



## BC680R

**LGA 1700 Socket supports Intel® 12/13th Gen. Core™ i9/i7/i5/i3 Processor, up to 65W Max**

- > LGA 1700 Socket supports Intel® 12th/13th Gen Core™ i9/i7/i5/i3 processors, up to 65W Max.
- > Intel® R680E PCH.
- > 4 x DIMM up to 128GB Max Dual Channel DDR5 4400 MHz with optional ECC support (CPU Dependent)
- > 2 x HDMI (HDMI 2.0b), 2 x DP++ (DP1.4a), Supports 4 Independent Displays.
- > 2 x Intel® I225-LM 2.5G Gigabit Controller.
- > 4 x SATA III
- > 2 x M.2 M-Key NVMe, 1 x M.2 E-Key supports CNVi
- > 1 x Gen 5 PCIe x16, 2 x Gen 4 PCIe x4, 1 x Gen 3 PCIe x4, 1 x Gen3 PCIe x1, 2 x Gen 3 PCIe x1 Open End
- > 1 x USB 3.2 Gen 2x2 Type-C, 6 x USB 3.2 Gen 2x, 8x USB 2.0 (Headers), 2 x USB 3.2 Gen 2 (Headers)
- > 1 x RS-232/422/485, 5 x RS-232 Headers.

### + Spec

-System Information-	
<b>Processor</b>	LGA 1700 Socket supports Intel® 12th/13th Gen Core™ i9/i7/i5/i3 processors, up to 65W Max.
<b>Platform Controller Hub</b>	Intel® R680E chipset.
<b>System Memory</b>	4 x DIMM up to 128GB Max Dual Channel DDR5 4400 MHz with optional ECC support, (CPU Dependent)
<b>I/O Chipset</b>	Nuvoton NCT6126D (eSPI super IO)
<b>BIOS Information</b>	AMI uEFI BIOS 256Mbit SPI Flash ROM
<b>Watchdog Timer</b>	H/W Reset, 5~255 seconds/5~255 minutes
<b>H/W Status Monitor</b>	Monitoring System Temperature, Voltage, with Auto Throttling Control
<b>TPM</b>	Onboard Infineon® SLB9670VQ2.0 TPM 2.0
<b>Board</b>	ATX Board
Expansion	
<b>Expansion</b>	1 x Gen 5 PCIe x16, 2 x Gen 4 PCIe x4, 1 x Gen 3 PCIe x4, 1 x Gen3 PCIe x1, 2 x Gen 3 PCIe x1 Open End
I/O	
<b>USB Port</b>	1 x USB 3.2 Gen 2x2 Type-C 6 x USB 3.2 Gen 2x, 8x USB 2.0 (Headers) 2 x USB 3.2 Gen 2 (Headers)
<b>COM Port</b>	6 x COM
<b>GPIO</b>	8-bits GPIO
<b>SMBus</b>	1 x SMBus Header
<b>SATA</b>	4 x SATA III
<b>DIO</b>	8-bits GPIO
<b>MIO</b>	1 x PS/2
<b>RS232</b>	5 x RS232 1 x RS232/422/485
Display	
<b>Graphic Chipset</b>	Integrated
<b>Spec. &amp; Resolution</b>	2 x HDMI 2.0b 4K@60Hz 2 x Dual Mode DisplayPort 1.4a 4K@60Hz
Audio	
<b>Audio Codec</b>	Realtek ALC888S
<b>Audio Interface</b>	Audio Jack, Line out (green color) and Mic in (Pink color)
<b>Audio Amplifier</b>	6W8Ω Amplifier
Ethernet	
<b>LAN Chipset</b>	2 x Intel® i225-LM 2.5G Gigabit Controller
<b>LAN Port</b>	2 x RJ-45
Mechanical & Environmental	
<b>Operating Temperature</b>	0~60°C (32~140°F), 0.5m/s airflow
<b>Storage Temperature</b>	-20~ +80°C (-4 ~ 176°F)
<b>Operating Humidity</b>	40°C @ 5% to 90% Relative Humidity, Non-condensing □
<b>Weight</b>	1.85lbs (0.84kg)
<b>Power Requirement</b>	+12V/+5V/5VSB/+3.3V/-12V
<b>ACPI</b>	Single power ATX Support S0, S3, S4, S5
<b>Power Mode</b>	AT / ATX mode Switchable Through Jumper
<b>Dimension (L x W)</b>	12" x 9.6" (304.8mm x 243.84mm)

### + Ordering

P/N: 71832-1A  
include 1 x I/O Shield

LGA 1700 Socket supports Intel® Alder/Raptor Lake Core™ 9, Core™ 7, Core™ 5, Core™ 3, Pentium, Celeron Processor up to 16 Cores 24 Threads Hybrid.