



NEIMB-WLIHT

Thin Mini-ITX Industrial Motherboard (170x170 mm)
Onboard Intel® N150 / Atom® x7213E / Core™ i3-N305 / DC-IN 9~24V

Features

Intel Processor N150 / Atom x7213E / Core i3-N305 (Twin/Amston/Alder Lake-N)

1 x DDR5 4800 MHz SO-DIMM, up to 16GB

1 x M.2 Key M (PCIe3.0 NVMe/SATA) / 1 x M.2 Key B (4G/5G) / 1 x SATA3

Triple Display: 2 x HDMI® / USB-C (DP Alt, 20V/5A PD) / LVDS or eDP

2 x USB3.2 Gen1 + 1 x USB-C (Gen2, PD) + 6 x USB2.0

2 x GbE LAN (Realtek RTL8111H)

2 x COM (RS232/422/485) / 4 x COM (RS232) / TPM2.0

Specifications

Processor	Intel Processor N150 / Intel Atom x7213E / Intel Core i3-N305 (Alder Lake-N/Amston Lake/Twin Lake)
	Onboard (SoC)
Memory	1 x DDR5 4800 MHz SO-DIMM, up to 16GB
GRAPHICS	Intel® Integrated Graphics, triple display: 2x HDMI® 4096x2160@24Hz / USB-C 4096x2160@60Hz / LVDS 1920x1200@60Hz or eDP 1920x1080@60Hz
Storage	1 x SATA3 connector
	1 x M.2 M Key 2242/2280 support PCIe3.0 x1/SATA (NVMe/SATA)
Board edge I/O interface	2 x COM connector, support RS-232/422/485 / 4 x COM RS-232 (internal)
	2 x HDMI® connector / 1 x USB-C connector (DP Alt + PD 20V/5A)
	2 x RJ45 connector, support 1G (2 x Realtek RTL8111H)
	1 x USB-C (USB3.2 Gen2x1, DP Alt, PD 20V/5A sink)
	ALC897 + ALC105, support 4Ω 2W amplifier / 1 x LINE-out (rear)
	2 x USB3.2 Gen1 Type A (rear) / 2 x USB2.0 Type A (rear) / 4 x USB2.0 (2 x header)
Extended interface/function	1 x M.2 E Key 2230 support PCIe3.0 x1 + USB2.0 (WiFi/BT)
	1 x M.2 B key 3042/3052 support PCIe3.0 x1 + USB3.2 w/ SIM slot for 4G/5G module
Power supply	DC-IN 9~24V / USB-C PD Sink 20V/5A
Working environment	Working temperature: 0°C ~ +60°C; Humidity: 5% ~ 90%
	Storage temperature: -40°C ~ +85°C; Storage humidity: 0% ~ 90% relative humidity, no condensation
Operating system	Windows 10/11 IoT Enterprise, Ubuntu 22.04
Size	170 x 170 (mm) / Thin Mini-ITX form factor
Weight	N/A

Dimension

170 x 170 (mm) / Thin Mini-ITX