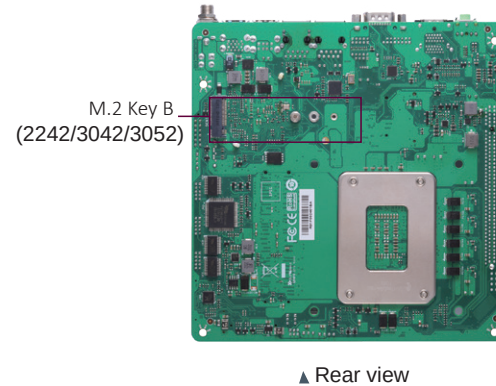
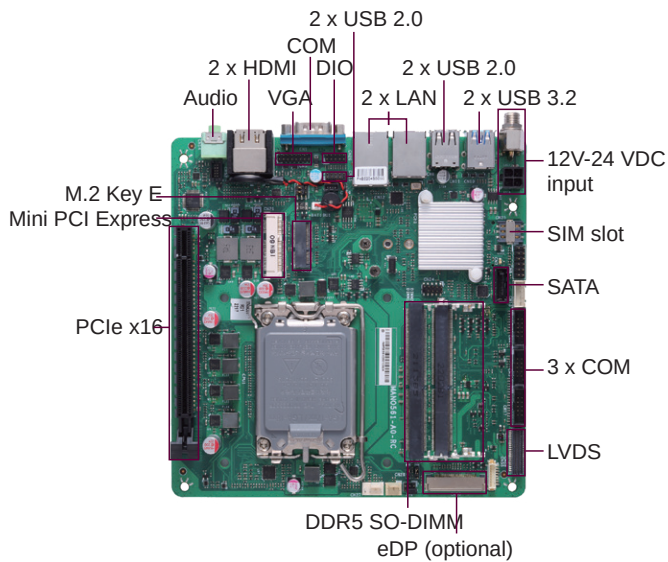


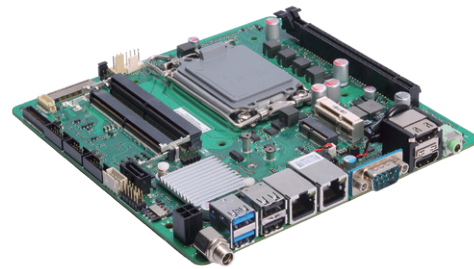
MAN0561



Thin Mini-ITX SBC with LGA1700 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® Processor HDMI, VGA, LVDS, USB 3.2, M.2, and Dual LAN



▲ Rear view



▲ Side view



Quad-View



M.2



PCIe Mini



12 to 24 VDC



Thin

Features

- LGA1700 14th/13th/12th Gen Intel® processor with Intel® H610 chipset
- 2 DDR4 SO-DIMM for up to 64GB or 2 DDR5 SO-DIMM for up to 96GB
- 2 USB 3.2 Gen 1 and 5 USB 2.0
- 2.5GbE LAN and 4 COM ports
- 1 PCIe x16, 1 M.2 Key E, 1 M.2 Key B, and 1 full-size PCI Express Mini Card slot
- 1 SATA-600
- 12 to 24 VDC power in

Specifications

Core System

CPU	LGA1700 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processor (up to 65W)
System Memory	2 x 260-pin DDR4-3200/2666/2400MHz SO-DIMM, up to 64GB 2 x 262-pin DDR5-5600MHz SO-DIMM, up to 96GB
Chipset	Intel® H610
BIOS	AMI
Storage	1 x SATA-600
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x PCIe x16 1 x M.2 Key B 2242/3042/3052 (with support for SATA & USB 3.2 Gen 1) 1 x M.2 Key E 2230 (with support for PCIe x1 & USB 2.0) 1 x PCI Express Mini Card slot (with support for PCIe x1 & USB 2.0) 1 x SIM slot for M.2 Key B
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.)	145W

Display

Chipset	Intel® UHD Graphics
Display Interface	2 x HDMI 1 x LVDS (eDP BOM optional) 1 x VGA

I/O

External	1 x 12 to 24 VDC Jack 2 x HDMI 2 x USB 3.2 Gen 1 1 x 2.5GbE/Fast Ethernet port with support for Wake-on-LAN and PXE using Intel® I226-V 1 x 1GbE/Fast Ethernet port with support for Wake-on-LAN and PXE using Intel® I219-V 1 x RS-232/422/485 (with +5V/+12V power) 1 x audio jack (Line-out) with Realtek ALC897 2 x USB 2.0
Internal	1 x SATA-600 1 x LVDS 3 x RS-232 3 x USB 2.0 1 x 4-pin ATX connector 1 x audio header (Mic-in/Line-in/Speaker-out)

Key Benefits

TPM	Onboard TPM 2.0 (TPM IC: SLB9672)
Digital I/O	8-channel programmable input/output
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

MANO561-DDR5-B R05 (P/N: E38M561109)	Mini-ITX SBC with LGA1700 14th/13th/12th Gen Intel® Core™ processor, HDMI, VGA, LVDS, USB 3.2, M.2, dual GbE LAN, HD audio, and bulk packing
MANO561-DDR5-S R05 (P/N: E38M561110)	Mini-ITX SBC with LGA1700 14th/13th/12th Gen Intel® Core™ processor, HDMI, VGA, LVDS, USB 3.2, M.2, dual GbE LAN, HD audio, and single box packing
MANO561-H-B (P/N: E38M561100)	Mini-ITX SBC with LGA1700 14th/13th/12th Gen Intel® Core™ processor, HDMI, VGA, LVDS, USB 3.2, M.2, dual GbE LAN, HD audio, and bulk packing
MANO561-H-S (P/N: E38M561101)	Mini-ITX SBC with LGA1700 14th/13th/12th Gen Intel® Core™ processor, HDMI, VGA, LVDS, USB 3.2, M.2, dual GbE LAN, HD audio, and single box packing

Ordering Information

Optional

505000001000	LGA1700 1U cooler, 4500 RPM
505000001100	LGA1700 1.5U cooler, 5500 RPM
594P8802810E	USB cable, 150 mm, with screw-lock USB Type-A female and internal HS P1.25 4-pin connector
590000039200	COM cable, D-Sub 9-pin to 2 x 5 DuPont (P=2.0 mm), L=300 mm
59386831010E	SATA 2.0 signal cable, 180°, L=350 mm (RC)
590000054400	CBL HS4P to SATA 15-pin power cable, L=300 mm, XH 2.5 1 x 4 to SATA 15-pin F, 180°, internal
5095AD24000E	19V, 120W screw-lock power adapter
590000064100	VGA cable, D-Sub 15-pin female to HS 16-pin (2 x 8, 2.0 mm pitch), L=250 mm, internal
591000006000	USB cable, L=250 mm, with screws, 2 x USB Type-A female to 10-pin (2.0 mm) internal connector, HS (DP 2032H-2 x 5P)

Packing List

I/O bracket 2 pcs (thin and standard)

Block Diagram

