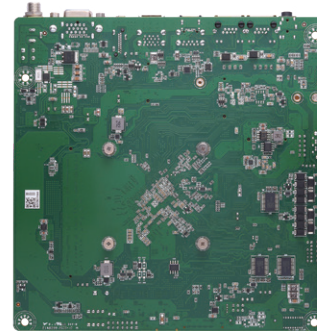
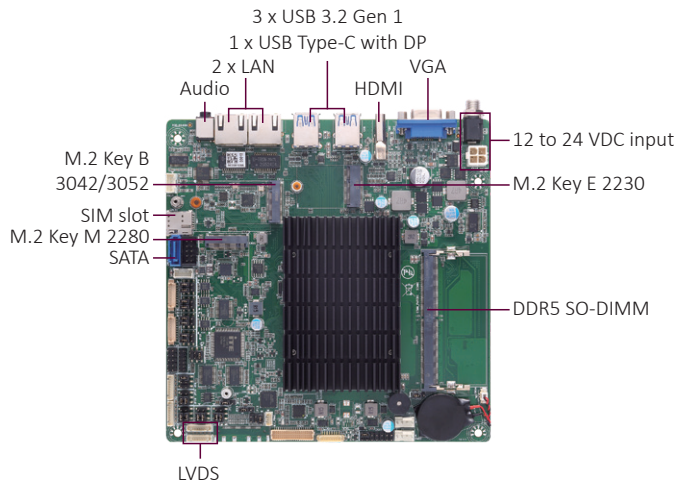


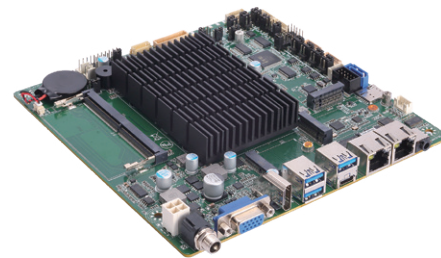
MAN0330 NEW



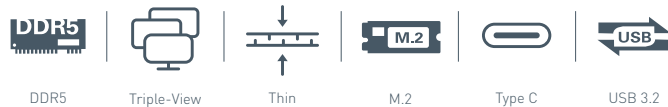
Thin Mini-ITX SBC with Intel® Processor N97/N150, DDR5, Type-C, M.2, HDMI, VGA, LVDS, and Dual LAN



▲ Rear view



▲ Side view



Features

- Intel® Processor N97/N150
- DDR5-4800 SO-DIMM for up to 32GB
- Dual LAN ports
- M.2 Key B 3042/3052
- M.2 Key E 2230
- M.2 Key M 2280

Specifications

Core System

CPU	Intel® Processor N97/N150
System Memory	1 x 262-pin DDR5-4800 SO-DIMM, up to 32GB
Chipset	SoC integrated
BIOS	AMI
Storage	1 x M.2 Key M 2280 (SATA/NVMe auto detect) 1 x SATA 3.0
Watchdog Timer	255 levels, 0 to 255 sec.

Specifications

Expansion Interface	1 x M.2 Key E 2230 (PCIe 3.0 x1, USB 2.0) 1 x M.2 Key B 3042/3052 (PCIe 3.0 x1, USB 2.0) 1 x Nano SIM
Battery Lithium	Lithium 3V/220mAh
Power Input	1 x 12 to 24 VDC jack 1 x 12 to 24V 4-pin ATX connector
Power Consumption (Max.)	38.1W
Display	
Chipset	Intel® UHD Graphics
Display Interface	1 x HDMI 1 x VGA 1 x LVDS (co-layout with eDP)
I/O	
External	3 x USB 3.2 Gen 1 (rear, 1 port co-layout with M.2 Key B) 1 x USB Type-C (DisplayPort/USB 5 Gbps support) 1 x 2.5GbE Ethernet (RTL8125BG-CG) 1 x GbE Ethernet (RTL8111H-CG) HD Codec audio as MIC-in/Line-out with Realtek ALC897 (rear: MIC-in and Line-out)
Internal	2 x USB 2.0 2 x RS-232 (wafer) (default: RS-232/jumper-selectable RS-422 or RS-485) 4 x RS-232 (wafer) 1 x SATA 3.0
Key Benefits	
TPM	TPM 2.0 supported by Intel® Platform Trust Technology (PTT)
GPIO	8-bit (2.54 mm pitch)
Hardware Monitoring	Detect CPU/system temperature, voltage, and fan speed
Mechanical and Environmental	
Dimensions	170 x 170 mm
Board Thickness	1.6 mm
Operating Temperature	0°C to +60°C (+32°F to +140°F)
Relative Humidity	5% to 95% relative humidity, non-condensing

Ordering Information

Standard

MANO330-N97-B (P/N: E38M330100)	Thin Mini-ITX SBC with Intel® Processor N97, 1 x VGA, 1 x HDMI, LVDS, 5 x USB, 1 x USB Type-C, 2 x LAN, HD audio, and bulk packing
MANO330-N97-S	Thin Mini-ITX SBC with Intel® Processor N97, 1 x VGA, 1 x HDMI, LVDS, 5 x USB, 1 x USB Type-C, 2 x LAN, HD audio, and single-box packing
MANO330-N150-B (P/N: E38M330101)	Thin Mini-ITX SBC with Intel® Processor N150, 1 x VGA, 1 x HDMI, LVDS, 5 x USB, 1 x USB Type-C, 2 x LAN, HD audio, and bulk packing
MANO330-N150-S	Thin Mini-ITX SBC with Intel® Processor N150, 1 x VGA, 1 x HDMI, LVDS, 5 x USB, 1 x USB Type-C, 2 x LAN, HD audio, and single-box packing

Optional

59432170600E	SATA power cable, 4-pin to SATA power, 180 mm (RC)
59386831000E	2 x USB, 2 x 5-pin (2.54 mm pitch), L=180 mm
59382620000E	COM port cable with bracket, 2.0 mm pitch, L=300 mm
50966124050E	Adapter FSP060-DHAN3, 60W, 12V, with screw
509000002100	PWS FSP 65W, AC input 100–240V, 24V, 1200 mm

Block Diagram

