

# MANO540 NEW

Mini-ITX SBC with FCLGA1200 10th Gen Intel® Core™ i9/i7/i5/i3, DisplayPort++, HDMI, VGA, eDP, USB 3.2, M.2, and Dual GbE LAN

## Features

- FCLGA1200 10th gen Intel® Core™ i9/i7/i5/i3 processor
- Intel® H410 chipset
- 2 DDR4 SO-DIMM for up to 64GB memory
- 2 USB 3.2 Gen1 and 5 USB 2.0
- 6 COM port
- 1 PCIe x16 and 1 M.2 Key E slot
- 1 Full-size mini-PCIe slot
- 2 SATA-600
- 1 M.2 Key B for USB 3.2 interface 5G module



### Core System

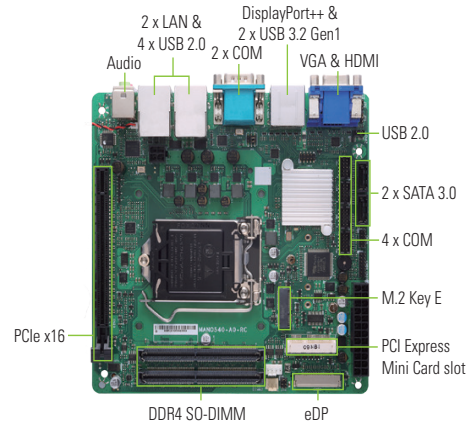
CPU	FCLGA1200 10th gen Intel® Core™ i9/i7/i5/i3, Intel® Pentium® processors Gold/Celeron® processors (up to 65W)
System Memory	2 x 260-pin DDR4-2933/2666/2400 SO-DIMM, up to 64GB
Chipset	Intel® H410
BIOS	AMI
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x PCIe x16 1 x M.2 Key B 1 x M.2 Key E 2230 1 x mini-PCIe
M.2 Key B Expansion Function Option	USB 3.2 Gen1 for 3042/3052 5G module or SATA interface for 2242/2280 SSD
Battery Lithium	Lithium 3V/220mAH
Power Input	Standard 12V ATX power 24+4 pin ATX connector AT Mode Auto Power Function supported
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

### I/O

SATA	2 x SATA-600
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM
Audio	HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC897/888S
USB	2 x USB 3.2 Gen1 5 x USB 2.0
Serial	1 x RS-232/422/485 (with +5V/+12V power) 1 x RS-232
PS/2 Combo Port	N/A
TPM	Onboard TPM 2.0 (optional)
SMBus	N/A
Digital I/O	8-channel in/out programmed

### Display

Chipset	Intel® integrated Gfx graphic engine
Memory Size	Share system memory
Display Interface	1 x DisplayPort++ 1 x HDMI 2.0 1 x eDP 1 x VGA



### ECM500, Embedded Chassis

Construction	Heavy-duty cold-rolled steel
I/O	1 x Power button 1 x Standard Mini-ITX I/O bracket space 3 x D-Sub connector 1 x PCI Express card slot
Dimensions	217.2 mm (8.55") (D) x 300 mm (11.81") (W) x 74 mm (2.91") (H)
ECM500 (P/N: E272500101)	Embedded MicroBox for low power Mini-ITX SBC

### Packing List

<b>Standard</b>	I/O bracket
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### Ordering Information

<b>Standard</b>	
MANO540-H-B (P/N: E38M540100)	Mini-ITX SBC with FCLGA1200 10th gen Intel® Core™ i9/i7/i5/i3 processor, DP++, HDMI, VGA, eDP, USB 3.2, M.2 for USB 3.2 interface, dual GbE LAN, HD Audio and bulk packing
MANO540-H-S (P/N: E38M540101)	Mini-ITX SBC with FCLGA1200 10th gen Intel® Core™ i9/i7/i5/i3 processor, DP++, HDMI, VGA, eDP, USB 3.2, M.2 for USB 3.2 interface, dual GbE LAN, HD Audio and single box packing
MANO540-H-B-A (P/N: E38M540102)	Mini-ITX SBC with FCLGA1200 10th gen Intel® Core™ i9/i7/i5/i3 processor, DP++, HDMI, VGA, eDP, USB 3.2, M.2 for SATA interface, dual GbE LAN, HD Audio and bulk packing
MANO540-H-S-A (P/N: E38M540103)	Mini-ITX SBC with FCLGA1200 10th gen Intel® Core™ i9/i7/i5/i3 processor, DP++, HDMI, VGA, eDP, USB 3.2, M.2 for SATA interface, dual GbE LAN, HD Audio and single box packing
<b>optional</b>	
594M5402100E	COM cable DB9/DUPONT 2x5 P2.0, L=20 cm
594P8802810E	USB to 1.25 4pin housing, L:150 mm
71377AGC000E	FCLGA1200 1.5U Cooler
E272500101	ECM500, Embedded MicroBox for low power Mini-ITX SBC

## 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.

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