





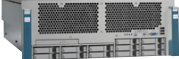







# Cisco Unified Computing Systems Hardware





Cisco UCS C-Series Rack Servers							
	C200 M2	C210 M2	C250 M2	C220 M3	C240 M3	C260 M2	C460 M2
							
Form Factor	1U	2U	2U	1U	2U	2U	4U
Max Sockets	2	2	2	2	2	2	4
Processor	Intel Xeon 5500/5600 [1]	Intel Xeon 5500/5600 [1]	Intel Xeon 5500/5600 [1]	Intel Xeon E5-2600	Intel Xeon E5-2600	Intel Xeon E7-2800, E7-8800	Intel Xeon E7-4800, E7-8800
Clock Speed	4C/2.00(E5504), 4C/2.13(E5606), 4C/1.86(L5609), 4C/2.40(E5620), 4C/2.66(E5640), 4C/2.13(L5630), 4C/2.26(L5640), 6C/2.53(E5649), 6C/2.4 (E5645), 6C/2.66(X5650), 6C/2.93(X5670), 6C/3.06(X5675)	4C/2.00(E5504), 4C/2.13(E5606), 4C/1.86(L5609), 4C/2.40(E5620), 4C/2.66(E5640), 4C/2.13(L5630), 4C/2.26(L5640), 6C/2.4 (E5645), 6C/2.53(E5649), 6C/2.66(X5650), 6C/2.93(X5670), 6C/3.06(X5675)	4C/2.66(E5640), 6C/2.53(E5649), 6C/2.66(X5640), 6C/2.93(X5670), 6C/3.06(X5675), 6C/3.33(X5680), 6C/3.46(X5690)	4C/2.4/2609, 4C/3.3/2643, 6C/2.0/2630L, 6C/2.0/2620, 6C/2.3/2630, 6C/2.5/2640, 8C/1.8/2650L, 8C/2.0/2650, 8C/2.4/2665, 8C/2.4/2665, 8C/2.7/2680, 8C/2.9/2690	4C/2.4/2609, 4C/3.3/2643, 6C/2.0/2630L, 6C/2.0/2620, 6C/2.3/2630, 6C/2.5/2640, 8C/2.0/2650, 8C/2.4/2665, 8C/2.7/2680, 8C/2.9/2690	10C/2.40 (E7-2870), 10C/2.26 (E7-2860), 10C/2.13 (E7-8867L), 10C/2.00 (E7-2850), 8C/2.13 (E7-2830), 6C/1.73 (E7-2803)	6C/1.86 (E74807), 8C/2.13 (E74830), 8C/2.66 (E78837), 10C/2.00 (E74850), 10C/2.13 (E78867L), 10C/2.26 (E74860), 10C/2.4 (E74870)
Memory	192 GB (12)	192 GB (12)	384 GB (48)	256 GB (16)	384 GB (24)	1024 GB (64)	2 TB (32)
Network Ports	dual GbE	dual GbE	dual GbE	dual GbE	Quad GbE	dual GbE, dual 10Gb SFP+	dual GbE, dual 10Gb
Int Disks	Four LFF/500GB SATA, 146GB 15K, 1TB SAS 7.2K, 2TB SAS 7.2K, 300GB SAS 15K, 450GB SAS 15K  Eight SFF/500GB SATA 7.2K, 146GB 15K SAS, 300GB 10K SAS, 600GB 10K SAS, 1TB 7.2K SATA SSD: 100 GB	Sixteen 146GB 6G 15K, 300GB 6G 10K, 500GB SATA, 500GB 6G SATA, 600GB 6G 10K, 1TB SATA SSD: 100GB	Eight 146GB 15K, 300GB 10K, 500GB, 1TB SATA, 600GB 10K	Eight SFF:SAS 300GB 15K, 300GB 10k, 600GB 10k, 900GB 10k, SATA 500 GB 7.2K, 1TB 7.2k SSD 100 GB	24 SFF: SAS 300GB 15K, 300GB 10k, 600GB 10k, 900GB 10k, SATA 500 GB 7.2K, 1TB 7.2k SSD 100 GB	146 GB 15K, 300 GB 10K, 500 GB 7.2K, 600 GB 10K, 900 GB 10K, 100 GB SSD	146 GB 15K, 300 GB 10K, 300 GB 15K, 500 GB 7.2K, 600 GB 10K, 900 GB 10K, 100 GB SSD
RAID	RAID 0,1,5,6,10 / BBWC [6] LSI 1064E (LFF) / LSI 1068E (SFF) LSI 6G 9260-4i 512WC (LFF) LSI 6G 9260-8i 512WC (SFF) LSI 6G 9280-4i4e	RAID 0,1,5,6,10,60 / BBWC LSI 1064E LSI 6G 9261-8i 512WC LSI 6G 9280-4i4e	RAID 0,1,5,6,10,60 / BBWC LSI SAS3081E-R LSI 6G 9261-8i 512WC	LSI MegaRAID SAS9266-8i/BBWC (RAID 0,1,5,6,10,50,60) Cisco UCS RAID SAS 2008M-8i (RAID 0,1,5,10,50)	LSI MegaRAID SAS9266-8i/BBWC (RAID 0,1,5,6,10,50,60) Cisco UCS RAID SAS 2008M-8i (RAID 0,1,5,10,50)	LSI 9261-8i RAID 0,1,5,6,50,60 BBWC	LSI 9240-8i RAID 0,1,10 LSI 9260-8i 512WC RAID 0,1,5,6,10,50,60
Power Supply	N+N (2) 650W PSU	N+N (2) 650W PSU	N+N (2) 850W PSU	N + N(2) 650W PSU	N + N(2) 650W & 1200W PSU,	N+N (2) 1200W PSU	N+N (4) 850W PSU
PCI Slots	2 half-length PCIe x8: 1 full height, 1 low profile	5 full height PCIe x8: 2 full length, 3 half length	5 PCIe Slots: 3 low profile x8 2 full height, half length x16	1 x8, 1/2 height and 1/2 length, 1 x16, full height and 1/2 length	One x8 half-height, 3/4 length; Three x8 full-height, half-height; One x16 full-height, 3/4 length	6 PCIe Slots: 3 low profile, half-length PCIe x8; 2 full height, half-length x16; 1 low-profile, half length x4	10 full height PCIe slots: 4 half-length x4/x8; 6 three-quarter length x8/x16 Gen 2; 2 Gen1 slots, x4
Connectors	DB-15 video, 4 USB 2.0, serial console, DB-9 serial port			VGA video port, 2 USB 2.0 ports, RJ45 serial port, 1 Gb Ethernet management port	VGA video port, 2 USB 2.0 ports, RJ45 serial port, 1 Gb Ethernet management port	DB-15, 4 USB 2.0, DB-9	2 VGA, 5 USB 2.0, serial port










Cisco UCS B-Series Blade Servers

	B200 M2	B200 M3	B250 M2	B230 M1	B230 M2	B440 M1	B440 M2
							
Form Factor	Half-width	Half-Width	Full-width	Half-width	Half-width	Full-width	Full-width
Max Sockets	2	2	2	2	2	4	4
Processor	Intel Xeon 5500/5600	Intel Xeon E5-2600	Intel Xeon 5500/5600	Intel Xeon 6500/7500	Intel Xeon E7-2800	Intel Xeon 7500	Intel Xeon E7-4800
Clock Speed	4C/3.60 (X5687), 4C/2.93 (X5570), 4C/2.66 (X5550), 4C/2.53 (E5540), 4C/2.26 (E5520), 4C/2.26 (L5520), 4C/2.40 (E5620), 6C/3.46 (X5690), 6C/3.33 (X5680), 6C/3.06 (X5675), 6C/2.93 (X5670), 6C/2.66 (X5650), 6C/2.53 (E5649), 6C/2.40 (E5645), 6C/2.26 (L5640), 8C/2.66 (E5640)	4C/3.3/2643, 6C/2.0/2630L, 6C/2.0/2620, 6C/2.3/2630, 6C/2.5/2640, 8C/1.8/2650L, 8C/2.0/2650, 8C/2.4/2665, 8C/2.7/2680, 8C/2.9/2690	4C/3.60 (X5687), 4C/2.93 (X5570), 4C/2.66 (X5550), 4C/2.66 (E5640), 4C/2.53 (E5540), 4C/2.26 (E5520), 4C/2.26 (L5520), 4C/2.40 (E5620), 6C/3.46 (X5690), 6C/3.33 (X5680), 6C/3.06 (X5680), 6C/3.06 (X5675), 6C/2.93 (X5670), 6C/2.66 (X5650), 6C/2.53 (E5649)	8C/1.86 (L7555)	6C/1.73 (E72803), 8C/2.13 (E78867L), 8C/2.13 (E72830), 10C/2.00 (E72850), 10C/2.26 (E72860), 10C/2.40 (E72870)	4C/1.86 (E7520), 8C/1.86 (L7555), 6C/2.00 (E7540), 8C/2.26 (X7560), 6C/2.67 (X7542)	6C/1.86 (E74807), 8C/2.10 (E74850), 8C/2.13 (E78867L), 8C/2.13 (E74830), 10C/2.0 (E74850), 10C/2.26 (E74860), 10C/2.4 (E74870)
Memory	192 GB (12)	384 GB (24)	384 GB (48)	256 GB (32)	512 GB (32)	512 GB (32)	1 TB (32)
Bandwidth	20 Gbps	80 Gbps	40 Gbps	20 Gbps	20 Gbps	40 Gbps	40 Gbps
Int Disks	146 GB 15K, 300 GB 10K, 300 GB 15K, 500 GB 7.2K, 600 GB 10K, 900 GB 10K, 1 TB 7.2 K, 100 GB SSD	Two SFF: SAS 146GB 15K, 300GB 15K, 300GB 10K, 600GB 10K, SATA 500 GB 7.2K SSD 100 GB, 200 GB	146 GB 15K, 300 GB 10K, 300 GB 15K, 500 GB 7.2K, 600 GB 10K, 900 GB 10K, 1 TB 7.2K, 100 GB SSD	Two 32GB SSD, 64GB SSD	Two 32GB SSD, 100GB SSD	Four 73GB 15K, 146GB 15K, 300GB 10K, 600GB 10K	Four 146GB 15K, 300GB 10K, 600GB 10K, 100GB SSD
RAID	RAID 0,1	RAID 0, 1	RAID 0,1	RAID 0,1	RAID 0,1	RAID 0,1,5,6 BBWC	RAID 0,1,5,6 BBWC
Mezzanine	1	1 + 1 Cisco UCS VIC 1240	2	1	1	2	2
Notes:	1. Key: Number of cores:clock speed in GHz (model number) - consult datasheet for list of all 5500 and 5600-series processors 2. C200 M2 will add a new drive cage (Q3FY11 - C200 M2 SFF) supporting eight 2.5" SFF SAS/SATA drives 3. C-Series includes both onboard SATA controller and optional LSI controllers (RAID 0/1 or RAID 0,1,5,6)			4. The B230 M2 supports 512 GB memory with qualification of 16GB DIMMs (32 GB Kits - 2x16 GB) 5. Expansion to 64 DIMM slots requires optional memory riser board (RC460-MRB), one per socket 6. RAID 60 is only supported on C200 M2 SFF			




Cisco UCS Fabric Interconnects		
	6296UP Fabric Interconnect	6248UP Fabric Interconnect
		
Form Factor	2RU	1RU
Maximum Ports	96	48
Cisco UCS™ Manager Version	Cisco UCS Manager 2.0 (2)	Cisco UCS Manager 2.0 (1)
Expansion Modules	16-port UP	16-port UP
Fixed Base Ports	48	32
Prelicensed Base Ports	18	12
Fans	4	2
Power Supply Units	2	2
Throughput	1920 Gbps	960 Gbps
Maximum Chassis per System	20	20

Cisco UCS® Fabric Extenders			
	Cisco UCS 2208XP: I/O Module in Blade Chassis	Cisco UCS 2204XP: I/O Module in Blade Chassis	Cisco Nexus® 2232PP 10GE: 1RU Standalone Fabric Extender (Used with Cisco UCS C-Series Rack Servers)
			
Number of Fabric Interfaces	8	4	8
Fabric Interface Port Speed	10 Gbps	10 Gbps	10 Gbps
Throughput	80 Gbps	40 Gbps	80 Gbps
Number of Server Interfaces	32	16	32
Server Interface Port Speed	10 Gbps	10 Gbps	10 Gbps
Cisco® VM-FEX	Supported	Supported	Supported
Port-Channel	Supported	Supported	Supported
Cisco UCS Manager Version	Release 2.0(1)	Release 2.0(2)	Release 2.0(2)

Cisco UCS Virtual Interface Cards				
	M81KR Virtual Interface Card	1240 Virtual Interface Card	1280 Virtual Interface Card	P81E Virtual Interface Card
				
Total Number of Interfaces	128	256	256	128
Interface Type	Dynamic	Dynamic	Dynamic	Dynamic
Ethernet Interfaces	0-128	0-256	0-256	0-128
Fibre Channel Interfaces	0-128	0-256	0-256	0-128
Cisco Data Center VM-FEX	Supported	Supported	Supported	Supported
Failover Handling	Hardware; no driver needed	Hardware; no driver needed	Hardware; no driver needed	Hardware; no driver needed
Form Factor	Mezzanine card	Modular LOM	Mezzanine card	PCI Express
Network Throughput	20 GB	40-80* GB	80 GB	20 GB
Cisco UCS Server Compatibility	Cisco UCS M1 and M2 blade servers	Cisco UCS M3 blade servers	Cisco UCS M2 and M3 blade servers	Cisco UCS rack servers

\* With use of port expander card for the Cisco UCS 1240 Virtual Interface Card in the optional mezzanine slot

Cisco UCS 5108 Chassis	
	Cisco UCS 5108 Blade Server Chassis
	
Chassis Characteristics	Cisco UCS 5108 chassis: 6RU supporting 8 half-width and 4 full-width blade servers
Fabric Extenders	Up to 2 Cisco UCS 2204XP or 2208XP Fabric Extenders
Power	4 N+N 2500W power supply units