

Comparison of Current Generation x86 Blade Servers (Cisco, Dell, HP and IBM)

last updated 11.5.13 (updated with IBM x222 Compute Node Details)

= top values per group

Cisco

Cisco Model	Form Factor	Max. Servers per Chassis	Type of CPUs
B22 M3	Half Width	8	Intel Xeon E5-2400
B200 M3	Half Width	8	Intel Xeon E5-2600 v2
B230 M2	Half Width	8	Intel Xeon E7-2800
B420 M3	Full Width	4	Intel Xeon E5-4600
B440 M2	Full Width	4	Intel Xeon E7-4800

Specs Per Server									
Max CPUs	Max Core per CPU	Max Cores per System	# internal drives	Supported Drive Types	Max LAN on Motherboard	# I/O Card Expansion Slots	# of DIMM Slots	Max Memory (GB)	
2	8	16	2	SAS, SATA, SSD	VIC 1240 (dual 2-port 10 Gigabit Ethernet)*	1	12	192	
2	12	24	2	SAS, SATA, SSD	VIC 1240 (dual 2-port 10 Gigabit Ethernet)*	1	24	768	
2	10	20	2	SSD	none - requires use of the mezz expansion slot	1	32	512	
4	8	32	4	SAS, SATA, SSD	VIC 1240 (dual 2-port 10 Gigabit Ethernet)*	2	48	1536	
4	10	40	4	SAS, SATA, SSD	none - requires use of the mezz expansion slot	2	32	1024	

Specs Per 42U Rack (based on 7 x 6U chassis)*			
Max # Servers	Max CPUs	Max CPU Cores	Max Memory (GB)
56	112	896	10752
56	112	1344	43008
56	112	1120	28672
28	112	896	43008
28	112	1120	28672

*all 4 ports requires the 2208XP FX

*Fabric Interconnect may consume up to 2U in a rack

Dell

Dell Model	Form Factor	Max. Servers per Chassis	Type of CPUs
M420	1/4 height	32	Intel Xeon E5-2400
M520	Half Height	16	Intel Xeon E5-2400
M620	Half Height	16	Intel Xeon E5-2600 v2
M820	Full Height	8	Intel Xeon E5-4600
M910	Full Height	8	Intel Xeon E7-2800, E7-4800, and E7-8800
M915	Full Height	8	AMD Opteron 6300

Specs Per Server									
# CPU Sockets	Max Core per CPU	Max Cores	# internal drives	Supported Drive Types	Max LAN on Motherboard	# I/O Card Expansion Slots	# of DIMM Slots	Max Memory (GB)	
2	8	16	2	SSD	2 x 10GbE	1	6	192	
2	8	16	2	SAS, SATA, SSD	4 x 1GbE	2	12	384	
2	12	24	2	SAS, SATA, SSD, PCIe SSD	4 x 10GbE	2	24	768	
4	8	32	4	SAS, SSD, PCIe SSD*	4 x 10GbE	4	48	1536	
4	10	40	2	SAS, NL-SAS, SSD	4 x 1GbE	4	32	1024	
4	16	64	2	SAS, SATA SSD	4 x 10GbE	4	32	1024	

Specs Per 42U Rack (based on 4 x 10U chassis)			
Max # Servers	Max CPUs	Max CPU Cores	Max Memory (GB)
128	256	2048	24576
64	128	1024	24576
64	128	1536	49152
32	128	1024	49152
32	128	1280	32768
32	128	2048	32768

*PCIe SSD limited to 2 drives

HP

HP Model	Form Factor	Max. Servers per Chassis	Type of CPUs
BL420c Gen 8	Half Height	16	Intel Xeon E5-2400
BL460c Gen 8	Half Height	16	Intel Xeon E5-2600 v2
BL465c Gen 8	Half Height	16	AMD Opteron 6300
BL620c G7	Full Height	8	Intel Xeon E7-2800 & E7-8800
BL660c Gen 8	Full Height	8	Intel Xeon E5-4600
BL680c G7	Full Height, Double-Wide	4	Intel Xeon E7-4800, and E7-8800
BL685c G7	Full Height	8	AMD Opteron 6300

Specs Per Server									
# CPU Sockets	Max Core per CPU	Max Cores	# internal drives	Supported Drive Types	Max LAN on Motherboard	# I/O Card Expansion Slots	# of DIMM Slots	Max Memory (GB)	
2	8	16	2	SAS, SATA, SSD	2 x 10GbE	2	12	384	
2	12	24	2	SAS, SATA, SSD	2 x 10GbE	2	16	512	
2	16	32	2	SAS, SATA, SSD	2 x 10GbE	2	16	512	
2	10	20	2	SAS, SATA, SSD	4 x 10GbE	3	32	1024	
4	8	32	4	SAS, SATA, SSD	4 x 10GbE	3	32	1024	
4	10	40	4	SAS, SATA, SSD	6 x 10GbE	7	64	2048	
4	16	64	2	SAS, SATA SSD	4 x 10GbE	3	32	1024	

Specs Per 42U Rack (based on 4 x 10U chassis)			
Max # Servers	Max CPUs	Max CPU Cores	Max Memory (GB)
64	128	1024	24576
64	128	1536	32768
64	128	2048	32768
32	64	640	32768
32	128	1024	32768
16	64	640	32768
32	128	2048	32768

IBM

IBM Model	Form Factor	Max. Servers per Chassis	Type of CPUs
HS23E	Single-Wide	14	Intel Xeon E5-2400
HS23	Single-Wide	14	Intel Xeon E5-2600 v2
HX5	Double-Wide	7	Intel Xeon E7-2800, E7-4800, and E7-8800
HX5 + MAX 5	Double-Wide	7	Intel Xeon E7-2800, E7-4800, and E7-8800
Flex System x220 Compute Node	Single-Wide	14	Intel Xeon E5-2400
Flex System x222 Compute Node	2 Servers in Double-Wide	28	Intel Xeon E5-2400
Flex System x240 Compute Node	Single-Wide	14	Intel Xeon E5-2600 v2
Flex System x440 Compute Node	Double-Wide	7	Intel Xeon E5-4600

Specs Per Server									
# CPU Sockets	Max Core per CPU	Max Cores	# internal drives	Supported Drive Types	LAN on Motherboard	# I/O Card Expansion Slots	# of DIMM Slots	Max Memory (GB)	
2	8	16	2	SAS, SATA, SSD	2 x 1GbE	2	12	192	
2	12	24	2	SAS, SATA, SSD	2 x 1GbE + 2 x 10GbE	2	16	512	
4	10	40	4	SSD	2 x 1GbE	4	32	1024	
2	10	20	2	SSD	2 x 1GbE	2	40	1280	
2	8	16	2	SAS, SATA, SSD	2 x 1GbE	2	12	384	
2	8	16	2	SSD	2 x 10GbE	1	12	384	
2	12	24	2	SAS, SATA, SSD	2 x 10GbE	2	24	768	
4	8	32	2	SAS, SATA, SSD	4 x 10GbE	4	48	1536	

Specs Per 42U Rack (based on 4 x chassis)			
Max # Servers	Max CPUs	Max CPU Cores	Max Memory (GB)
56	112	896	10752
56	112	1344	28672
28	112	1120	28672
28	56	560	35840
56	112	896	21504
112	224	1792	43008
56	112	1344	43008
28	112	896	43008