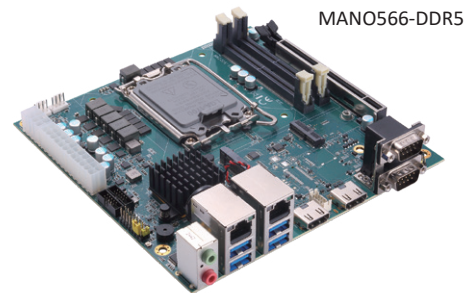
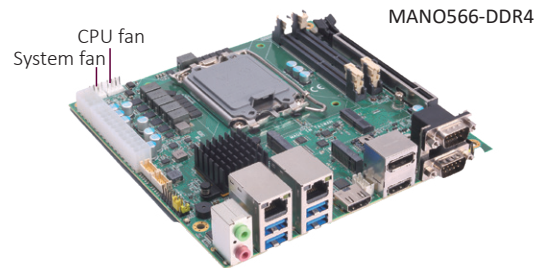
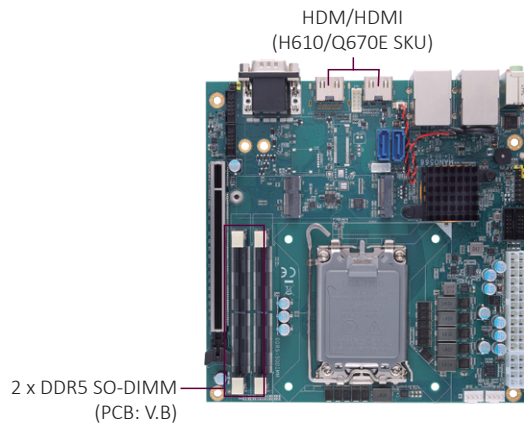
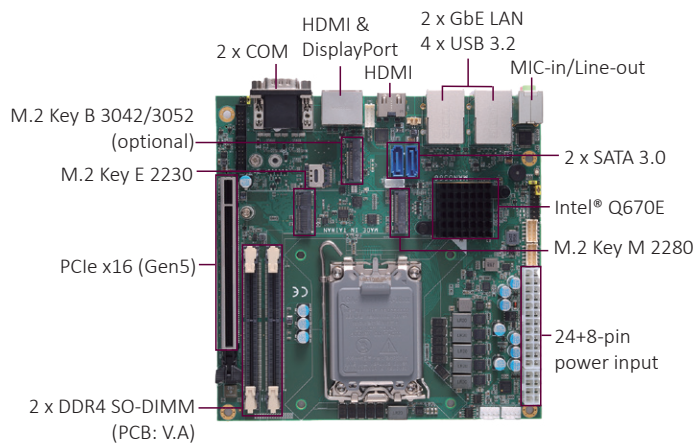
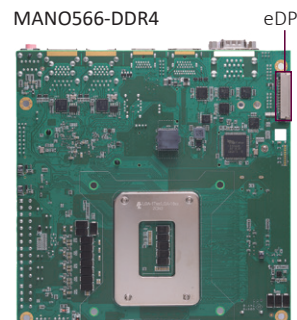


# MANO566 NEW

Mini-ITX SBC with LGA1700 Socket 14th/13th/12th Gen Intel® Core™ Processor, Intel® Q670E/R680E/H610E/H610, 2 HDMI, DisplayPort++, eDP, 2 GbE LAN, and HD Audio



▲ Side view



▲ Rear view



Triple-View



USB 3.2 Gen 2



M.2

## Features

- LGA1700 socket 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3 processor
- Intel® Q670E/R680E/H610E/H610 chipset
- 2 DDR4 SO-DIMM for up to 64GB or 2 DDR5 SO-DIMM for up to 96GB of memory
- 4 USB 3.2 and 4 USB 2.0
- 4 COM ports
- 2 SATA-600 and 1 M.2 Key M 2280
- 1 PCIe x16, 1 M.2 Key E 2230, and 1 M.2 Key B 3052/3042

## Specifications

### Core System

|                     |                                                                                                                           |
|---------------------|---------------------------------------------------------------------------------------------------------------------------|
| CPU                 | LGA1700 socket 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3 or Celeron® processor (up to 65W)                              |
| System Memory       | 2 x 260-pin DDR4-3200 SO-DIMM, up to 64GB (PCB: V.A)<br>2 x 262-pin DDR5-5600 SO-DIMM, up to 96GB (PCB: V.B)              |
| Chipset             | Intel® Q670E/R680E/H610E/H610                                                                                             |
| BIOS                | AMI                                                                                                                       |
| SSD                 | 1 x M.2 Key M 2280 with support for NVMe                                                                                  |
| Watchdog Timer      | 255 levels, 1 to 255 sec.                                                                                                 |
| Expansion Interface | 1 x PCIe x16<br>1 x M.2 Key E 2230<br>1 x M.2 Key B 3052/3042 (STD SKU only supports V.A of Q670E/R680E and V.B of R680E) |
| Battery Lithium     | Lithium 3V/220mAH                                                                                                         |
| Power Input         | 24+8-pin ATX connector<br>Supports AT Mode Auto Power-on                                                                  |

### Display

|                   |                                                                                                                 |
|-------------------|-----------------------------------------------------------------------------------------------------------------|
| Chipset           | Intel® UHD Graphics 700 series engine                                                                           |
| Memory Size       | Share system memory                                                                                             |
| Display Interface | 1 x DisplayPort++ (This feature only supports all SKUs of V.A and the R680E SKU of V.B.)<br>1 x eDP<br>2 x HDMI |

### I/O

|                     |                                                                                                                                                                                                                                                                                                              |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SATA                | 2 x SATA-600                                                                                                                                                                                                                                                                                                 |
| Hardware Monitoring | Detect CPU/system temperature, voltage, and fan speed                                                                                                                                                                                                                                                        |
| Ethernet            | 2 x 10/100/1000/2500 Mbps Ethernet with Intel® I226-LM and with wake-on-LAN and PXE Boot ROM supported (Q670E/R680 SKUs of V.A and R680E SKU of V.B.)<br>2 x 10/100/1000/2500 Mbps Ethernet with Intel® I226-V and with wake-on-LAN and PXE Boot ROM supported (H610E SKU of V.A and Q670E/H610 SKUs of V.B) |
| Audio               | HD Codec audio as MIC-in/Line-out with Realtek ALC888S                                                                                                                                                                                                                                                       |
| USB                 | 4 x USB 3.2<br>4 x USB 2.0                                                                                                                                                                                                                                                                                   |
| Serial              | 2 x RS-232/422/485 and 2 x RS-232/422/485 (internal) (for DDR4 version)<br>2 x RS-232/422/485 and 2 x RS-232 (internal) (for DDR5 version)                                                                                                                                                                   |
| TPM                 | Onboard TPM 2.0 or fTPM (TPM only supports all SKUs of V.A and the R680E SKU of V.B.)                                                                                                                                                                                                                        |
| Digital I/O         | 8-channel programmable input/output                                                                                                                                                                                                                                                                          |

### 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     | 10% to 95% relative humidity, non-condensing |

## Packing List

I/O bracket

## Ordering Information

### Standard

|                                       |                                                                                                                                                             |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MANO566-Q670E-S<br>(P/N: E38M566100)  | Mini-ITX SBC with LGA1700 socket 14th/13th/12th Gen Intel® Core™ processor, Intel® Q670E, 2 HDMI, DisplayPort++, eDP, 2 GbE LAN, HD audio, and bulk packing |
| MANO566-H610E-S<br>(P/N: E38M566101)  | Mini-ITX SBC with LGA1700 socket 14th/13th/12th Gen Intel® Core™ processor, Intel® H610E, 2 HDMI, DisplayPort++, eDP, 2 GbE LAN, HD audio, and bulk packing |
| MANO566-H610-S5<br>(P/N: E38M566104)  | Mini-ITX SBC with LGA1700 socket 14th/13th/12th Gen Intel® Core™ processor, Intel® H610, DDR5, 2 HDMI, eDP, 2 GbE LAN, HD audio, fTPM, and bulk packing     |
| MANO566-Q670E-S5<br>(P/N: E38M566103) | Mini-ITX SBC with LGA1700 socket 14th/13th/12th Gen Intel® Core™ processor, Intel® Q670E, DDR5, 2 HDMI, eDP, 2 GbE LAN, HD audio, and bulk packing          |
| MANO566-R680E-S5<br>(PN: E38M566105)  | Mini-ITX SBC with LGA1700 14th/13th/12th Gen Intel® Core™ processor, Intel® R680E, DDR5, 2 HDMI, DisplayPort++, eDP, 2 GbE LAN, HD audio, and bulk packing  |

### Optional

|              |                                                                 |
|--------------|-----------------------------------------------------------------|
| 594E8422800E | DDR4-V.A use/cable USB 2.0 x 2/HS2 x 5P P2.0 with BKT L = 18 cm |
| 591000018100 | DDR5-V.B use/cable USB 2.0 x 2/HS10 P2.0 180 mm with BKT        |
| 59384500200E | COM port x 2 cable with BKT P = 2.0 L = 250 mm                  |
| 713000001400 | RGD3219-50-003 cooler 2U LGA_1700                               |
| 505000001000 | LGA1700 cooler 1U 4500RPM                                       |