
ECC Unbuffered DIMM 1Rx8/2Rx8 modules supported  
Non-ECC Unbuffered DIMM 1Rx8/2Rx8/1Rx16 modules supported  
Memory speed: up to 5200 MHz (1DPC), 3600 MHz (2DPC)

## LAN

**Rear side:**  
2 x 1Gb/s LAN ports (2 x Broadcom® BCM5720)  
Support NCSI function

1 x 10/100/1000 management LAN

## Video

Integrated in Aspeed® AST2600  
2D Video Graphic Adapter with PCIe bus interface  
1920x1200@60Hz 32bpp, DDR4 SDRAM

## Storage

**Front side:**  
4 x 3.5"/2.5" SATA hot-swappable bays

## SATA supported only

## SAS

N/A

## RAID

RAID 0/1/10

**Expansion Slots****PCIe Cabi**

- 1 x PCIe x16 (Gen5 x16) FHFL slot, from CPU, for GPUs\*

**\*Max 300W for GPUs****Riser Card CRSE016:**

- 1 x PCIe x4 (Gen4 x4) FHFL slot, from CPU

1 x M.2 slot:

- M-key
- PCIe Gen4 x4, from FCH
- Supports 2280/22110 cards

**Internal I/O**

- 2 x USB 3.2 Gen1
- 2 x USB 2.0
- 1 x Front panel header
- 1 x Back panel header
- 2 x Fan headers (4 pin)
- 1 x M.2 slot
- 1 x TPM header
- 1 x PMBus header

**Front I/O**

- 2 x USB 3.2 Gen1
- 1 x Power button with LED
- 1 x ID button with LED
- 1 x NMI button
- 1 x Reset button
- 2 x LAN activity LEDs
- 1 x HDD activity LED
- 1 x System status LED

**Rear I/O**

- 2 x USB 3.2 Gen1
- 1 x Mini-DP
- 2 x RJ45
- 1 x MLAN
- 1 x ID button with LED

**Backplane Board**

Speed and bandwidth:  
SATA 6Gb/s

**TPM**

1 x TPM header with SPI interface  
Optional TPM2.0 kit: [CTM010](#)

**Power Supply**

1+1 800W (240V) 80 PLUS Platinum redundant power supplies

AC input:

- 100-240V~/ 10-5A, 50-60Hz

DC Input:

- 240Vdc/ 4A

DC Output:

- Max 800W/ 100-240V~ or 240Vdc Input  
+ 12V/ 65A  
+ 12Vsb/ 2.1A

**System Management**

Aspeed® AST2600 management controller  
GIGABYTE Management Console (AMI MegaRAC SP-X) web interface

Dashboard

HTML5 KVM

Sensor Monitor (Voltage, RPM, Temperature, CPU Status ...etc.)

Sensor Reading History Data

FRU Information

SEL Log in Linear Storage / Circular Storage Policy

Hardware Inventory

Fan Profile

System Firewall

Power Consumption

Power Control

Advanced power capping

LDAP / AD / RADIUS Support

Backup & Restore Configuration

Remote BIOS/BMC/CPLD Update

Event Log Filter

User Management

Media Redirection Settings

PAM Order Settings

SSL Settings

SMTP Settings

**OS Compatibility**

Windows 10 21H2 (x64)  
Windows 11 (x64)

**System Fans**

2 x 40x40x56mm (29,700rpm)  
3 x 40x40x56mm (32,000rpm)

**Operating Properties**

Operating temperature: 10°C to 30°C  
Operating humidity: 8%-80% (non-condensing)  
Non-operating temperature: -40°C to 60°C  
Non-operating humidity: 20%-95% (non-condensing)

**Packaging Dimensions**

977 x 588 x 236 mm

**Packaging Content**

- 1 x R133-C13
- 1 x CPU heatsink
- 1 x Mini-DP to D-Sub cable
- 1 x GPU power cable (2x4pin to 2x 2x4pin)
- 1 x 2-Section Rail kit

**Part Numbers**

- Barebone package: 6NR133C13MR000AAB1\*
- Motherboard: 9MC13BL1NR-000
- 2-Section Rail kit: 25HB2-3A0203-K0R
- CPU heatsink: 25ST1-443300-S7R
- M.2 heatsink: 12SP2-11000E-00R
- Front panel board - CFP1010: 9CFP1010NR-00
- Backplane board - CBP1047: 9CBP1047NR-00
- Fan module: 25ST2-405623-A0R/25ST2-40562H-A0R
- Riser card - CRSE016: 9CRSE01016NR-00
- Mini-DP to D-Sub cable: 25CRN-200801-K1R
- GPU power cable (8+8pin, PCIe): 25CRI-700004-G5R
- Power supply: 25EP0-208009-F3S

**Optional parts:**

- 3-Section Rail kit: 25HB2-A56120-K0R
- Cable Management Arm: 25HBZ-R18100-K0R

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\* Advertised performance is based on maximum theoretical interface values from respective Chipset vendors or organization who defined the interface specification. Actual performance may vary by system configuration.

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\* Due to standard PC architecture, a certain amount of memory is reserved for system usage and therefore the actual memory size is less than the stated amount.