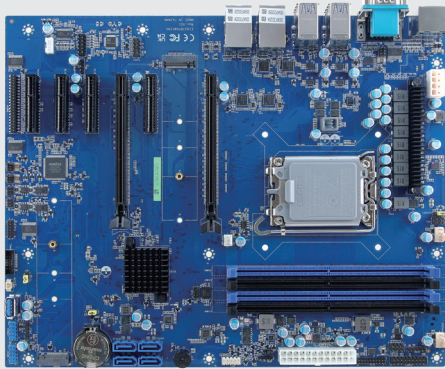


EAX-R680BP

12/13/14th & Series 2 Gen Intel® Core™ i9/i7/i5/i3 Processors, supports LGA1700 CPU Up to 125W Max



Features

- 12/13/14th & Series 2 Gen Intel® Core™ i9/i7/i5/i3 Processors, supports LGA 1700 CPU Up to 125W Max, Intel® R680E Chipset
- 4 x 288-Pin DDR5 4400MHz U-DIMM Socket Supports Up to 192GB (ECC Memory Support by CPU)
- 2 x DP++, 1 x HDMI 2.0b
- 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)
- 2 x Intel® i226LM & 2 x Intel® i226V 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
- 4 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 & Series 2 Gen Intel® Core™ processors i9/i7/i5/i3 (Max. TDP at 125W)
Platform Controller Hub	Intel® R680E Chipset
System Memory	4 x 288-Pin DDR5 4400MHz U-DIMM Socket Supports Up to 192GB (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 NPCT760 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 (BIOS selection) 2 x PCIe x4 Gen4 1 x PCIe x4 Gen3 1 x PCIe x4 slot for 1 x PCIe x2 Gen3 2 x M.2 NVMe Key M 2242/2280/22110 (PCIe Gen4x4, for Storage only, no SATA)
-----------	---

Storage

Storage	2 x M.2 Key M NVMe (Gen4x4) 2242/2280/22110 4 x SATA III
---------	---

Display

Graphic Chipset	Intel® Graphic Chipset 12/13/14th & Series 2 Gen Intel® Core™ processors 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 2.1b): 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	2 x Intel® i226-LM 2.5G Gigabit Controller 2 x Intel® i226V 2.5G Gigabit Controller
LAN Port	4 x RJ-45

Power Requirement

Power Mode	AT/ATX (Default Setting: ATX)
------------	-------------------------------

Software Support

OS	Windows 11, Linux
----	-------------------

Certification

Certification Information	CE, FCC, 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	1 x RS232 on rear I/O 2 x RS232/422/485 by pin-header 3 x RS232 by pin header
SATA	4 x SATA III
RAID	Support RAID 0, 1, 5, 10
DIO	1 x 16-bit GPIO

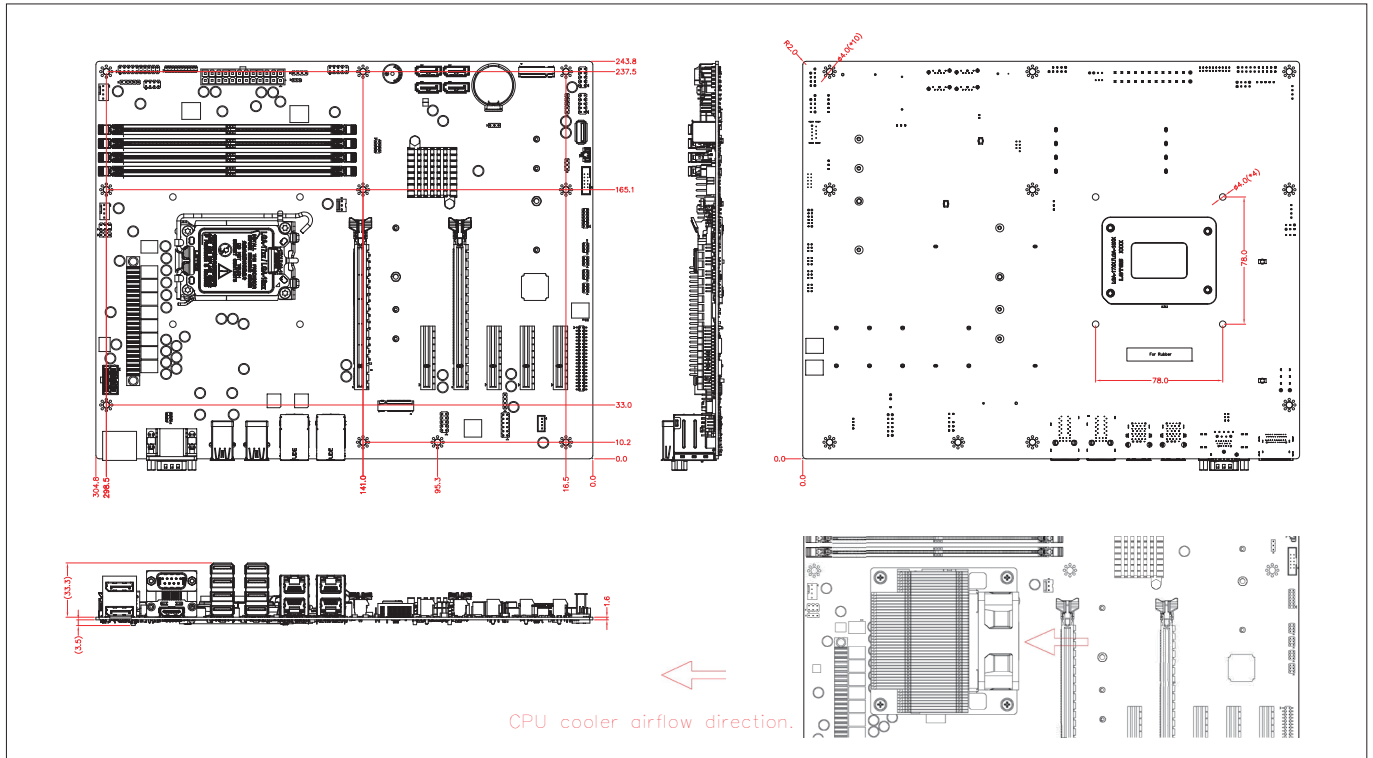
Mechanical & Environmental

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	1.54 lbs (0.7 kg)
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-R680BP

12/13/14th & Series 2 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-R680BP-A1R	12/13/14th & Series 2 Gen Intel® Core™ i9/i7/i5/i3 Processors, supports LGA1700 CPU Up to 125W Max	Intel® R680E	4	14	6	6	ATX Power	0 ~ 55°C (32 ~ 131°F)

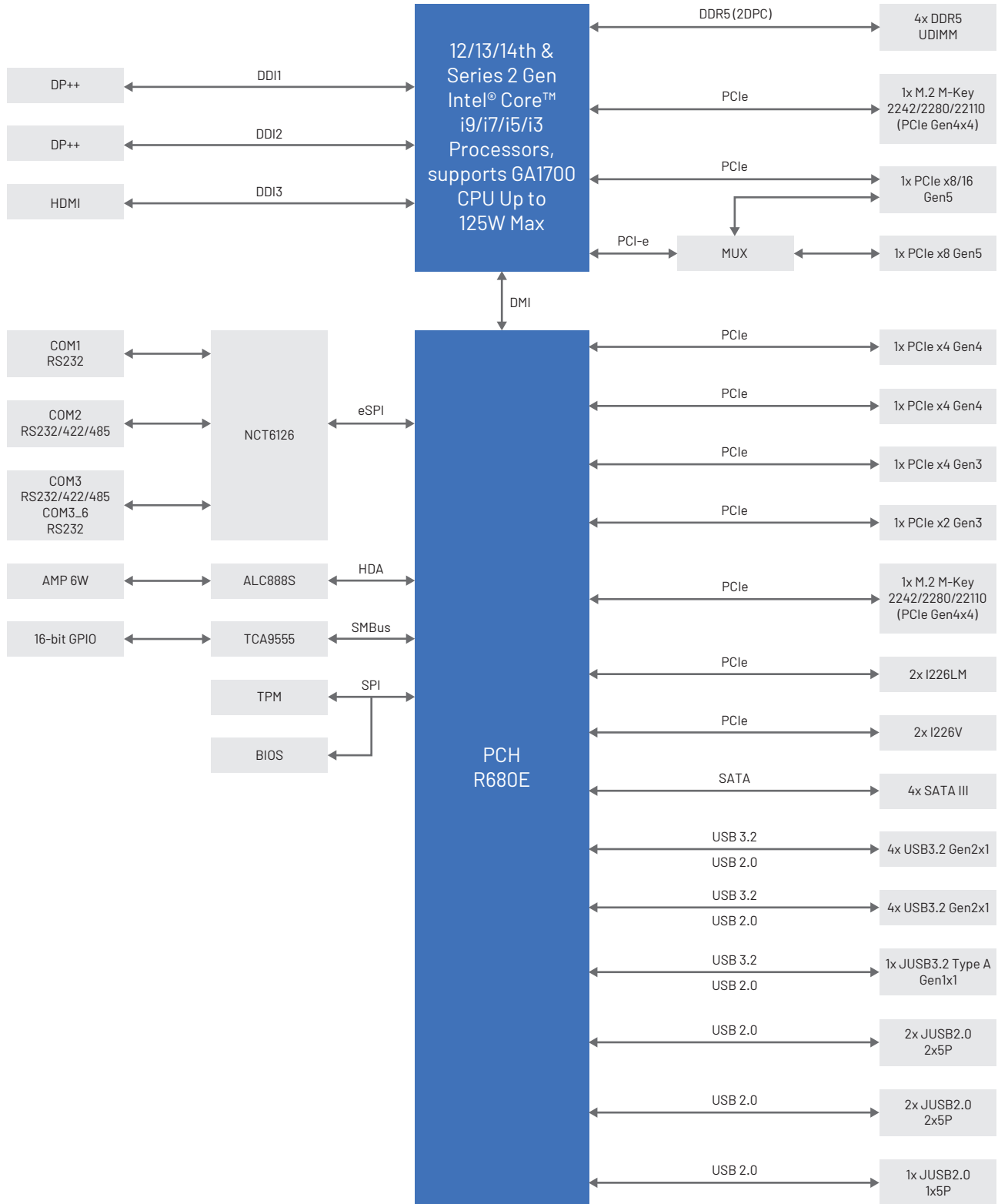
Packing List

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

Optional Items

Item	P/N
65W Cooler	ACC-FAN-170-03R
125W Cooler	E1961121A25000R

Block Diagram



EAX-R680BP

12/13/14th & Series 2 Gen Intel® Core™ i9/i7/i5/i3 Processors,
supports LGA1700 CPU Up to 125W Max

I/O Overview

