

Single-Socket



IBM HS12

2 Sockets x86 Nehalem Istanbul



IBM HS22V

2 Sockets x86 Nehalem Istanbul



IBM HS22

Singel Socket 64-bit Power7



IBM PS700

Singel Socket 64bit-bit Power7



IBM PS701

2 Socket 64bit-bit Power7



IBM PS702

CPU brand	Intel	Intel	Intel	Power7	Power7	Power7
Uni CPUs	Celeron 445	Xeon		RISC	RISC	RISC
Dual Core CPUs	E3113, E6405, E6305	E5503	E5502			
Quad Core CPUs	X3363, L5420		x5570, E5540, E5506, L5520	3.0 GHz Power7		
Exa Core CPUs		L5640, E5649, X5650, X5670, X5680, X5690				
Oct Core CPUs					3.0 GHz Power7	2x 3.0 GHz Power7
Chipset		Intel 5520	Intel 5520	IBM proprietry	IBM proprietry	IBM proprietry
Max memory (GB)	24	288	96	64	128	256
Physical memory slots	6	18	12	8	16	32
Chipkill / Online Spare/ Mirroring	Yes / No / No	Yes* / No / Yes	Yes* / No / Yes	Yes / - / -	Yes / No / No	Yes / No / No
Memory expansion blade supported	No	No	No	No	No	No
Standard NIC ports	2	2 (Broadcom 5709S)	2 (Broadcom 5709S)			
Std. TOE / iSCSI	No / No	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes	Yes / Yes
Max NICs/FC ports (concurrently)	8/0* or 4/4*	8/0* or 4/4*	8/0** or 4/4**			
Expansion cards max	2	2	2	2	2	2
SAS expansion card supported	Yes	Yes	Yes			
Ethernet	2-port Gb, 4-port GB, 2-port 10Gb (NetXen or Broadcom), 4-port 10Gb (Broadcom)	Broadcom 5709S onboard NIC with dual Gigabit Ethernet (GbE) ports	2-port Gb, 4-port GB, 2-port 10Gb (NetXen or Broadcom), 4-port 10Gb (Broadcom 57711)	Integrated Dual Gigabit Virtual Ethernet	Integrated Dual Gigabit Virtual Ethernet	Integrated Dual Gigabit Virtual Ethernet
CNA (Converged Network Adapters)	QLogic 2-port 10 Gbps CNA	QLogic 2-port 10 Gbps CNA, Emulex Virtual Fabric Adapter	QLogic 2-port 10 Gbps CNA, Emulex Virtual Fabric Adapter			
PCI expansion blade	Yes	No	No			
Virtualized I/O card	N/A	Emulex Virtual Fabric Adapter	Emulex Virtual Fabric Adapter	CIOv / CFFh	CIOv / CFFh	CIOv / CFFh
InfiniBand	2-port Cisco 4x, 2-port Cisco 4x DDR, 2-port Voltaire 4x DDR,	2-port Cisco 4x, 2-port Cisco 4x DDR, 2-port Voltaire 4x DDR, 2-port QDR CFFh	2-port Cisco 4x, 2-port Cisco 4x DDR, 2-port Voltaire 4x DDR, 2-port QDR CFFh	4x	4x	4x
Light Path Diagnostics on blade (also when off)	Yes	Yes	Yes	Yes	Yes	Yes
iSCSI	QLogic HBA	QLogic HBA	QLogic HBA	QLogic HBA	QLogic HBA	QLogic HBA
Fibre Channel	2-port Qlogic, 2-port Emulex, combo QLogic (incl. 2-port FC + 2-port Ethernet)	2-port Qlogic, 2-port Emulex, combo QLogic (incl. 2-port FC + 2-port Ethernet), 2-port 8Gbps Qlogic	2-port Qlogic, 2-port Emulex, combo QLogic (incl. 2-port FC + 2-port Ethernet), 2-port 8Gbps Qlogic	4 und 8 Gbit/s FC	4 und 8 Gbit/s FC	4 und 8 Gbit/s FC
Solid State Disks (SATA/USB)	2 SATA (50GB)	2	Yes / USB for hypervisor			
SAS / SATA disks	SAS or SATA	SAS	Yes/Yes	SAS	SAS	SAS
SAS Max # HDD	2 (+3 on SIO blade)	2	2	300 / 600 GB	300 / 600 GB	300 / 600 GB
SAS hot swap	Yes	SSD	Yes	No	No	No
RAID standard	0,1	0, 1, 1E	0,1	RAID 0, 1	No	RAID 0, 1
RAID as option	RAID 5 & BBWC in SIO	RAID 5 & BBWC	RAID 5 and BBWC	No	No	No
Combo card support (FC + E/Net)	Yes, QLogic (2+2ports, also 8Gbps FC)	Yes, QLogic (2+2ports, also 8Gbps FC)	Yes, QLogic (2+2ports, also 8Gbps FC)			
Pre-failure Alert	Memory, CPU, optional disk	Memory, CPU, disk	Memory, CPU, disk	Memory, CPU, disk	Memory, CPU, disk	Memory, CPU, disk
TPM	No	TPM Version 1.2 chip	TPM Version 1.2 chip			
Blade slots occupied in chassis	1 (2 if SIO or PCI exp. Blade used)	1	1	1	1	1

* in BCH with MSIM

* Nehalem-EP memory controllers support Chipkill technology with x4 DIMMs, but not with x8 DIMMs without using lockstep mode.
** in BCH with MSIM

Single-Socket Non-x86



IBM JS12

2 Socket Non-x86



IBM QS22

2 Socket Non-x86 Power6+



IBM JS23

4 Socket Non-x86 Power6+



IBM JS43

2 Socket x86



IBM HX5

Telco Blades

All blades except LS42*

	IBM JS12	IBM QS22	IBM JS23	IBM JS43	IBM HX5
CPU brand	IBM Power6	Cell Broadband Engine	IBM Power6+	IBM Power6+	Intel
Uni CPUs					
Dual Core CPUs	3,8GHz Power 6	IBM PowerXCell 8i (1 PPE + 8 SPE)*	4,2 GHz Power6+	4,2 GHz Power6+	
Quad Core CPUs					E6510, E7520
Exa Core CPUs					E7530, E7540, L7545, X7542
Oct Core CPUs					X6550, L7555, X7550, X7555
Chipset	64	32	64	128	Intel 7500
Max memory (GB)					320
Physical memory slots	8		8	16	16
Chipkill / Online Spare/ Mirroring	Yes / No (Bit Steering) / No		Yes / No (Bit Steering) / No	Yes / No (Bit Steering) / No	Yes / Yes / Yes
Memory expansion blade supported	No		No	No	No
Standard NIC ports	Integrated Virtual ethernet (2)	2 (Virtual I/O supported)	2	4 (Virtual I/O supported)	2
Std. TOE / iSCSI	No / No	No (I/O bridge chip=	No / No	No / No	No / No
Max NICs/FC ports (concurrently)	6/2* or 4/4*	N/A	6/2* or 4/4*	10/2* or 6/4*	8/0** or 4/4**
Expansion cards max	2	1	2	4	2
SAS expansion card supported	Yes	Yes	Yes	Yes	Yes
Fibre Channel	2-port Qlogic, 2-port Emulex, combo QLogic (incl. 2-port FC + 2-port Ethernet)	No	2-port Qlogic, 2-port Emulex, combo QLogic (incl. 2-port FC + 2-port Ethernet), all also 8Gbps	2-port Qlogic, 2-port Emulex, combo QLogic (incl. 2-port FC + 2-port Ethernet), all also 8Gbps	
Ethernet	2-port Gb, 4-port Gb	No	No	No	Broadcom dual-port Gigabit Ethernet Controller
CNA (Converged Network Adapters)	Yes, QLogic (2+2ports)	No	Yes, QLogic (2+2ports)	Yes, QLogic (2+2ports)	
Virtualized I/O card	No	No	No	No	CIOv / CFFh
Combo card support (FC + E/Net)	QLogic 2-port CNA	No	QLogic 2-port 10 Gbps CNA	QLogic 2-port 10 Gbps CNA	
InfiniBand	2-port Cisco 4x, 2-port Voltaire 4x DDR,	Cisco DDR 4x	2-port Voltaire DDR 4x, 2-port 4x DDR	2-port Voltaire DDR 4x, 2-port 4x DDR	
iSCSI	QLogic HBA	No	No	No	QLogic HBA
PCI expansion blade	Yes	Yes	No	No	No
Solid State Disks (SATA/USB)	No	Flash drive	Yes/No	Yes/No	Yes/No
SAS / SATA disks	SAS	No	SAS	SAS	optional SAS
SAS Max # HDD	2	0	1	1	2, 4
SAS hot swap	No	No	No	No	No
RAID standard	0, 1	No	No	No	No
RAID as option	-	No	No	No	RAID 0, 1, 1E, 5
Light Path Diagnostics on blade (also when off)	No	No	Yes	Yes	Yes
Pre-failure Alert	No	No	Yes	Yes	Yes
TPM	1	1	1	2	1
Blade slots occupied in chassis	No	No	No	No	No

* in BCH with MSIM

* Power Processor Element (PPE) Synergistic Processor Elements (SPE)

* in BCH with MSIM

* in BCH with MSIM

* Some combinations of chassis and blades might be subject to restrictions. See the interoperability guide <http://www-947.ibm.com/systems/support/supportsite.wss?cdisplay?Indocid=MIGR-5073016&brandid=5000020>