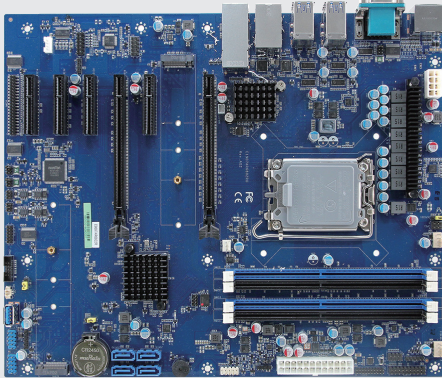


EAX-R680FP

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



Features

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



Specifications

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

Expansion	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)
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Storage

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

Graphic Chipset	Intel® 12th/13/14th Generation CPU Integrated
Spec. & Resolution	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)
Multiple Display	Triple Display

Audio

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

Ethernet

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

Power Requirement

Power Mode	AT/ATX (Default Setting: ATX)
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Software Support

OS	Windows 10, Windows 11, Linux
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Certification

Certification Information CE, FCC Class, RoHS Compliant

I/O

USB	8 x USB 3.2 Gen2 1 x USB 3.2 Gen1 Vertical Type A 5 x USB 2.0
COM Port	6 x RS232 2 x RS232/422/485 (COM2 & 3 By BIOS Selection)
SATA	4 x SATA III
RAID	Support RAID 0, 1, 5, 10
DIO	1 x 16-bit GPIO

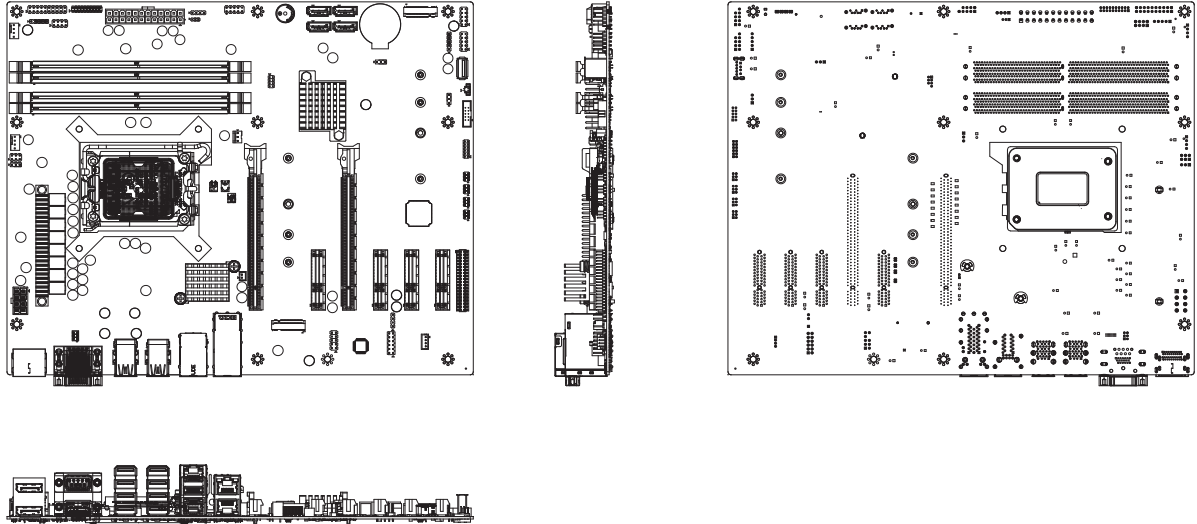
Mechanical & Environmental

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)

EAX-R680FP

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

Mechanical Drawing



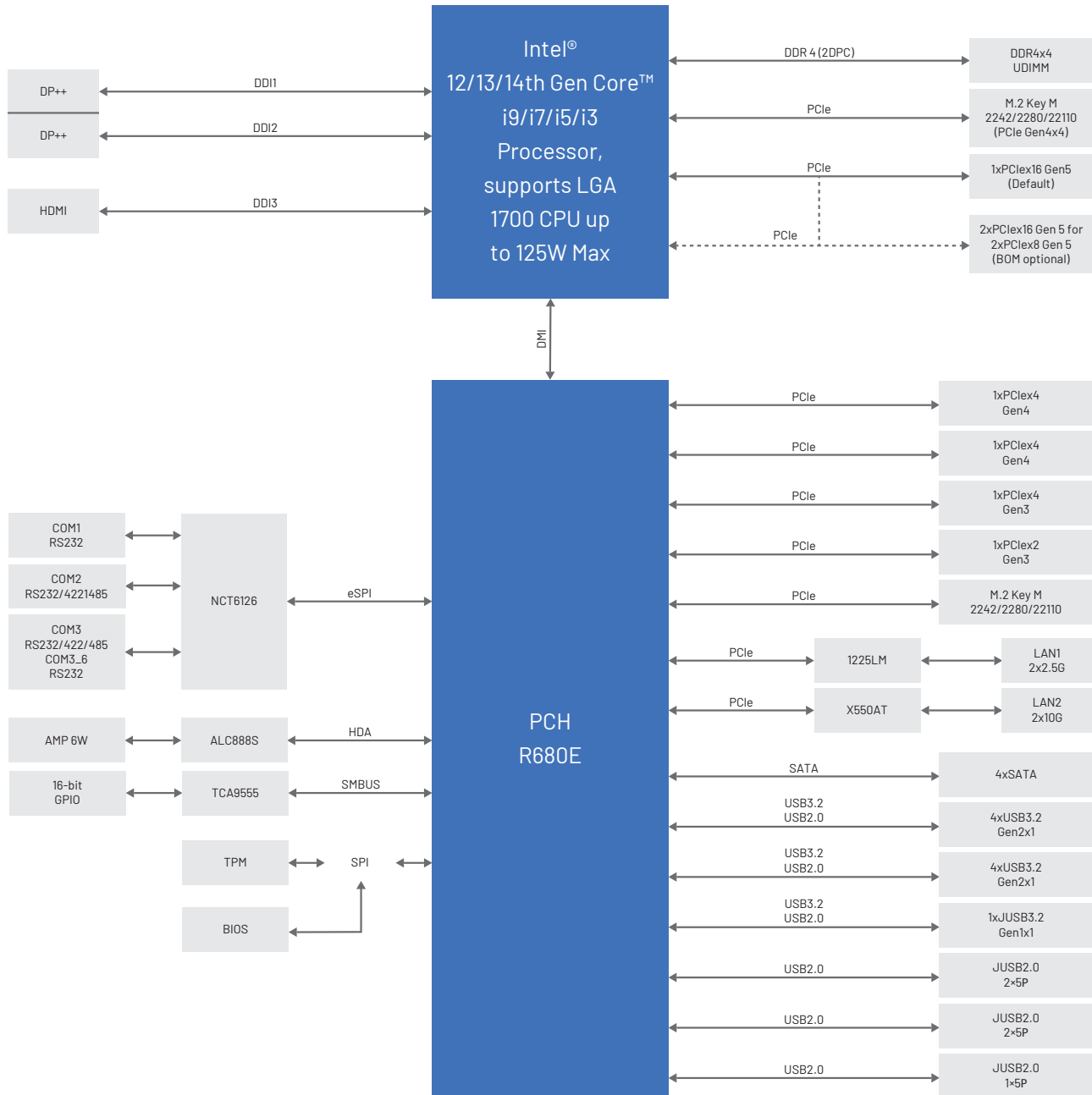
Ordering Information

P/N	Processor	Chipset	LAN	USB	COM	PCIe Slot	Power Input	Temp.
EAX-R680FP-A1R	12th/13th/14th Gen Intel® Core™ i9/i7/i5/i3 Processor, Supports LGA1700 CPU Up to 125W TDP	Intel® R680E	4	14	6	6	ATX Power	0°C ~ 60°C (32~140°F)
EAX-R680FP-A1-1R	12th/13th/14th Gen Intel® Core™ i9/i7/i5/i3 Processor, Supports LGA1700 CPU Up to 125W TDP	Intel® R680E	2	14	6	6	ATX Power	0°C ~ 60°C (32~140°F)
EAX-R680FP-A1-2R	12th/13th/14th Gen Intel® Core™ i9/i7/i5/i3 Processor, Supports LGA1700 CPU Up to 125W TDP	Intel® R680E	2	14	6	6	ATX Power	0°C ~ 60°C (32~140°F)

Packing List

Item	P/N	Quantity
SATA Cable	-	2
IO shield	-	1

Block Diagram



I/O Overview

