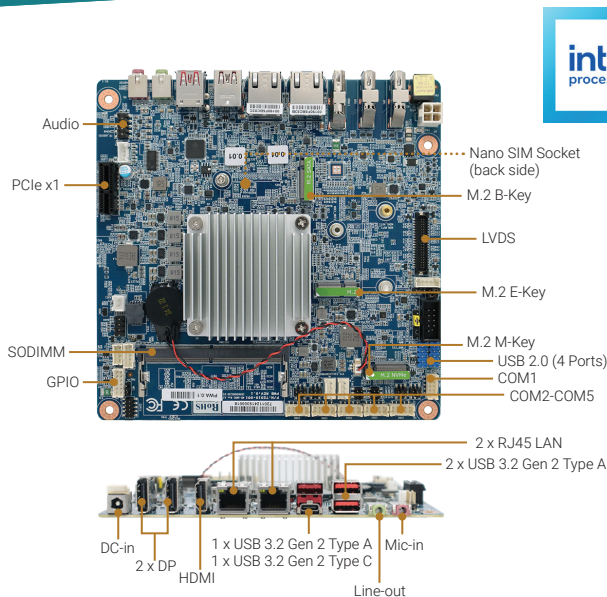


MX97N

Thin (low-profile) Mini ITX Motherboard with
Intel® Processor N97 SoC Onboard



Features

- Intel® Processor N97, low power Quad-core Soc (12W TDP), Intel® Alder Lake N platform
- Build-to-Order on Intel® Atom® Processors Amston Lake (up to 15W TDP) platform
- Low-profile design, Value-Packed Thin Mini ITX Motherboard
- Integrated Intel® UHD Graphic, supports 3 Independent Displays: 2 x DP 1.4a 4K, 1 x HDMI 1.4b, LVDS/eDP
- Dual 2.5GbE LAN: 2 x Intel® Ethernet Controller I226-V
- 1 x USB Type C
- 3 x USB 3.2 Gen2 Type A, 4 x USB 2.0
- 6 x COM/Serial Ports
- Expansion Slots: M.2 E-Key, M-Key, B-Key, PCIe x1
- 12V-24V Wide Range DC-In
- TPM 2.0
- Passive Cooling with Optional Cooling Fan



Low Profile



CPU Onboard



Dual LAN



3 Displays



USB Type C



Fanless



6 COM

SPECIFICATIONS

System	
Processor	Intel® Processor N97, Quad-core SoC processor (12W TDP), formerly Alder Lake N Platform Optional Build-to-Order: Intel® Atom® Processors (up to 15W TDP), formerly Amston Lake Platform
Chipset	SoC
Memory	1 x SODIMM socket supports DDR5 4800MHz up to 16GB, non-ECC Support
I/O Chipset	Fintek F81966AB-I
Ethernet	2 x Intel® Ethernet Controller I226-V (2.5GbE)
Audio Codec	Realtek HD Audio Codec
TPM	TPM 2.0
Expansion	1 x PCIe x1 Open Ended 1 x M.2 E-Key 2230 (PCIe x1 & USB 2.0) 1 x M.2 M-Key 2280/2242 supports NVMe (PCIe x2) 1 x M.2 B-Key 3042 with Nano SIM Socket (SATA III & USB 3.2)
BIOS	256Mb SPI BIOS
H/W Monitor	Yes
Watchdog Timer	1 Sec ~ 255 Sec
Supported OS	Win 10, Win 11, Linux
Graphics	
Chipset	Integrated Intel® UHD Graphic
Multi-Display	Supports 3 Independent Displays
Interface	2 x DisplayPorts 1.4a 4K @ 60Hz 1 x HDMI 1.4b 1 x LVDS, optional eDP
External I/O Ports	
Display	2 x DisplayPorts (DP++) 1 x HDMI
USB	3 x USB 3.2 Gen2 Type A 1 x USB 3.2 Gen2 Type C

External I/O Ports Cont.

LAN	2 x RJ45 LAN
Audio	Line-out, Mic-in
Power Input	1 x DC-in

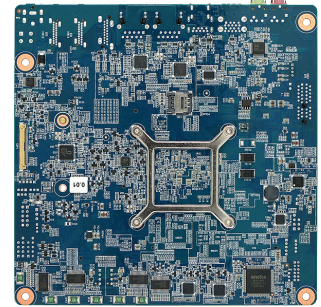
Internal I/O Connectors

Display	1 x LVDS Header 1 x eDP Header (Optional)
USB	2 x USB 2.0 Header (4 Ports)
COM/Serial Port	2 x RS-232/422/485 Headers 4 x RS-232 Headers
Additional I/O	1 x 8-bits GPIO Header I²C, SMBUS, 4-pin DC-in Connector

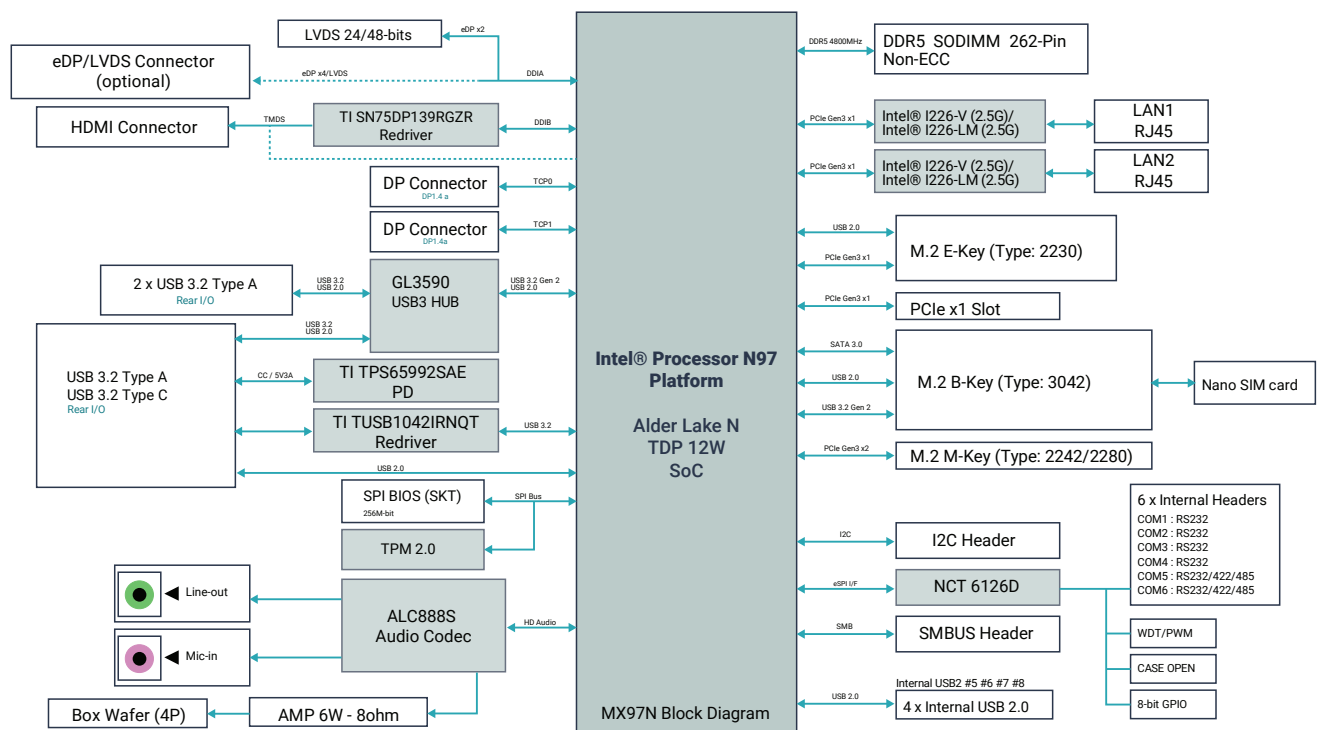
Mechanical, Power, and Environment

Power	12V-24V Wide Range DC-In
Operating Temp	0°C to 60°C (32°F ~ 140°F)
Storage Temp	-20°C ~ 80°C (-4°F ~ 176°F)
OP Humidity	5% ~ 90% Relative Humidity, Non-condensing
Cooling Design	Passive Cooling with Optional Cooling Fan
Certification / Compliance	FCC Class B/CE UL/CB, RoHS and REACH Compliant
Form Factor	Mini ITX
Dimensions	6.7" x 6.7" (170mm x 170mm)
Weight	0.88 lbs (0.4 KG)

SPECIFICATIONS / ADDITIONAL PRODUCT PHOTOS



BLOCK DIAGRAM



ORDERING INFORMATION

Model Name	CPU/CPU Socket	Memory / Storage	LAN	Low Profile I/O	Power Input
MX97N	Intel® Processor N97(12W)	1 x SO-DIMM socket	2 x 2.5GbE LAN	Yes	DC-in 12-24V

PACKING LIST

- ✓ 1 x MX97N Motherboard
- ✓ 1 x Full Height I/O Shield
- ✓ 1 x Low-profile I/O Shield



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