

3U Rack Mount Industrial PC Rackmount

Configuration Number: BASE CONFIG
SL-3U-LLQ670EA-SR



NVMe RAID is possible with PCIe4-SI-PEX40110 Plug-in Board.

Type:

- 3U Rack Mount Industrial PC
- Depth: 14.89", Max Card Depth: 324mm"

Motherboard:

- Featuring Intel Q670 Chipset and 13th & 12th Gen Intel Core™, Pentium Gold and Celeron, LGA1700 processor
- **Long Production Cycle Motherboard (Through Q1 2029)**
- **Full Height Slots:**
 - 2 - PCIe x16
 - 3 - PCIe x4
 - 2 - PCI
- **LAN:** 3x Ports (2.5GbE + 2.5GbE + 1GbE)
- **RAID:** 0,10 and NVMe 0,1
- **Video:** 1x VGA, 1x DisplayPort, 1x HDMI
- **Audio:** Realtek ALC897
- **Ports:**
 - 4x USB 2.0 Ports (4 Internal Headers)
 - 4x USB 3.2 Gen 1 Ports (2 Front, 2 Internal Headers)
 - 5x USB 3.2 Gen 2 Ports (5 Rear)
 - 1x USB 3.2 Gen 2 Type-C Port (1 Rear)
 - 6x COM Ports (4 RS232 Internal Headers, 1 RS232/422/485 Rear, 1 RS232/422/485 Internal Headers)
- See specifications for more ports
- **Operating Temperature:** 0°C to 60°C (32°F to 140°F)

Configuration summary:

- **Processor:** i3-12100 - 3.30GHz (up to

4.30GHz) Intel Core CPU - 4 Core, 12MB Cache, UHD Graphics 730 (Base 60W, Max 89W) (ERM)

- **Memory:** 16GB DDR5 5600MHz RAM Non-ECC Unbuffered DIMM
- **Hard Drive:** 500GB M.2 2280 NVMe SSD or greater 5,000/3,000MB/s
- **Power Supply:** 350W SFX-form factor auto-switching power supply
- **Operating System:** Not Included -
- **Warranty:** One-Year Depot Warranty

Technical Specifications

MotherBoard Specifications:

Motherboard Model

- Motherboard Type: ATX
- Long Production Cycle
- Long Life: YES
- EOL Date: Q1 2029

Supported CPU

- Number of Processors: 1
- Processor Type: 13th & 12th Gen Intel Core™, Pentium Gold and Celeron, LGA1700

Chipset

- Chipset: Intel Q670 Chipset

Memory

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

On Board Audio

- Audio Type: Realtek ALC897

On Board Video

- Video Chipset: Supported by CPU - depends on CPU selected
- Video on IO: 1x VGA, 1x DisplayPort, 1x HDMI
- VGA Port Out: 1
- Display Port Out: 2
- HDMI Out: 1

LAN

- LAN Ports: 3

Chassis Specifications:

General

- Form Factor: 3U Rackmount
- Front Changeable Air Filter
- Color: Black
- Material: Metal/Steel
- Material Thickness: 1mm
- Motherboard Compatibility: E-ATX
- Slide Rails: Optional

Expansion

- Full Height Slots: 8
- Max Card Depth: 324mm"
- External 3.5" Bays: 1
- Internal 2.5" Bays: 2

Front Ports

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

Cooling System

- Maximum Fan Count: 2

Physical

- Depth: 14.89"
- Width: 17"
- Height: 5.22"
- Shipping Box - Depth: 24"
- Shipping Box - Width: 23"
- Shipping Box - Height: 11"
- Shipping Weight: 28lbs

Other Features

- LAN Type and IPMI: 2.5GbE + 2.5GbE + 1GbE
- LAN Chipset: Intel i226-V 2.5GbE Ethernet
- Second LAN Chipset: Intel i226-LM 2.5GbE Ethernet
- Third LAN Chipset: Intel i210AT
- Wireless LAN: No Integrated WLAN

Drive Interface

- SATA III Ports (6GB): 7
- RAID Type: Software RAID
- RAID Levels Supported on Motherboard: 0, 1, 5, 10

Expansion Slots

- PCI Express x16 Slots On Motherboard: 2
- PCI Express x4 Slots On Motherboard: 3
- PCI Slots (Conventional 32-Bit): 2

M.2 Slot Specs

- Total M.2 NVMe SSD Slots: 1
- M.2 Slot #1 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): 5
- USB 3.2 Gen 2 Type C Ports (on I/O): 1
- Serial 232/422/485 Ports: 1
- Audio on IO

Headers

- USB 2.0 Ports (on Headers): 4
- USB 3.2 Gen 1 Ports (on Headers): 4
- USB 3.0 Type A Internal: 1
- Serial (via Headers): 4
- Serial 232/422/485 Ports: 1
- FAN Connectors: 4
- Digital I/O (8 Bit) On Headers
- Audio on Headers
- Chassis Intrusion
- TPM Support: Via 2.0 Header

Management Features

- Watch Dog

Environmental

- Operating Temperature: 0°C to 60°C (32°F to 140°F)
- High Humidity: 95%
- Low Humidity: 10%

Features:

- 8x full height PCIe card slot cutouts
- Maximum card height: 115mm
- Maximum card length with 3x Noctua A12x25 fans: 324mm
- Maximum card length with Asetek 360mm AIO and Noctua A12x25 fans: 297mm
- Maximum card length with no fans / no AIO cooler: 349mm
- Chassis Warranty: 1 Year

Operating System Support

- Windows 10 Home (64 Bit)
- Windows 10 Pro (64-Bit)
- SL-Windows 11PRO to 10PRO 64bit
- Windows 10 IoT 2021 LTSC Value
- Windows 10 IoT 2021 LTSC High End
- 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
- RED HAT Enterprise LINUX SERVER BASIC
- RED HAT Enterprise LINUX WORKSTATION STANDARD
- RED HAT Enterprise LINUX SERVER STANDARD
- LINUX Ubuntu Desktop
- Ubuntu Server Edition

Compliance of Component

- CE
- FCC

Other Features

- Features:

PCIe Expansion Slots

1 x PCIe5.0x16 Slot(1 x16 mode/ 2 x8 mode)

1 x PCIe4.0x4 Slot(x4 mode, open slot)

1 x PCIe5.0x16 Slot(x8 mode)

1 x PCIe3.0x4 Slot(x4 mode, open slot)

1 x PCIe4.0x4 Slot(x4 mode, open slot)

PCI2

M.2

1 x M.2 M key, Type 2242/2260/2280 (PCIex4 /SATA mode) supports NVMe

1 x M.2 E key, type 2230 for WIFI/BT device (only support Intel CNVi) *If install CNVI Wificard on M.2 E key slot, USB port14 will be disabled.

* Access to PCI Express slot requires expansion slot and a riser in some chassis models. Please check Chassis Specification section for more information.

If you have any questions, please discuss with our Sales Engineers.

- Motherboard Warranty: 1 Year



Simplifying Computing™

www.superlogics.com
Phone: 1-508-650-9500

sales@superlogics.com
Fax: 1-508-650-9525