



IBM i on POWER Blades Supported Environments

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POWER Blades and IBM i Integration
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The tables list the supported hardware configurations for running IBM i on a POWER blade installed in an IBM BladeCenter chassis. There is a table for each of the components: Chassis, SAN I/O Modules for BladeCenter H Chassis, Ethernet I/O Modules, Additional I/O Modules, System Management Modules, JS12 POWER Blade, JS22 POWER Blade, I/O Expansion Cards for POWER Blade, SANs, Tape Drives and Software and Firmware.

JS12/JS22 POWER Blade and BladeCenter S Minimum Supported Environment

- BladeCenter S chassis:
 - 1 Advanced Management Module
 - 1 supported Ethernet I/O module from table below
 - 1 IBM BladeCenter S 6-Disk Storage Module
 - 2 SAS Hot-swap hard disks (73GB, 146GB or 300GB)
 - 1 SAS Connectivity Module
- JS12 POWER Blade:
 - JS12 blade
 - 2 GB memory
 - SAS Expansion Card (CFFv) for IBM BladeCenter
 - 1 SAS disk drive
- JS22 POWER Blade:
 - JS22 blade
 - 2 GB memory
 - SAS Expansion Card (CFFv) for IBM BladeCenter
 - 1 SAS disk drive

JS12/JS22 POWER Blade and BladeCenter H Minimum Supported Environment

- BladeCenter H chassis:
 - 1 Advanced Management Module
 - 1 supported SAN I/O module from table below
 - 1 supported Ethernet I/O module from table below
 - 1 Multi-Switch Interconnect Module
- JS12 POWER Blade:
 - JS12 blade
 - 2 GB memory
 - QLogic Ethernet and 4 GB Fibre Channel Expansion Card (CFFh)
- JS22 POWER Blade:
 - JS22 blade
 - 2 GB memory
 - QLogic Ethernet and 4 GB Fibre Channel Expansion Card (CFFh)

(see table below for feature codes and options)

Chassis

| Power System MTM | Supported with IBM i JS12 JS22 | System x MTM | Description | Notes: |
|------------------|----------------------------------|--|-----------------------|--|
| 7989-BCH | Y Y | 8852-xxx | BladeCenter H Chassis | Download Firmware : http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/mainselect?familyind=5297403&typeind=5297408&modelind=0&osind=0&brandind=5000020&oldfamily=5297403&continue.x=5&continue.y=10 |
| 7779-BCS | Y Y | 8886-xxx | BladeCenter S Chassis | Download Firmware: http://www-304.ibm.com/systems/support/supportsite.wss/selectproduct?familyind=5356544&typeind=0&osind=0&brandind=5000020&oldbrand=5000020&oldfamily=5356544&oldtype=0&taskind=2&psid=sp&continue.x=19&continue.y=12 |
| n/a | N N | 8677-xxx | BladeCenter E Chassis | |
| n/a | N N | 8720-xxx 8730-xxx 8740-xxx 8750-xxx | BladeCenter T Chassis | |

SAN I/O Modules for BladeCenter H Chassis

At least one Fibre channel I/O module is required. This I/O module must be installed in the right I/O Module bay of a Multi Switch Interconnect Module (MSIM) that is installed in I/O bays 7 & 8 and/or 9 & 10. If you want redundant paths to your SAN, than two Fibre channel I/O modules are required each installed in the right I/O Module bay of two Multi Switch Interconnect Modules (MSIM) one installed in I/O bays 7 & 8 and one installed in I/O bays 9 & 10.

| Power Feature Code | Supported with IBM i | System x Option Number | System x Feature Code | Description |
|--------------------|----------------------|------------------------|-----------------------|---|
| 3207 | Y | 32R1813 | 1571 | Brocade 4Gb 10-port SAN Switch Module for IBM eServer BladeCenter |
| 3206 | Y | 32R1812 | 1569 | Brocade 4Gb 20-port SAN Switch Module for IBM eServer BladeCenter |
| n/a | N | 32R1822 | n/a | Brocade 4Gb 10-port Upgrade for IBM BladeCenter |
| 3203 | Y | 32R1904 | 1575 | QLogic 4Gb 10-port Fibre Channel Switch Module for IBM eServer BC |
| 3202 | Y | 26R0881 | 1560 | QLogic 4Gb 20-port Fibre Channel Switch Module for IBM eServer BC |

| | | | | |
|------|---|----------|------|---|
| 3243 | Y | 43W6724 | 2986 | QLogic 10-port 4Gb SAN Switch Module for IBM BladeCenter |
| 3244 | Y | 43W6725 | 2987 | QLogic 20-port 4Gb SAN Switch Module for IBM BladeCenter |
| 3245 | Y | 43W6723 | 2985 | QLogic 4Gb Intelligent Pass-thru Module for IBM BladeCenter |
| 3241 | Y | 39Y9284 | 2984 | Cisco Systems 4Gb 10-port Fibre Channel Module |
| 3242 | Y | 39Y9280 | 2983 | Cisco Systems 4Gb 20-port Fibre Channel Module |
| 3217 | N | 32R17564 | 1574 | Cisco Systems 4X InfiniBand Switch module for IBM BladeCenter |
| 3178 | Y | 43W6836 | n/a | QLogic SAN Doctor for IBM BladeCenter |
| 3183 | Y | 43W6838 | n/a | QLogic Enterprise Fabric Suite 2007 for IBM BladeCenter |
| 3181 | Y | 43W6837 | n/a | QLogic Fabric Security for IBM BladeCenter |
| 3209 | N | 32R1905 | 1576 | McData 4Gb 10-port Fibre Channel Switch Module for eServer |
| 3208 | N | 32R1833 | 1562 | McData 4Gb 20-port Fibre Channel Module for eServer BladeCenter |
| n/a | N | 32R1912 | n/a | QLogic/ McData 10-port Upgrade for IBM eServer BladeCenter |
| n/a | N | 39Y9207 | 2941 | QLogic InfiniBand Ethernet Bridge Module for IBM BladeCenter |
| n/a | N | 39Y9211 | 2942 | QLogic InfiniBand Fibre Channel BladeCenter |
| 3216 | N | 43W4419 | 2990 | 4X InfiniBand Pass-thru Module for IBM BladeCenter |

Ethernet I/O Modules

At least one Ethernet I/O module installed in I/O bay 1 is required for external Ethernet connections.

For BladeCenter H Chassis: If a second external Ethernet connection is required, a second Ethernet I/O module is installed in I/O bay 2. For third and fourth external Ethernet connections, 2 additional Ethernet I/O modules are installed in the left I/O Module bay of two Multi Switch Interconnect Modules (MSIM) one installed in I/O bays 7 & 8 and one installed in I/O bays 9 & 10.

| Power Feature Code | Supported with IBM i | | System x Option Number | System x Feature Code | Description |
|--------------------|----------------------|-----|------------------------|-----------------------|---|
| | BCS | BCH | | | |
| 3211 | Y | Y | 32R1859 | 1494 | Nortel Networks Layer 2-7 Gb Ethernet Switch Mod for IBM BladeCenter (not supported in MSIM in BCH) |
| 3212 | Y | Y | 32R1860 | 1495 | Nortel Networks L2/L3 Copper Gb Ethernet Sw Mod for IBM BladeCenter |
| 3213 | Y | Y | 32R1861 | 1496 | Nortel Networks L2/L3 Fiber Gb Ethernet Sw Mod for IBM BladeCenter |
| 3214 | N | Y | 32R1888 | 1497 | Cisco Systems Fiber Intelligent Gb Ethrnt Sw Mod for IBM BladeCenter |
| 3215 | N | Y | 32R1892 | 1498 | Cisco Systems Intelligent Gb Ethernet Sw Mod for IBM BladeCenter |
| 3174 | Y | Y | 43W4395 | 5450 | Cisco Catalyst Ethernet Switch Module - 3012 |
| 3171 | N | Y | 41Y8522 | 2988 | Cisco Catalyst Ethernet Switch Module - 3110X |

| | | | | | |
|------|---|---|----------|------|---|
| 3173 | N | Y | 41Y8523 | 2989 | Cisco Catalyst Ethernet Switch Module - 3110G |
| 5452 | Y | Y | 44W4483 | 5452 | Intelligent Copper Passthru Module for IBM BladeCenter |
| 3219 | Y | Y | 39Y9320 | 2900 | IBM BladeCenter Copper Passthru Module for IBM BladeCenter |
| 3218 | Y | Y | 39Y9316 | 1556 | IBM BladeCenter Optical Passthru Module for IBM BladeCenter |
| 3220 | Y | Y | 39Y9324 | 1484 | Server Connectivity Module for IBM BladeCenter |
| 3210 | Y | Y | 32R1783 | 1493 | Nortel 10Gb Uplink Ethernet Switch Module for IBM BladeCenter |
| n/a | N | N | 39Y92674 | 2952 | Nortel 10Gb Ethernet Switch Module for IBM BladeCenter |

Additional I/O Modules

| Power Feature Code | Supported with IBM i BCS BCH | System x Option Number | System x Feature Code | Description |
|--------------------|--------------------------------|------------------------|-----------------------|---|
| 3239 | N Y | 39Y9314 | 2971 | Multi-Switch Interconnect Module for IBM BladeCenter H (MSIM) |
| 3267 | Y Y | 39Y9195 | 2980 | IBM BladeCenter SAS Connectivity Module |

Systems Management Modules

| Power Feature Code | Supported with IBM i BCS BCH | System x Option Number | System x Feature Code | Description |
|--------------------|--------------------------------|------------------------|-----------------------|--|
| 3201 | Y Y | 25R5778 | 1604 | IBM BladeCenter KVM/Advanced Management Module |

JS12 POWER Blade

| | Power Feature Code | Description | Notes |
|--------------------------|--------------------|--|--|
| Blade | 8442 | IBM BladeCenter JS12 2-core, 3.8 GHz | not available yet |
| Processor | 8444 | Processor Entitlement (Qty 2) | two processor entitlements required |
| | 8444 | <u>Express Config</u> Processor Entitlement (Qty 1) | |
| | 8443 | Zero-priced Processor Entitlement (Qty 1) | |
| Memory | 8220 | 2 GB (2 x 1 GB) DDR2 667 MHz DIMMs | one required, up to four supported |
| | 8229 | 4 GB (2 x 2 GB) DDR2 667 MHz DIMMs | |
| | 8239 | 8 GB (2 x 4 GB) DDR2 667 MHz DIMMs | |
| | 8245 | 16 GB (2 x 8 GB) DDR2 533 MHz DIMMs | |
| Disk | 8237 | IBM 73 GB SAS 10K SFF HDD | zero required, up to two supported |
| | 8236 | IBM 146 GB SAS 10K SFF HDD | |
| Fibre I/O Expansion Card | 8252 | QLogic Ethernet and 4 GB Fibre Channel Expansion Card (CFFh) | <ul style="list-style-type: none"> required for SAN connection in BCH not supported in BCS |
| SAS I/O Expansion Card | 8250 | SAS Expansion Card (CFFv) for IBM BladeCenter | <ul style="list-style-type: none"> optional for SAS tape connection in BCH required for SAS disk and tape in BCS |

JS22 POWER Blade

| | Power Feature Code | Description | Notes |
|--------------------------|--------------------|--|---|
| Blade | 8400 | IBM BladeCenter JS22 4-core, 4.0 GHz | Download Firmware: http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/mainselect?familyind=5358230&typein=0&osind=0&brandind=5000020&oldfamily=5358230&continue.x=9&continue.y=5 |
| Processor | 8401 | Processor Entitlement (Qty 4) | four processor entitlements required |
| | 8401 8399 | Express Config Processor Entitlement (Qty 2) Zero-priced Processor Entitlement (Qty 2) | |
| Memory | 8232 | 2 GB (2 x 1 GB) DDR2 667 MHz DIMMs | one required, up to two supported |
| | 8233 | 4 GB (2 x 2 GB) DDR2 667 MHz DIMMs | |
| | 8234 | 8 GB (2 x 4 GB) DDR2 667 MHz DIMMs | |
| | 8235 | 16 GB (2 x 8 GB) DDR2 533 MHz DIMMs | |
| Disk | 8237 | IBM 73 GB SAS 10K SFF HDD | zero required, up to one supported |
| | 8236 | IBM 146 GB SAS 10K SFF HDD | |
| Fibre I/O Expansion Card | 8252 | QLogic Ethernet and 4 GB Fibre Channel Expansion Card (CFFh) | <ul style="list-style-type: none"> required for SAN connection in BCH not supported in BCS |
| SAS I/O Expansion Card | 8250 | SAS Expansion Card (CFFv) for IBM BladeCenter | <ul style="list-style-type: none"> optional for SAS tape connection in BCH required for SAS disk and tape in BCS |

I/O Expansion Cards on POWER Blade

| Power Feature Code | Supported with IBM i | | System x Option Number | System x Feature Code | Description |
|--------------------|----------------------|-----|------------------------|-----------------------|--|
| | BCS | BCH | | | |
| 8252 | N | Y | 39Y9306 | 2968 | Qlogic Ethernet & 4Gb Fibre Channel Exp Card (CFFh) for BladeCenter |
| 8250 | Y | Y | 39Y9190 | 2979 | SAS Expansion Card (CFFv) for IBM BladeCenter |
| 8249 | N | N | 39Y9310 | 2969 | Ethernet Expansion Card (CFFv) for IBM BladeCenter |
| 8238 | N | N | 32R1923 | 1358 | Qlogic iSCSI Daughtercard for IBM BladeCenter |
| 8298 | N | N | 43W4420 | 2993 | Voltaire 4X InfiniBand DDR Expansion Card (CFFh) for IBM BladeCenter |
| 8297 | N | N | 43W4421 | 2992 | Cisco 4X InfiniBand DDR Expansion Card (CFFh) for IBM BladeCenter |
| 8256 | N | N | 32R1760 | 1466 | Cisco Systems 4X InfiniBand expansion card for IBM BladeCenter |
| 8258 | N | N | 43W4423 | 2991 | 4X InfiniBand DDR Expansion Card (CFFh) for IBM BladeCenter |
| 8251 | N | N | 43W6859 | 2994 | Emulex 4Gb Fibre Channel Expansion Card (CFFv) for IBM BladeCenter |
| 8248 | N | N | 41Y8527 | 2970 | QLogic 4Gb Fibre Channel Expansion Card (CFFv) for IBM BladeCenter |
| n/a | N | N | 73P6000 | 1546 | Myrinet Cluster Exp. Card |
| n/a | N | N | 39R8624 | 1548 | SFF Gb Ethernet Exp. Card |
| n/a | N | N | 39Y9271 | 2967 | NetXen 10Gb Ethernet Expansion Card (CFFh) for IBM BladeCenter |
| n/a | N | N | 26K6457 | 1551 | Topspin InfiniBand host channel expansion card for eServer |
| n/a | N | N | 26R0890 | 1577 | QLogic 4Gb SFF Fibre Channel Expansion Card for eServer |
| n/a | N | N | 39Y9186 | 2925 | Emulex 4Gb SFF Fibre Channel Expansion Card for IBM BladeCenter |
| n/a | N | N | 26K5939 | 1568 | cKVM Feature Card for IBM BladeCenter |
| n/a | N | N | 39R7563 | 4265 | IBM BladeCenter Storage and I/O Expansion Blade |

SANs

| Supported with IBM i on POWER Blade in BCS BCH | Description | Notes |
|--|---------------------------|--------------------------------|
| N Y | IBM System Storage DS4700 | Fibre channel disk drives only |
| N Y | IBM System Storage DS4800 | Fibre channel disk drives only |
| N Y | IBM System Storage DS8100 | |
| N Y | IBM System Storage DS8300 | |

Tape Drives

| Supported with IBM i | Description | Model number |
|----------------------|---|-----------------------|
| Y | IBM System Storage TS2240 Tape Drive (LTO4) | 3580S4E (SAS version) |
| Y | IBM System Storage TS2230 Tape Drive (LTO3) | 3580S3E (SAS version) |

Software and Firmware

| Description | Minimum Levels Required |
|---|---|
| IBM i | 6.1 plus the latest PTF package and the following individual PTFs: <ul style="list-style-type: none"> • SI30649 • MF43772 • SI30583 • MF43935 |
| VIOS | 1.5.2 with Fix Pack 11.1 and any individual Interim Fixes (iFixes) listed at the VIOS update Web page: http://www14.software.ibm.com/webapp/set2/sas/f/vios/download/home.html |
| System firmware on POWER blade (FSP code level) | EA320_030_030 or later |
| Advanced Management Module firmware | BPET42I or later |
| Multi-Path I/O software | DS8100, DS8300 <ul style="list-style-type: none"> • SDDPCM v2.1.0.8 or later • Download SDDPCM package for DS8000 and AIX version 5.3 from this Web page: http://www-1.ibm.com/support/docview.wss?rs=540&context=ST52G7&dc=D430&uid=ssg1S40c=en_US&cs=utf-8&lang=en DS4700, DS4800 <ul style="list-style-type: none"> • RDAC driver which is included in base VIOS code |

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