# Bedrock R8000 Options

Rev 2.02 | 12-Aug-2025

## CPU

Select one

- ☐ Ryzen 9 Pro **8945HS** AI ECC **45W** APU 8C/16T
- ☐ Ryzen Embedded 10y **8845HS** AI ECC **45W** APU 8C/16T
- ☐ Ryzen Embedded 10y **8840U** AI ECC **15W** APU 8C/16T
- ☐ AMD Ryzen 3 **7440U** **15W** APU 4C/8T

Enclosure should be matched to CPU power.
See below **Enclosure** / **Walls**

CPU is soldered down on
**Bedrock R7000 SoM** (System on Module)

## RAM

Select one

- ☐ No RAM Requires applying thermal paste
- ☐ **8 GB** 1x8 GB DDR5
- ☐ **16 GB** 2x8 GB DDR5
- ☐ **32 GB** 2x16 GB DDR5
- ☐ **32 GB ECC** 2x16 GB DDR5 ECC
- ☐ **64 GB** 2x32 GB DDR5

RAM is **2x SODIMM DDR5**

ECC is supported by **Pro / Embedded** CPUs only.

## Main storage

Select one

- ☐ No main storage → No OS options
- ☐ **960 GB PLP** Micron 7450 PLP: power loss protection Gen 4
- ☐ **1 TB** Samsung EVO 990 Pro Gen 4
- ☐ **2 TB** Samsung EVO 990 Pro Gen 4
- ☐ **4 TB** Samsung EVO 990 Pro Gen 4
- ☐ **256 GB** ADATA 710 Gen 3
- ☐ **512 GB** ADATA 710 Gen 3
- ☐ **1 TB** ADATA 710 Gen 3
- ☐ **2 TB** ADATA 710 Gen 3

Additional storage devices can be installed.
See below **SX / PCIe x4 slot**

### OS

Select one

- ☐ No OS
- ☐ Ubuntu Linux
- ☐ Windows 11 IOT

## NIO

Select one

- ☐ NIO R8000 4X25 4x 2.5 GbE, USB4
- ☐ NIO R7000 Basic 2x 2.5 GbE

NIO is
**Networking & I/O** board

## SX

Select one

- ☐ No SX → No extension options
- ☐ SX 4M2 4x M.2 sockets

SX is
**Storage & Extension Cards** board

### PCIe x4 slot 1

Select one

- ☐ No device
- ☐ **960 GB PLP** Micron 7450 PLP: power loss protection Gen 4
- ☐ **1 TB** Samsung EVO 990 Pro Gen 4
- ☐ **2 TB** Samsung EVO 990 Pro Gen 4
- ☐ **4 TB** Samsung EVO 990 Pro Gen 4
- ☐ **1 TB** ADATA 710 Gen 3
- ☐ **2 TB** ADATA 710 Gen 3
- ☐ **Hailo-8** AI acceleration module

### PCIe x4 slot 2

Select one

- ☐ No device
- ☐ **960 GB PLP** Micron 7450 PLP: power loss protection Gen 4
- ☐ **1 TB** Samsung EVO 990 Pro Gen 4
- ☐ **2 TB** Samsung EVO 990 Pro Gen 4
- ☐ **4 TB** Samsung EVO 990 Pro Gen 4
- ☐ **1 TB** ADATA 710 Gen 3
- ☐ **2 TB** ADATA 710 Gen 3
- ☐ **Hailo-8** AI acceleration module

### M.2 key-E

Select one

- ☐ No WiFi
- ☐ Customer's WiFi M.2 key-E 2230 PCIe + USB 2 Requires antennas
- ☐ **WiFi 6E** Intel AX210 Requires antennas
- ☐ **Hailo-8** AI acceleration module

For antennas, see below **Enclosure / Top panel**

### Modem

Select one

- ☐ No modem
- ☐ Customer's modem M.2 key-E 2230 USB 3.2 Requires antennas & SIM
- ☐ **LTE Cat 4** Quectel EM05-G Requires antennas & SIM
- ☐ **LTE Cat 12** Quectel EM12-G Requires antennas & SIM
- ☐ **5G** Quectel RM520N Requires antennas & SIM

For antennas,
see below **Enclosure / Top panel**

For SIM, see below **Enclosure** / **Rear panel**

## PM

Select one

- ☐ No PM 12V - 24V DC in
- ☐ PM 1260 12V - 60V DC in
- ☐ PM 1248 12V - 48V DC in

PM is
**Power Module**

## DCCON

Select one

- ☑ DCCON Phoenix terminal

DCCON is
**DC in Connector**

## Enclosure

Select one

- ☐ Without enclosure requires customer's thermal design → No enclosure options
- ☐ Enclosure

### Walls

Select one

- ☐ Tile 29x160x130 mm **15W** / **45W** CPU Conduction cooling
- ☐ 30W enclosure 45x160x130 mm **15W** CPU Passive cooling
- ☐ 60W enclosure 73x160x130 mm **45W** CPU Passive cooling

### Front panel

Select one

- ☐ Panel R7000 Basic Required for NIO R7000 Basic
- ☐ Panel R8000 4X25 Required for NIO R8000 4X25

### Top panel

Select one

- ☐ Generic top panel No antennas
- ☐ Top panel with antennas Required for Wifi or modem

### Rear panel

Select one

- ☐ Generic rear panel
- ☐ Rear panel with SIM trays Required for modem

### Bottom panel

Select one

- ☐ Generic bottom panel

## Temperature

Select one

- ☐ Commercial 0ºC to 70ºC
- ☐ Industrial -40ºC to 85ºC