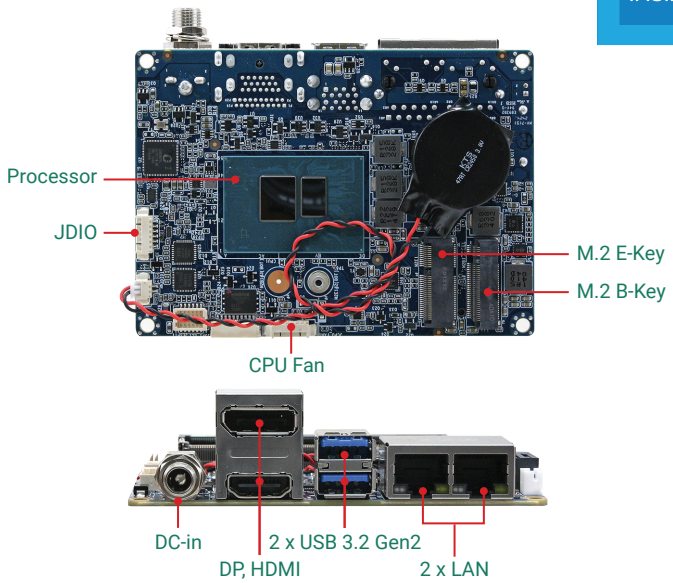
PRODUCT DATASHEET

EPX-TWLP

2.5” SBC Pico-ITX built with the Intel® Processor N150 or Intel® Processor N250 Onboard



Features

- Intel® Processor N150 or N250 Onboard
- 6W Low Power Processor Base Power
- Twin Lake Platform
- 1 x DDR5 4800MHz SO-DIMM socket, supports up to 16GB
- Supports 3 Indenpendent Displays: DP 1.4a, HDMI 2.0b, 1 x 1CH LVDS
- Dual LAN: Intel® Ethernet Controllers I226-V (2.5GbE)
- M.2 B-Key, M.2 E-Key
- 1 x RS-232, 1 x RS-232/422/485
- DC in +12V
- Ultra Small Form Factor: 3.94” x 2.83” (100mm x 72mm)
- Cooling Solution is not included

SPECIFICATIONS

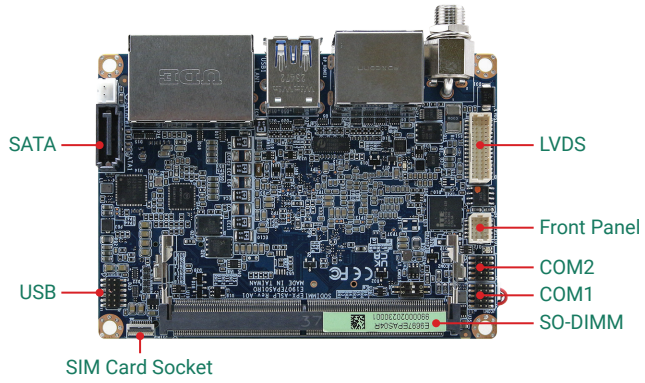
System	
Processor	Intel® Processor N150, 6M Cache, up to 3.60 GHz, TDP up to 6W Intel® Processor N250, 6M Cache, up to 3.80 GHz, TDP up to 6W
Memory	1 x 262-pin DDR5 4800MHz SODIMM socket, supports up to 16GB
Audio	HD Audio
Ethernet	2 x Intel® Ethernet Controller I226-V (2.5 GbE)
I/O Chip	EC IC: IT5782 or Equivalent Fintek_F81435N or Equivalent for COM port
BIOS	AMI BIOS, 256Mbit SPI Flash ROM
Expansion	1 x M.2 B-Key 2242/3042 with (1 x PCIe x1 or USB3.2 GEN1) or (1 x SATA III + USB3.2 GEN1), USB2.0, SIM Slot for SSD/LTE/IO Cards) *Default: SATA * 1 x 10Pin FPC connector for Micro SIM card adapter * Micro SIM card to SIM card adapter by optional 1 x M.2 E-Key 2230 support WiFi module, USB 2.0 Signal, PCIe x1 Signal
Storage	1 x M.2 B-Key, x SATA III
Watchdog Timer	H/W Reset: 1Sec. ~ 65535Sec./Min. and1 Sec. or 1Min./Step
H/W Status Monitor	CPU temperature monitoring Voltages monitoring CPU fan speed control
TPM	Support fTPM
Supported OS	Windows 11, Linux
Graphics	
Graphics Engine	Intel® Graphics
Interface	HDMI 2.0b Max resolution 4096 x 2160@60Hz DP 1.4a Max resolution 4096 x 2160@60Hz LVDS 1366 x 768 Single channel 18/24-bits
Multi-Display	Supports 3 Indenpendent Displays

External I/O Ports	
Display	1 x DP, 1 x HDMI
LAN	2 x RJ45
USB	2 x USB 3.2 Gen2
DC-in	Lockable DC Jack
Internal I/O Connectors	
Display	LVDS
USB	4 x USB 2.0
COM	1 x RS-232, 1 x RS-232/422/485
GPIO	1 x 4-bit GPIO
SATA	1 x SATA III
Mechanical, Power, and Environment	
Power Type	DC in +12V
Operating Temperature	0°C ~ 60°C (-4°F ~ 140°F) with 0.5m/s Air Flow
Storage Temperature	-40°C ~ 75°C (-40°F ~ 167°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Form Factor	Pico-ITX
Dimensions	3.94” x 2.83” (100mm x 72mm)
Certification	CE, FCC, RoHS Compliant
Weight	approx. 0.66lbs (0.3Kgs)
Weight	0.88 lbs (0.4 KG)

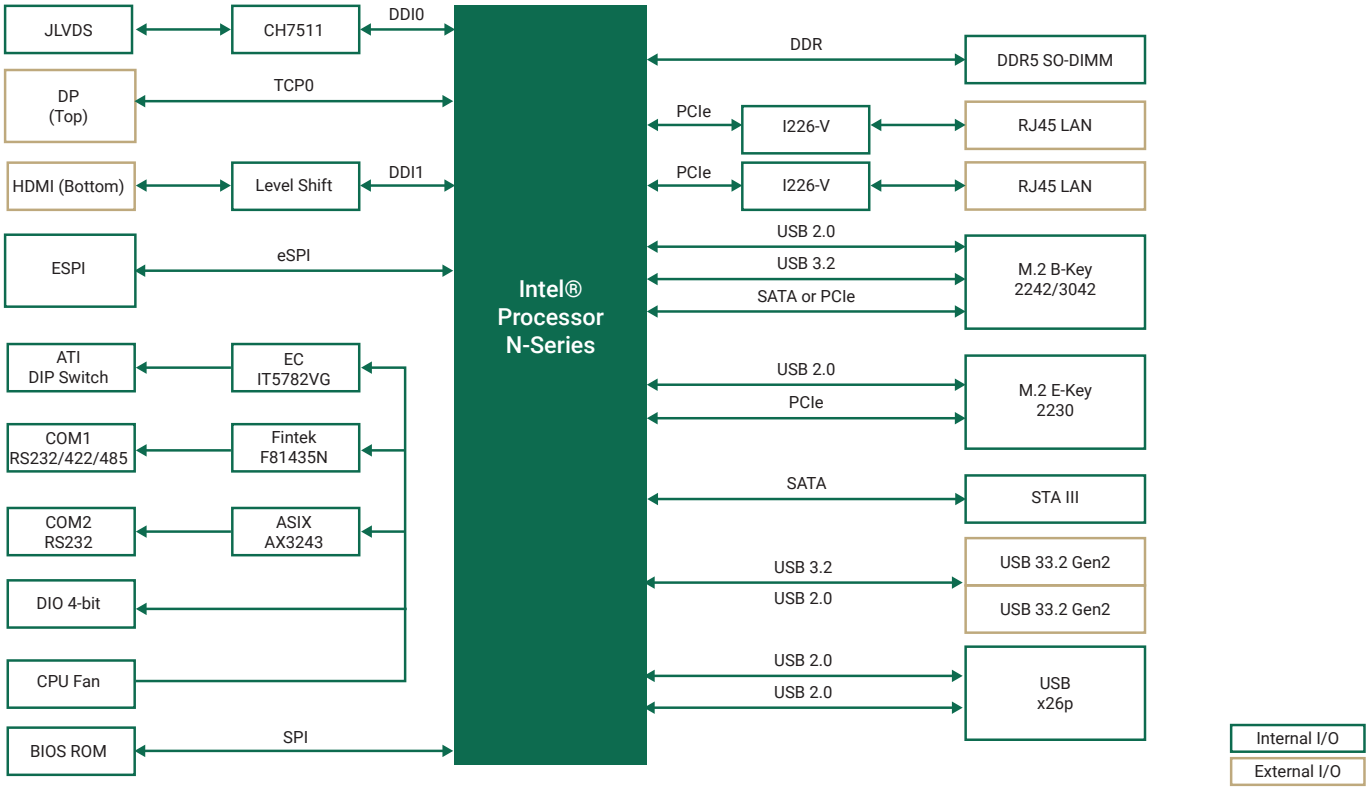
* All product specifications and images are subject to change without notice. Last update: 09/11/2026

SPECIFICATIONS / ADDITIONAL PRODUCT PHOTOS





BLOCK DIAGRAM



ORDERING INFORMATION

Model Name	CPU/CPU Socket
EPX-TWLP-N150-A1R	Pico-ITX with Intel® Processor N150 onboard. Heatsink/sooling solution is not included.
EPX-TWLP-N250-A1R	Pico-ITX with Intel® Processor N250 onboard. Heatsink/sooling solution is not included.
Accessory Included	SATA Cable, SATA Power Cable

PACKING LIST

- √ 1 x EPX-TWLP Motherboard
- √ 1 x Desiccant (5g)
- √ 1 x SATA cable (35cm)
- √ 1 x SATA power cable (20cm)
- √ 2 x M.2 Screw
- √ 1 x M.2 Stand-Off

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