This motherboard supports both Skylake-X and Kaby Lake-X processors.

Unlocked Intel® Core™ X-Series Processor Family

Processor #	PCI express 3.0 lanes	Memory Channel	RSTe*	RST*
i9-7980XE	44	Quad Channel	Supported	Supported
i9-7960X	44	Quad Channel	Supported	Supported
i9-7940X	44	Quad Channel	Supported	Supported
i9-7920X	44	Quad Channel	Supported	Supported
i9-7900X	44	Quad Channel	Supported	Supported
i7-7820X	28	Quad Channel	Supported	Supported
i7-7800X	28	Quad Channel	Supported	Supported
i7-7740X	16	Dual Channel	N/A	Supported
i5-7640X	16	Dual Channel	N/A	Supported

*For further details on RST (Rapid Storage Technology), Optane, RSTe (Rapid Storage Technology enterprise), and VROC (Intel® Virtual RAID on CPU), please refer to the official information released by Intel and the website driver update released by ASRock.
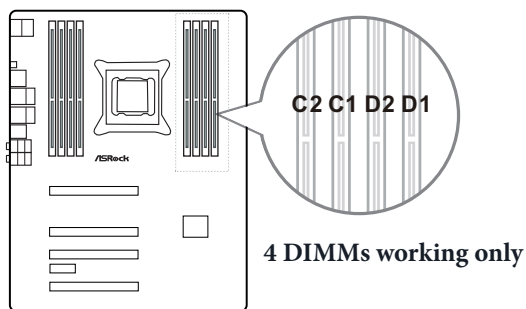
Memory Configuration

i7-7800X and above (Skylake-X CPU)

B1 B2 A1 A2   **C2 C1 D2 D1**
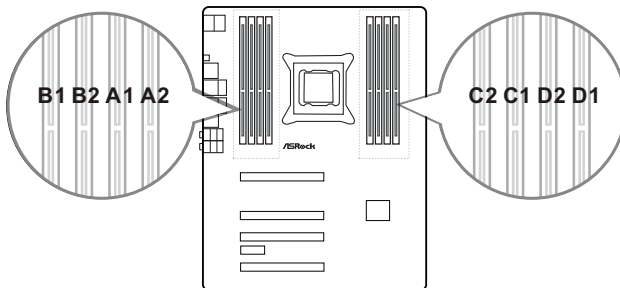
8 DIMMs working simultaneously

When installing memory modules, the DIMM slots should be populated in the following order: DDR4_A1, DDR4_B1, DDR4_C1, DDR4_D1, and then DDR4_A2, DDR4_B2, DDR4_C2, DDR4_D2.

i5-7640X, i7-7740X (Kaby Lake-X CPU)

C2 C1 D2 D1

4 DIMMs working only

When installing memory modules, the DIMM slots should be populated in the following order: DDR4_C1, DDR4_D1 and then DDR4_C2, DDR4_D2.

PCIe Slot Configuration

i9-7900X and above (44-lane Skylake-X CPU)

Slot #	Single VGA	SLI/CrossFireX	3-Way SLI/CrossFireX
1	x16	x16	x16
3		x16	x16
5			x8

i7-7800X or i7-7820X (28-lane Skylake-X CPU)

Slot #	Single VGA	SLI/CrossFireX
1	x16	x16
3		x8

i5-7640X, i7-7740X (16-lane Kaby Lake-X CPU)

Slot #	Single VGA	SLI/CrossFireX
1	x16	x8
3		x8

*Unplug all power cables before installing or removing the CPU.