

# X8 Dual Processor Motherboards



## Max DIMMs supported per CPU

Each Xeon 5500/5600 CPU supports 24 ranks of memory.

Recommended to use DIMM modules with the same number of ranks on each board.

Ranks per DIMM	Max UDIMMs per CPU	Max RDIMMs per CPU	Max LRDIMMs per CPU*
Eight	Not supported	Not supported	6
Quad	Not supported	6	9
Dual	6	9	Not supported
Single	6	9	Not supported

\*LRDIMM ranks appear as half the number of ranks to the CPU. For example, an 8-rank LRDIMM appears as a 4-rank.

## Max memory speed supported

When populating DIMM modules, evenly distribute the DIMM modules across the channels.

For example, if each CPU has 3 DIMMs populated, put one DIMM in channel 1, channel 2, and channel 3 respectively.

If each CPU has 5 DIMMs populated, put the fourth DIMM in channel 1 and the fifth DIMM in channel 2.

DIMM slots present per CPU	DIMM Type	DIMM modules populated per CPU	Ranks per DIMM	Memory speeds supported	
9	UDIMM	1 to 3	Single or dual	800, 1066, 1333	
		4 to 6	Single or dual	800, 1066, 1333	
		7 to 9	Not supported	Not supported	
	Low-voltage UDIMM	1 to 3	Single or dual	800, 1066, 1333	
		4 to 6	Single or dual	800, 1066	
		7 to 9	Not supported	Not supported	
	RDIMM	1 to 3	Single or dual	800, 1066, 1333	
			Quad	800, 1066	
		4 to 6	Single or dual	800, 1066, 1333	
			Quad	800	
		7 to 9	Single or dual	800	
			Not supported	Not supported	
	Low-voltage RDIMM	1 to 3	Single or dual	800, 1066, 1333	
			Quad	800	
		4 to 6	Single or dual	800, 1066	
Quad			800		
7 to 9		Single or dual	800, 1066, 1333		
		Not supported	Not supported		
LRDIMM*	1 to 3	Quad or Eight	1066		
	4 to 6	Quad or Eight	1066		
	7 to 9	Quad	1066		
6	UDIMM	1 to 3	Single or dual	800, 1066, 1333	
		4 to 6	Single or dual	800, 1066, 1333	
	Low-voltage UDIMM	1 to 3	Single or dual	800, 1066, 1333	
		4 to 6	Single or dual	800, 1066	
	RDIMM	1 to 3	Single or dual	800, 1066, 1333	
			Quad	800, 1066	
		4 to 6	Single or dual	800, 1066, 1333	
			Quad	800	
	Low-voltage RDIMM	1 to 3	Single or dual	800, 1066, 1333	
			Quad	800	
		4 to 6	Single or dual	800, 1066	
			Quad	800	
	LRDIMM	Not supported	Not supported	Not supported	
	3	UDIMM	1 to 3	Single or dual	800, 1066, 1333
		Low-voltage UDIMM	1 to 3	Single or dual	800, 1066, 1333
RDIMM		1 to 3	Single or dual	800, 1066, 1333	
			Quad	800, 1066	
Low-voltage RDIMM		1 to 3	Single or dual	800, 1066, 1333	
			Quad	800	
LRDIMM		Not supported	Not supported	Not supported	

\*LRDIMMs supported only on select motherboards. Please check motherboard's product webpage for more information.