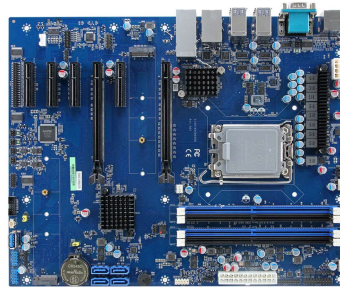


# EAX-R680FP

12/13/14th Gen Intel® Core™ i9/i7/i5/i3 Processors, supports LGA1700 CPU Up to 125W Max



## Product Features

- 12/13/14th Generation Intel® Core™ i9/i7/i5/i3 Processors, supports LGA 1700 CPU Up to 125W Max, Intel® R680E Chipset
- 2 x DP++, 1 x HDMI2.0b
- 1 x Intel® X550AT2 10G Gigabit Controller (BOM Optional) , 2 x Intel® i225LM 2.5G Gigabit Controller
- 2 x M.2 Key M NVMe (Gen4x4) 2242/2280/22110
- ATX Power
- 4 x 288-Pin DDR4 3200MHz U-DIMM Socket Supports Up to 128GB (ECC Memory Support by CPU)
- 2 x PCIe x16 Slots for 1 x PCIe x16 (Gen5) Default or 2 x PCIe x8 (Gen5), 2 x PCIe x4 Gen4, 1 x PCIe x4 Gen3, 1 x PCIe x4 slot for 1 x PCIe x2 (Gen3)
- 8 x USB 3.2 Gen2, 1 x USB 3.2 Gen1 Vertical Type A, 5 x USB by Pin-header
- 6 x RS232, 2 x RS232/422/485 (COM2 & 3 By BIOS Selection)

## Specification

### System Information

|                         |                                                                                                       |
|-------------------------|-------------------------------------------------------------------------------------------------------|
| Processor               | LGA 1700 Socket Supports 12/13/14th Generation Intel® Core™ i9/i7/i5/i3 Processors (Max. TDP at 125W) |
| Platform Controller Hub | Intel® R680E Chipset                                                                                  |
| System Memory           | 4 x 288-Pin DDR4 3200MHz U-DIMM Socket Supports Up to 128GB (ECC Memory Support by CPU)               |
| I/O Chipset             | nuvoton NCT6126D                                                                                      |
| Watchdog Timer          | H/W Reset, 5~255 Seconds/5~255 Minutes                                                                |
| BIOS                    | AMI uEFI BIOS, 256Mbit SPI Flash ROM                                                                  |
| H/W Status Monitor      | CPU Temperature Monitoring<br>Voltage Monitoring<br>CPU Fan Speed Control                             |
| TPM                     | Onboard nuvoTon NPCT750AADYX Supports TPM 2.0                                                         |
| Board                   | ATX                                                                                                   |

### Expansion

|           |                                                                                                                                                             |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Expansion | 2 x PCIe x16 slots for 1 x PCIe x16 (Gen5) default or 2 x PCIe x8 (Gen5)<br>2 x PCIe x4 Gen4<br>1 x PCIe x4 Gen3<br>1 x PCIe x4 slot for 1 x PCIe x2 (Gen3) |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|

Storage

Storage2 x M.2 Key M NVMe (Gen4x4) 2242/2280/22110  
4 x SATAIII

Display

Graphic ChipsetIntel® 12th/13/14th Generation CPU Integrated

Spec. & Resolution2 x DP (DP1.4a): Max (Combined): 7680 x 4320@60Hz (DP++ Via dongle: 1920 x 1080@60 Hz)  
1 x HDMI (HDMI 2.0b): Max Resolution 4K x 2K@60Hz (With HDR)

Multiple DisplayTriple Display

Audio

Audio CodecRealtek ALC888S HD Audio Decoding Controller

Audio InterfaceMic-in, Line-out, 5.1-CH Audio

Audio Amplifier2 x 6W 8Ω Amplifier

Ethernet

LAN Chipset1 x Intel® X550AT2 10G Gigabit Controller (BOM optional)  
2 x Intel® i225LM 2.5G Gigabit Controller

LAN Port2 x 10G LAN (BOM Optional)  
4 x 2.5G LAN

Power Requirement

Power ModeAT/ATX (Default Setting: ATX)

Software Support

OSWindows 10, Windows 11, Linux

Certification

Certification InformationCE, FCC Class, RoHS Compliant

I/O

USB8 x USB 3.2 Gen2  
1 x USB 3.2 Gen1 Vertical Type A  
5 x USB 2.0

COM Port6 x RS232  
2 x RS232/422/485 (COM2 & 3 By BIOS Selection)

SATA4 x SATA III

RAIDSupport RAID 0, 1, 5, 10

DIO1 x 16-bit GPIO

Mechanical & Environmental

Operating Temp.0~55°C (32~131°F), 0.5m/s Air Flow

Storage Temp.-40~ +75°C (-40~167°F)

|                    |                                              |
|--------------------|----------------------------------------------|
| Operating Humidity | 40°C @ 95% Relative Humidity, Non-condensing |
| Weight             | 1.54lbs (0.7kg)                              |
| Power Requirement  | +12V/+5V/5VSB/+3.3V/-12V                     |
| Power Mode         | AT/ATX (Default Setting: ATX)                |
| Dimension (L x W)  | 12" x 9.6" (304.8mm x 243.84mm)              |