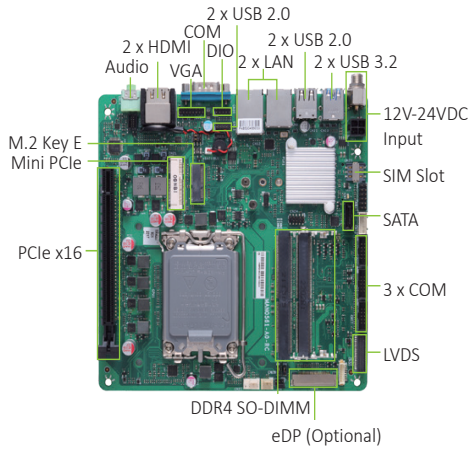


# MANO561 NEW

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

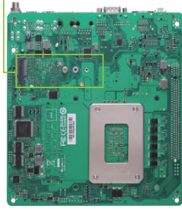


## Features

- LGA1700 12th gen Intel® Core™ i9/i7/i5/i3 processor
- Intel® H610 chipset
- 2 DDR4 SO-DIMM for up to 64GB memory
- 2 USB 3.2 Gen1 and 5 USB 2.0
- 2.5GbE LAN and 4 COM ports
- 1 PCIe x16, 1 M.2 Key E, and 1 M.2 Key B
- 1 Full-size PCI Express mini card slot
- 1 SATA-600
- 12 to 24 VDC power in



M.2 Key B (2242/3042/3052)



▲ Rear view



▲ Side view



▲ ECM550

## Specifications

### Core System

CPU	LGA1700 12th gen Intel® Core™ i9/i7/i5/i3, Intel® Pentium® processors Gold/Celeron® processors (up to 65W)
System Memory	2 x 260-pin DDR4-3200/2666/2400 SO-DIMM, up to 64GB
Chipset	Intel® H610
BIOS	AMI
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x PCIe x16 1 x M.2 Key B 2242/3042/3052 (supports SATA & USB 3.2 Gen1) 1 x M.2 Key E 2230 1 x PCIe Mini Card slot (supports 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 24V DC Jack 1 x 12 to 24V 4-pin ATX connector

### Display

Chipset	Intel® UHD Graphics
Memory Size	Share system memory
Display Interface	2 x HDMI 1 x LVDS (eDP BOM optional) 1 x VGA

**I/O**

SATA	1 x SATA-600
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
Ethernet	1 x 2500/1000/100/10 Mbps Gigabit/Fast Ethernet; supports Wake-on-LAN, PXE with Intel® I225-V 1 x 1000/100/10 Mbps Gigabit/Fast Ethernet; supports Wake-on-LAN, PXE with Intel® I219-V
Audio	HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC897
USB	2 x USB 3.2 Gen1 5 x USB 2.0
Serial	1 x RS-232/422/485 (with +5V/+12V power) 3 x RS-232
TPM	Onboard TPM 2.0 (TPM IC: SLB9670)
Digital I/O	8-channel in/out programmed
<b>Mechanical and Environmental</b>	
Size	170 x 170 mm
Board Thickness	1.6 mm
Operating Temperature	0°C to +60°C (+32°F to +140°F)
Relative Humidity	10%- 95% relative humidity, non-condensing

**ECM550, Embedded Chassis**

Construction	Heavy-duty cold-rolled steel
Indicator	1 x Blue LED for system power-on 1 x Amber LED HDD Active
Panel I/O	Front      4 x D-Sub connector 1 x Power button 2 x USB 2.0 1 x Reset button Rear        1 x Standard Thin Mini-ITX I/O bracket space
ECM550 (P/N:E272550101)	Embedded Thin MicroBox for Low Power Mini-ITX SBC

**Packing List**

I/O bracket 2cps (Thin and Standard)

**Ordering Information**

**Standard**

MANO561-H-B (P/N: E38M561100)	Mini-ITX SBC with LGA1700 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 12th gen Intel® Core™ processor, HDMI, VGA, LVDS, USB 3.2, M.2, dual GbE LAN, HD audio, and single box packing

**Optional**

505000001000	LGA1700 Cooler 1U 4500RPM
505000001100	LGA1700 Cooler 1.5U 5500RPM
594P8802810E	USB Cable 1.25_4pin Housing L: 150 mm
594M5402100E	COM Cable DB9M/DUPONT 2 x 5 P2.0 L=20 cm
59386831010E	SATA2 Signal Cable 180D, L=350 mm (RC)
594E3420610E	Cable 4P housing to SATA/180D L:300 mm
5095AD24000E	ADAPTER 19V 120W w/screw
590000015500	VGA cable 250mm DSUB 15P (F)/HS (2004-H-2x8P)16P
590000021900	USB cable L:250mm w/SCREW x4pcs USB Type A x2, 2x5P pitch:2mm
594P8802810E	USB to 1.25_4pin Housing L:150mm

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660