HMI Panel PC Panel PC

Configuration Number: BASE CONFIG
SL-PPC-12A-LL6412J-S29-1

Completely Fanless,

Type:

- Fanless Panel PC
- **Screen:**
  - 12" 5-Wire Resistive, Native Resolution: 800 x 600, Front Panel Rating: IP65 / NEMA4
- **Mounting:** Bezel Mounting Hardware Included, Suitable for Mounting in Cut-Out

Motherboard:

- Featuring Intel Celeron SoC and Intel Celeron J6412 Elkhart Lake Platform (Quad Core 2.0GHz/10W, Turbo 2.6GHz)
- **Long Production Cycle Motherboard (Through Q1 2036)**
- **LAN:** 2x Ports (2.5GbE + 2.5GbE)
- **Video:** 1x HDMI
- **Audio:** Onboard Audio
- **Ports:**
  6x USB 2.0 Ports (2 Front, 2 Rear, 2 Internal Headers)
  2x USB 3.2 Gen 1 Ports (2 Rear)
  6x COM Ports (4 RS232 Internal Headers, 2 RS232/422/485 Internal Headers)
  See specifications for more ports
- **Operating Temperature:** 0ºC to 60ºC (32ºF to 140ºF)

Configuration summary:

- **Memory:** 8GB DDR4 3200MHz SODIMM RAM
- **Hard Drive:** 500GB M.2 2280 NVMe SSD or greater 5,000/3,000MB/s
- **Power Supply:** AC/DC Power Adapter

Included
- **Operating System:** Not Included -
- **Warranty:** One-Year Depot Warranty

Technical Specifications

MotherBoard Specifications:

Motherboard Model
- Motherboard Type: MiniITX
- Fanless
- Long Production Cycle
- Long Life: YES
- EOL Date: Q1 2036

Supported CPU
- Number of Processors: 1
- Processor Type: Embedded CPUs (ultra-low power, soldered down)
- Embedded CPU: Intel Celeron J6412 Elkhart Lake Platform (Quad Core 2.0GHz/10W, Turbo 2.6GHz)

Chipset
- Chipset: Intel Celeron SoC

Memory
- Memory Type: DDR4 2666MHz
- Memory Type: Non-ECC
- DIMMS: 1
- Maximum Memory: 32GB

On Board Audio
- Audio Type: Onboard Audio

On Board Video
- Video Chipset: Supported by CPU - see Embedded CPU Information
- Video on IO: 1x HDMI
- HDMI Out: 1

LAN
- LAN Ports: 2
- LAN Type and IPMI: 2.5GbE + 2.5GbE
- LAN Chipset: Intel I225-V 2.5GbE Ethernet
- Second LAN Chipset: Intel i225-V 2.5GbE Ethernet
- Wireless LAN: No Integrated WLAN

Drive Interface
- SATA III Ports (6GB): 1

Display Specifications

Display
- Screen Size (inches): 12
- Touch Type: 5-Wire Resistive
- Front Panel Rating: IP65 / NEMA4
- Aspect Ratio: 4 : 3
- Native Display Resolution: 800 x 600
- Brightness (nits): 400
- Screen Refresh Rate: 60Hz
- Display Area (H): 246mm
- Display Area (V): 184.50mm
- Aspect Ratio: 4 : 3
- DisplayColors: 16.2 M
- Contrast Ratio: 600:1
- Backlight: LED
- Viewing Angle(U) : 65
- Viewing Angle(D) : 75
- Viewing Angle(L) : 80
- Viewing Angle(R) : 80

Connectivity
- HDMI In: 1
- Display Port In: 1
- Touchscreen Interface USB Port (Front): 1

Mounting Options
- Mounting Options: Bezel Mounting Hardware Included, Other options sold separately
- Suggested Cut-Out Dimension (Width):
- Suggested Cut-Out Dimension (Height):

Physical
- Width:
- Height:
- Depth:
- Depth (Inches): Click Available Downloads Tab > Mechanical Drawings.
- Unboxed Weight: 9lbs
- Shipping Weight: 25lbs

Environmental

Mini PCIe

- SIM Card Slot On Motherboard: Nano SIM

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.
- 2280 - 22 mm x 80 mm.

Rear IO

- USB 2.0 Ports (on IO): 2
- USB 3.2 Gen 1 Type A Ports (on IO): 2
- Audio on IO

Headers

- USB 2.0 Ports (on Headers): 4
- Serial (via Headers): 4
- Serial 232/422/485 Ports: 2
- FAN Connectors: 1
- Audio on Headers
- LVDS
- DC Power: 12V DC-in

Management Features

- Watch Dog

Environmental

- Operating Temperature: 0ºC to 60ºC (32ºF to 140ºF)
- High Humidity: 90%
- Low Humidity: 10%

Operating System Support

- Windows 10 Home (64 Bit)
- Windows 10 Pro (64-Bit)
- SL-Windows 11PRO to 10PRO 64bit
- Windows 10 IoT Entry 2019 LTSC
- Windows 10 IoT 2021 LTSC Entry
- Windows 11 Home (64 Bit)
- Windows 11 Pro (64 Bit)
- Windows 11 IoT 2024 LTSC Entry
- LINUX Ubuntu Desktop

Compliance of Component

- CE
- RoHS
- FCC

Other Features

- Motherboard Warranty: 1 Year
- MTBF: 50000hours
- Maximum Operating Temperature: 80C
- High Humidity: 90%
- Low Humidity: 8%
- Storage Temp (High): 80C
- Storage Temp (Low): -30C
- Storage Humidity (High): 90%
- Storage Humidity (Low): 8%

Power

- Power Supply: AC 100~240V/12V DC
- Power Consumption (on): 12Watts

Compliance of Component

- CE
- CCC

Warranty

- Warranty: 1 year

Other

- Built-in Chassis Power Supply: Wide Voltage Input (9-36VDC)
- Features:

Industrial Display

- Screen Size: 12"
- Touch Type: 5-Wire Resistive
- Front Panel Rating: IP65 / NEMA4
- Native Display Resolution: 800 x 600
- Brightness (nits): 400
- Wide Voltage Input (9-36VDC)

Chassis Specifications:

General

- Form Factor: Embedded PC
- Color: Black
- Material: Metal/Steel
- Material Thickness: 1mm
- Motherboard Compatibility: Mini ITX
- Slide Rails: Optional

Expansion

- Internal 2.5" Bays: 1
- Serial Port Punchouts: 3
- Parallel Port Punchouts: 1

Front Ports

- USB 2.0 Ports (Front): 2

Physical

- Depth: 7.60"
- Depth (Inches): 7.6
- Width: 8.47"
- Height: 1.78"
- Shipping Box - Depth: 13"
- Shipping Box - Width: 9"
- Shipping Box - Height: 5"
- Shipping Weight: 5lbs

Other Features

- Chassis Warranty: 1 Year

Power

- Built-in Chassis Power Supply: AC/DC Power Adapter Included