Microbox PC Panel PC

Configuration Number: BASE CONFIG
SL-PPC-19A-LLN100EM-S19

Type:

- Fanless Panel PC
- **Screen:**
  - 19" 5-Wire Resistive, Native Resolution: 1280 x 1024, Front Panel Rating: IP65 / NEMA4
- **Mounting:** Bezel Mounting Hardware Included, Suitable for Mounting in Cut-Out

Motherboard:

- Featuring Intel Celeron SoC and Intel Quad-core Processor N100 (up to 3.4 GHz)
- **Long Production Cycle Motherboard (Through Q1 2029)**
- **Low Profile Slots:**
  1 - PCIe x1
- **LAN:** 2x Ports (1GbE + 1GbE)
- **Video:** 1x VGA, 1x HDMI
- **Audio:** Realtek ALC897
- **Ports:**
  3x USB 2.0 Ports (1 Front, 2 Rear)
  4x USB 3.2 Gen 1 Ports (2 Rear, 2 Internal Headers)
  6x COM Ports (2 RS232 Rear, 3 RS232 Internal Headers, 1 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:** 500GB M.2 2280 NVMe SSD or greater
- **Power Supply:** Power Adapter Included

Technical Specifications

MotherBoard Specifications:

Motherboard Model
- Motherboard Type: MiniITX
- Fanless
- Long Production Cycle
- Long Life: YES
- EOL Date: Q1 2029

Supported CPU
- Number of Processors: 1
- Processor Type: Embedded CPUs (ultra-low power, soldered down)
- Embedded CPU: Intel Quad-core Processor N100 (up to 3.4 GHz)

Chipset
- Chipset: Intel Celeron SoC

Memory
- Memory Type: DDR4 3200MHz
- Memory Type: Non-ECC
- DIMMS: 1
- Maximum Memory: 16GB

On Board Audio
- Audio Type: Realtek ALC897

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

LAN
- LAN Ports: 2
- LAN Type: 1GbE + 1GbE
- LAN Chipset: Realtek RTL8111H
- Second LAN Chipset: Realtek RTL8111H
- Wireless LAN: No Integrated WLAN

Drive Interface
- SATA III Ports (6GB): 2

Display Specifications

Display
- Screen Size (inches): 19
- Touch Type: 5-Wire Resistive
- Front Panel Rating: IP65 / NEMA4
- Aspect Ratio: 5 : 4
- Native Display Resolution: 1280 x 1024
- Brightness (nits): 350
- Screen Refresh Rate: 60Hz
- Display Area (H): 376.32mm
- Display Area (V): 301.07mm
- Aspect Ratio: 5 : 4
- DisplayColors: 16.7 M
- Contrast Ratio: 1000:1
- Backlight: LED
- Viewing Angle(U) : 80
- Viewing Angle(D) : 80
- Viewing Angle(L) : 80
- Viewing Angle(R) : 80

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

Mounting Options
- Mounting Options: VESA 75mm x 75mm, VESA 100mm x 100mm, 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: 14lbs
- Shipping Weight: 40lbs

Expansion Slots

- PCI Express x1 Slots On Motherboard: 1

M.2 Slot Specs

- Total M.2 NVMe SSD Slots: 1
- 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.
- M.2 E-Key Slot
- PCIe Signal
- USB
- 2230 - 22 mm x 30 mm.

Rear IO

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

Headers

- USB 2.0 Ports (on Headers): 1
- USB 3.2 Gen 1 Ports (on Headers): 2
- Serial (via Headers): 3
- FAN Connectors: 1
- LVDS
- Chassis Intrusion
- TPM Support: Via 2.0 Header
- DC Power: 12V DC-in

Environmental

- Operating Temperature: 0ºC to 60ºC (32ºF to 140ºF)
- High Humidity: 95%
- 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 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

- FCC

Other Features

- Features:

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): 18Watts

Compliance of Component

- CE
- RoHS
- CCC

Warranty

- Warranty: 1 year

Other

- Features:

Industrial Display

- Screen Size: 19"
- Touch Type: 5-Wire Resistive
- Front Panel Rating: IP65 / NEMA4
- Native Display Resolution: 1280 x 1024
- Brightness (nits): 350
- Wide Voltage 9-36VDC

Expansion slots

1x PCI Express 3.0/2.0 x1 slot (x1 mode)

1x M.2 Socket 1 with E key, type 2230 for WIFI/BT
device (PCIe x1 /USB2.0)

1x M.2 Socket 3 with M key, type 2242/ 2260/
2280 (SATA/PCIex1)

- 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 Ports (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

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