

Bedrock R8000

(optional)

PM 1260
Power Module

DC-DC
converter

Phoenix
terminal block

12V - 60V
DC

19V DC

SoM R8000
System on Module

2x SODIMM
DDR5

DDR5-5600
(Quad channel ECC)

NVMe Gen 4
M.2 key-M 2280

4x PCIe Gen 4

2x SPI FLASH
256 Mbit

SPI

TPM 2.0

SPI

AMD Ryzen™
Embedded 8000
Processor

RTC

BR2032
RTC battery

NIO R8000 Basic
Networking & I/O

19V DC

PCIe Gen 4
9 ports
16 lanes

4x DDI

2x USB 4.0
40 Gb/s

2x USB 3.2
10 Gb/s

4x USB 2.0

3x UART

2x I2C

ESPI

GPIOs

HDMI 2.1

DP 2.1

DP 2.1

2x 2.5 Gbps
Ethernet

USB 3.2
10 Gb/s

3x USB 3.2
5 Gb/s

USB 2.0

HDMI

2x mini-DP

DisplayPort

2x RJ45

USB 3.2

3x USB 3.2

mini-USB
(console)

Remote
Power Button
With LED

2x Intel I226
2.5 Gbps
Ethernet
controller

USB 3.2 5 Gb/s
hub
CYUSB3304

UART to USB
converter

SX 4M2
Storage & Extension cards

M.2 key-M

NVMe Gen 4
M.2 key-M 2280

Hailo-8™
AI Acceleration
Module

M.2 key-M

NVMe Gen 4
M.2 key-M 2280

Hailo-8™
AI Acceleration
Module

M.2 key-E

WiFi 6E +
BT 5.3
M.2 key-E 2230

Hailo-8™
AI Acceleration
Module

M.2 key-B

4G / 5G modem
M.2 key-B
3042 / 3052

4G / 5G modem
M.2 key-B
3042 / 3052

(optional)

2x nano-SIM
(accessible trays)

19V DC

PCIe Gen 4
4 lanes

PCIe Gen 4
4 lanes

PCIe Gen 4

USB 2.0

USB 3.2
5 Gb/s