

# 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 Voltage Monitoring CPU Fan Speed Control
TPM	Onboard nuvoTon NPCT750AADYX Supports TPM 2.0
Board	ATX

## Expansion

<b>Expansion</b>	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)
------------------	---

## Storage

<b>Storage</b>	2 x M.2 Key M NVMe (Gen4x4) 2242/2280/22110 4 x SATAIII
----------------	--

## Display

<b>Graphic Chipset</b>	Intel® 12th/13/14th Generation CPU Integrated
<b>Spec. &amp; Resolution</b>	2 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)
<b>Multiple Display</b>	Triple Display

## Audio

<b>Audio Codec</b>	Realtek ALC888S HD Audio Decoding Controller
<b>Audio Interface</b>	Mic-in, Line-out, 5.1-CH Audio
<b>Audio Amplifier</b>	2 x 6W 8Ω Amplifier

## Ethernet

<b>LAN Chipset</b>	1 x Intel® X550AT2 10G Gigabit Controller (BOM optional) 2 x Intel® i225LM 2.5G Gigabit Controller
<b>LAN Port</b>	2 x 10G LAN (BOM Optional) 4 x 2.5G LAN

## Power Requirement

<b>Power Mode</b>	AT/ATX (Default Setting: ATX)
-------------------	-------------------------------

## Software Support

<b>OS</b>	Windows 10, Windows 11, Linux
-----------	-------------------------------

## Certification

<b>Certification Information</b>	CE, FCC Class, RoHS Compliant
----------------------------------	-------------------------------

## I/O

<b>USB</b>	8 x USB 3.2 Gen2 1 x USB 3.2 Gen1 Vertical Type A 5 x USB 2.0
------------	---

---

<b>COM Port</b>	6 x RS232 2 x RS232/422/485 (COM2 & 3 By BIOS Selection)
-----------------	---

---

<b>SATA</b>	4 x SATA III
-------------	--------------

---

<b>RAID</b>	Support RAID 0, 1, 5, 10
-------------	--------------------------

---

<b>DIO</b>	1 x 16-bit GPIO
------------	-----------------

---

## Mechanical & Environmental

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

---

<b>Storage Temp.</b>	-40~ +75°C (-40~167°F)
----------------------	------------------------

---

<b>Operating Humidity</b>	40°C @ 95% Relative Humidity, Non-condensing
---------------------------	--

---

<b>Weight</b>	1.54lbs (0.7kg)
---------------	-----------------

---

<b>Power Requirement</b>	+12V/+5V/5VSB/+3.3V/-12V
--------------------------	--------------------------

---

<b>Power Mode</b>	AT/ATX (Default Setting: ATX)
-------------------	-------------------------------

---

<b>Dimension (L x W)</b>	12" x 9.6" (304.8mm x 243.84mm)
--------------------------	---------------------------------

---