HMI Panel PC Panel PC

Configuration Number: BASE CONFIG
SL-PPC-22A-LL6412G-S19

Completely Fanless,

Type:

- Fanless Panel PC
- **Screen:**
    - 22" InfraRed, Native Resolution: 1680 x 1050, 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 2028)**
- **Low Profile Slots:**
    1 - PCIe x1
- **LAN:** 2x Ports (GB (10/100/1000))
- **Video:** VGA + HDMI
- **Audio:** Realtek ALC897
- **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 Rear)
    See specifications for more ports
- **Operating Temperature:** 0ºC to 60ºC (32ºF to 140ºF)

Configuration summary:

- **Memory:** 8GB DDR4 3200MHz SODIMM RAM
- **Hard Drive:** 250GB Solid State Drive -

M.2 2280 Internal - SATA (SATA/600)
- **Power Supply:** 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 2028

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: SO DIMM DDR4 3200MHz
- Memory Type: Non-ECC
- DIMMS: 2
- Maximum Memory: 32GB

On Board Audio
- Audio Type: Realtek ALC897

On Board Video
- Video Chipset: Intel UHD Graphics for 10th Gen Intel Processors
- Video on IO: VGA + HDMI
- VGA Port Out: 1
- Embedded DisplayPort Out: 1
- HDMI Out: 1

LAN
- LAN Ports: 2
- LAN Type: GB (10/100/1000)
- LAN Chipset: Realtek RTL8111H
- Second LAN Chipset: Realtek RTL8111H
- Wireless LAN: No Integrated WLAN

Display Specifications

Display
- Screen Size (inches): 22
- Touch Type: InfraRed
- Front Panel Rating: IP65 / NEMA4
- Aspect Ratio: 16 : 10
- Native Display Resolution: 1680 x 1050
- Brightness (nits): 300
- Screen Refresh Rate: 60Hz
- Display Area (H): 473.76mm
- Display Area (V): 296.10mm
- Aspect Ratio: 16 : 10
- DisplayColors: 16.7 M
- Contrast Ratio: 1000:1
- Backlight: LED
- Viewing Angle(U) : 85
- Viewing Angle(D) : 85
- Viewing Angle(L) : 80
- Viewing Angle(R) : 80

Connectivity
- VGA Port In: 1
- DVI-I In: 1
- HDMI 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: 20lbs

Drive Interface
- SATA III Ports (6GB): 5

Expansion Slots
- PCI Express x1 Slots On Motherboard: 1

M.2 Slot Specs
- M.2 Slot #1 Specs
- M.2 SATA SSD
- 2280 - 22 mm x 80 mm.
- M.2 E-Key Slot
- PCIe Signal
- USB

Rear IO
- USB 2.0 Ports (on IO): 2
- USB 3.2 Gen 1 Type A Ports (on IO): 2
- Serial 232/422/485 Ports: 2
- Audio on IO

Headers
- USB 2.0 Ports (on Headers): 4
- Serial (via Headers): 4
- FAN Connectors: 2
- Audio on Headers
- LVDS
- TPM Support: 2.0 Module Included
- DC Power: DC Jack (+12V/+19V~+24VDC)

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

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

Compliance of Component
- CE
- RoHS
- FCC

Other Features
- Features:
  Expansion Slots

  1 x PCIe x1 (Gen 3x1)
  1 x 2280 M.2 M-Key (SATA 6Gb/s)
  1 x 2230 M.2 E-Key

- Shipping Weight: 45lbs

Environmental
- MTBF: 30000hours
- Maximum Operating Temperature: 50C
- High Humidity: 90%
- Low Humidity: 8%
- Storage Temp (High): 60C
- Storage Temp (Low): -10C
- Storage Humidity (High): 90%
- Storage Humidity (Low): 8%

Power
- Power Supply: AC 100~240V/12V DC
- Power Consumption (on): 19Watts

Compliance of Component
- CE
- RoHS
- FCC

Warranty
- Warranty: 1 year

Other
- Features:
  Industrial Display

  - Screen Size: 22"
  - Touch Type: InfraRed
  - Front Panel Rating: IP65 / NEMA4
  - Native Display Resolution: 1680 x 1050
  - Brightness (nits): 300

TPM

Onboard TPM 2.0 security chip
Infineon SLB9670VQ2.0

Storage

5 x SATA 6Gb/s Ports
(4 x Asmedia ASM1064)
(1 x supports SATA DOM)

- Motherboard Warranty: 1 Year

Chassis Specifications:

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

Expansion
- Low Profile Slots: 1
- Max Card Depth: 7.5""
- Internal 2.5" Bays: 2
- Serial Port Punchouts: 2
- Parallel Port Punchouts: 1

Front Ports
- USB 2.0 Port (Front): 2

Cooling System
- Maximum Fan Count: 2

Physical
- Depth: 8.30"
- Depth (Inches): 8.27
- Width: 8"
- Height: 3.50"
- Shipping Box - Depth: 150mm
- Shipping Box - Width: 380mm
- Shipping Box - Height: 27mm
- Shipping Weight: 13lbs

Other Features
- Chassis Warranty: 1 Year

Power
- Built-in Chassis Power Supply: Power Adapter
Included