4U Rack Mount Industrial PC Rackmount

Configuration Number: BASE CONFIG
SL-4U-AZ790PA-SD

(full size images available on web site)
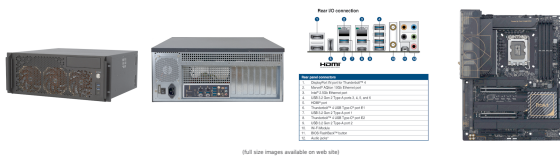
Type:

- 4U Rack Mount Industrial PC
- Depth: 16.89", Max Card Depth: 375mm (with 25mm thick front fans)"

Motherboard:

- Featuring Intel Z790 Chipset and 13th Gen Intel Core™ Processors (LGA1700) processor
- **Full Height Slots:**
  3 - PCIe x16
- **LAN:** 2x Ports (2.5GbE + 10GbE)
- **WiFi:** Wi-Fi 6E + BT
- **RAID:** 0,1,5,10 and NVMe 0,1,5
- **Video:** HDMI + DisplayPort + Intel Thunderbolt™ 4
- **Audio:** 8-Channel High Definition Audio CODEC Realtek ALC S1220A
- **Ports:**
  4x USB 2.0 Ports (4 Internal Headers)
  2x USB 3.2 Gen 1 Ports (2 Front)
  6x USB 3.2 Gen 2 Ports (6 Rear)
  1x USB 3.2 Gen 2 Type-C Port (1 Internal Headers)
  2x Thunderbolt™ 4 (supports USB 4.0) Type-C Port (Rear)
  1x COM Port (RS232 Internal Headers)
  See specifications for more ports
- **Operating Temperature:** 0ºC to 40ºC (32ºF to 104ºF)

Configuration summary:

- **Processor:** i5-12400 - 2.50GHz (up to 4.40GHz) Intel Core CPU - 6 Cores, 18MB Cache, UHD Graphics 730 (Base 65W, Max 117W) (ERM)

- **Memory:** 2 x 8GB DDR5 4800MHz RAM Non-ECC Unbuffered DIMM
- **Hard Drive:** 250GB NVMe SSD M.2 2.9GB/1.3GB - Samsung 980
- **Power Supply:** 600W Power Supply
- **Operating System:** Not Included -
- **Warranty:** One-Year Depot Warranty

Technical Specifications

MotherBoard Specifications:

Motherboard Model
- Motherboard Type: ATX

Supported CPU
- Number of Processors: 1
- Processor Type: 13th Gen Intel Core™ Processors (LGA1700)

Chipset
- Chipset: Intel Z790 Chipset

Memory
- Memory Type: DDR5 4800MHz
- Memory Type: Non-ECC
- DIMMS: 4
- Maximum Memory: 128GB

On Board Audio
- Audio Type: 8-Channel High Definition Audio CODEC Realtek ALC S1220A

On Board Video
- Video Chipset: Supported by CPU - depends on CPU selected
- Video on IO: HDMI + DisplayPort + Intel Thunderbolt™ 4
- HDMI Out: 1
- Thunderbolt™ video outputs: 2

LAN
- LAN Ports: 2
- LAN Type: 2.5GbE + 10GbE
- LAN Chipset: Marvell AQtion 10Gb Ethernet
- Second LAN Chipset: Intel i225-V 2.5GbE Ethernet
- Wireless LAN: Wi-Fi 6E + BT

Drive Interface

Chassis Specifications:

General
- Form Factor: 4U Rackmount
- Front Changeable Air Filter
- Color: Black
- Material: Metal/Steel
- Material Thickness: 1mm
- Motherboard Compatibility: SSI CEB
- Redundant Power Supply Capable
- Slide Rails: Optional

Expansion
- Full Height Slots: 8
- Max Card Depth: 375mm (with 25mm thick front fans)"
- External 5.25" Bays: 1
- Internal 3.5" Bays: 3
- Internal 2.5" Bays: 8

Front Ports
- USB 3.2 Ports (Front): 2
- USB Type-C (Front): 1

Cooling System
- Maximum Fan Count: 3

Physical
- Depth: 16.89"
- Depth (Inches): Click Available Downloads Tab > Mechanical Drawings.
- Width: 17"
- Height: 6.96"
- Shipping Box - Depth: 21"
- Shipping Box - Width: 21"
- Shipping Box - Height: 11"
- Shipping Weight: 30lbs

- SATA III Ports (6GB): 8
- RAID
- RAID Type: Software RAID
- RAID Levels Supported on Motherboard: 0, 1, 5, 10

Expansion Slots
- PCI Express x16 Slots On Motherboard: 3

M.2 Slot Specs
- Total M.2 NVMe SSD Slots: 4
- M.2 Slot #1 Specs
- PCIe Signal
- 2242 - 22 mm x 42 mm.
- 2260 - 22 mm x 60 mm.
- 2280 - 22 mm x 80 mm.
- 22110 - 22 mm x 110 mm.
- M.2 Slot #2 Specs
- PCIe Signal
- 2242 - 22 mm x 42 mm.
- 2260 - 22 mm x 60 mm.
- 2280 - 22 mm x 80 mm.
- M.2 Slot #3 Specs
- PCIe Signal
- 2242 - 22 mm x 42 mm.
- 2260 - 22 mm x 60 mm.
- 2280 - 22 mm x 80 mm.
- M.2 Slot #4 Specs
- M.2 SATA SSD
- PCIe Signal
- 2242 - 22 mm x 42 mm.
- 2260 - 22 mm x 60 mm.
- 2280 - 22 mm x 80 mm.

Rear IO
- USB 3.2 Gen 2 Type A Ports (on IO): 6
- Thunderbolt™ 4 (supports USB 4.0) Type-C Port: 2
- Audio on IO

Headers
- USB 2.0 Ports (on Headers): 4
- USB 3.2 Gen 1 Ports (on Headers): 2
- USB 3.2 Gen 2 Type-C (on Headers): 1
- Serial (via Headers): 1
- FAN Connectors: 8
- Audio on Headers
- Chassis Intrusion
- TPM Support: Via 2.0 Header

Environmental
- Operating Temperature: 0ºC to 40ºC (32ºF to 104ºF)

Other Features
- Features:
    - 8x full height PCIe card slot cutouts
    - Maximum card height: 158mm (card and power connector must be ≤158mm tall)
    - Maximum card length: 375mm (with 25mm thick front fans)
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    - LIQUID COOLING NOTE: radiators reduce the available depth inside the case for long GPUs
    - Inside of case is 399mm deep
    - Thickness of radiator + thickness of case fans + GPU length must equal less than 399mm total.
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- Chassis Warranty: 1 Year

- High Humidity: 95%
- Low Humidity: 5%

Operating System Support

- Windows 10 Home (64 Bit)
- Windows 10 Pro (64-Bit)
- Windows 10 Pro WS (64-Bit)
- SL-Windows 11PRO to 10PRO 64bit
- Windows 10 IoT 2021 LTSC Value
- Windows 10 IoT 2021 LTSC High End
- Windows 11 Home (64 Bit)
- Windows 11 Pro (64 Bit)
- Windows 11 Pro for WS (64 Bit)
- Windows 11 IoT 2024 LTSC Value
- Windows 11 IoT 2024 LTSC High End
- LINUX Ubuntu Desktop
- Ubuntu Server Edition

Compliance of Component

- RoHS
- FCC

Other Features

- Features:
  Intel 13th & 12th Gen Processors*
  2 x PCIe 5.0 x16 slots (support x16 or x8/x8 modes)
  Intel Z790 Chipset**
  1 x PCIe 4.0 x16 slot (supports x4 mode)

  1 x HDMI port**
  2 x Intel Thunderbolt™ 4 ports (USB Type-C) support DisplayPort*** and Thunderbolt™ video outputs****
  * Graphics specifications may vary between CPU types. Please refer to www.intel.com for any updates.
  ** Support 4K@60Hz as specified in HDMI 2.1.
  *** Support 8K@60Hz as specified in DisplayPort 1.4.
  **** Output at TBT4_E1 and TBT4_E2, the USB Type-C ports right under RJ45 ports, each requires a USB-C to DisplayPort adapter cable. For display connection and video output configuration regarding DP IN and Intel Thunderbolt™ 4 ports, please refer to the user manual for more details.
  VGA resolution support depends on processors' or graphic cards' resolution.

Total supports 4 x M.2 slots and 8 x SATA 6Gb/s ports*

Intel 13th & 12th Gen Processors

M.2_1 slot (Key M), type 2242/2260/2280/22110 (supports PCIe 4.0 x4 mode)

Intel Z790 Chipset

M.2_2 slot (Key M), type 2242/2260/2280 (supports PCIe 4.0 x4 mode)

M.2_3 slot (Key M), type 2242/2260/2280/22110 (supports PCIe 4.0 x4 mode)

M.2_4 slot (Key M), type 2242/2260/2280 (supports PCIe 4.0 x4 & SATA modes)**

8 x SATA 6Gb/s ports**

* Intel Rapid Storage Technology supports NVMe RAID 0/1/5, SATA RAID 0/1/5/10.

** M.2_4 slot shares bandwidth with SATA6G_5~8. SATA6G5~8 will be suspended once either a SATA or NVMe device is detected at M.2_4.

- Motherboard Warranty: 1 Year