

## System board diagrams - IBM eServer xSeries 220 (Type 8646)

### Product Documentation

#### Abstract

This document contains diagrams entitled IBM eServer xSeries 220 (Type 8646) - System board diagrams

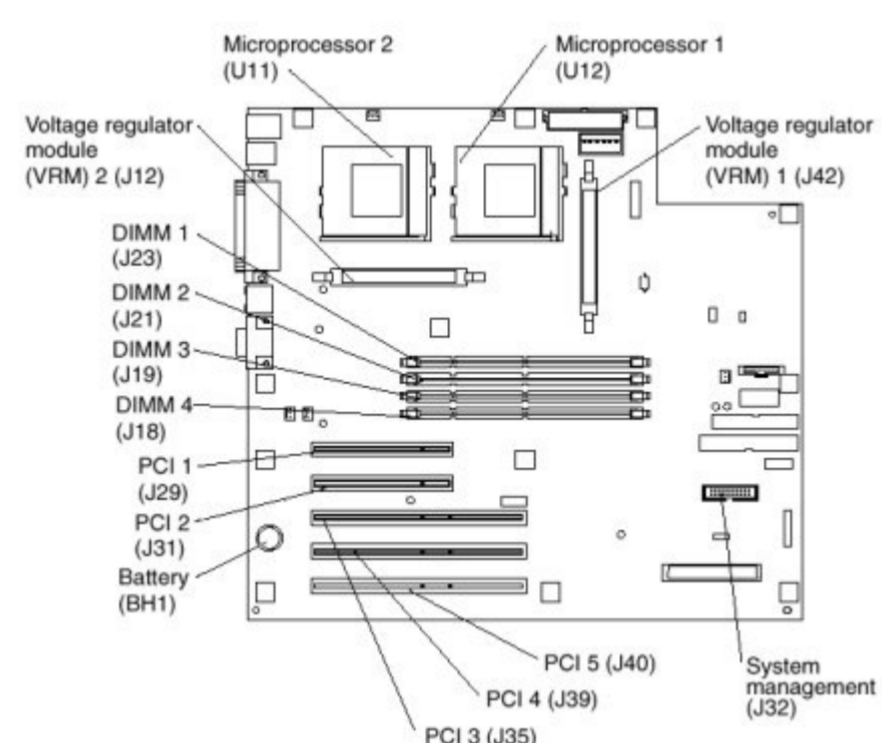
#### Content

The illustrations in this document show the components on the system board.

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- [Automatic Server Restart \(ASR\)](#)
- [System board switch block](#)

#### System board options connectors

The following illustrations identifies system board connectors for customer replaceable unit (CRU) options

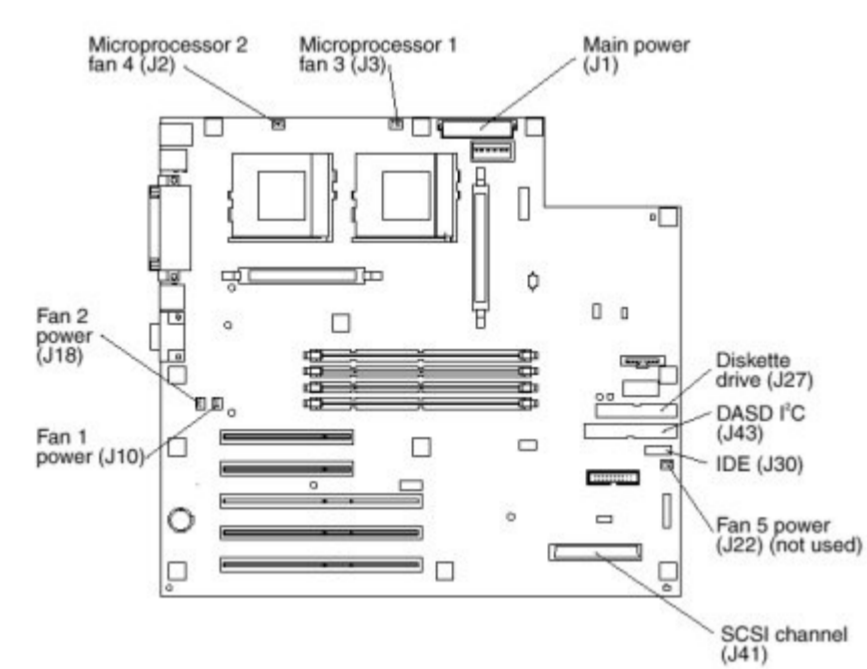


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**Note:** If the server and operating system support system management functions, and, if the Remote Supervisor Adapter (RSA) is installed in your server, the system management connector (J32) is dedicated to the RSA.

#### System board internal connectors

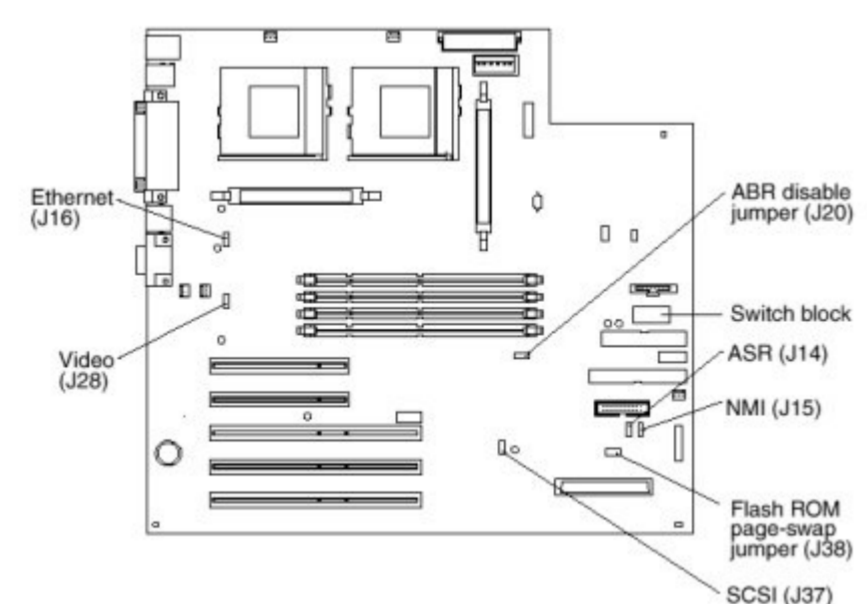
The following illustrations identifies system board connectors for internal cables.



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#### System board external connectors

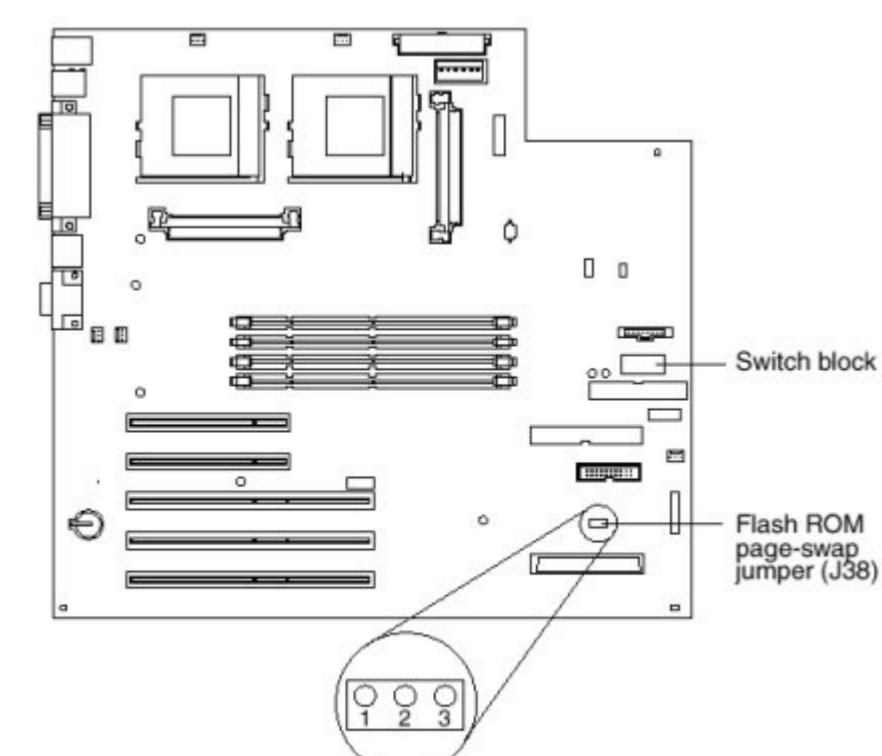
The following illustrations identifies system board connectors for external devices.



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#### System board jumpers and switches

The following illustration identifies the jumpers and switches on the system board.



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#### System board jumper blocks

Any jumper blocks on the system board that are not shown in the illustration are reserved. For normal operation of the system, the default jumpers shown in the following table should be installed. To disable the functions listed in the table, install a jumper (Except for J38).

#### Jumper descriptions

Was this topic helpful?

Yes  No

#### Document Information

**More support for:**  
Older System x->xSeries 220

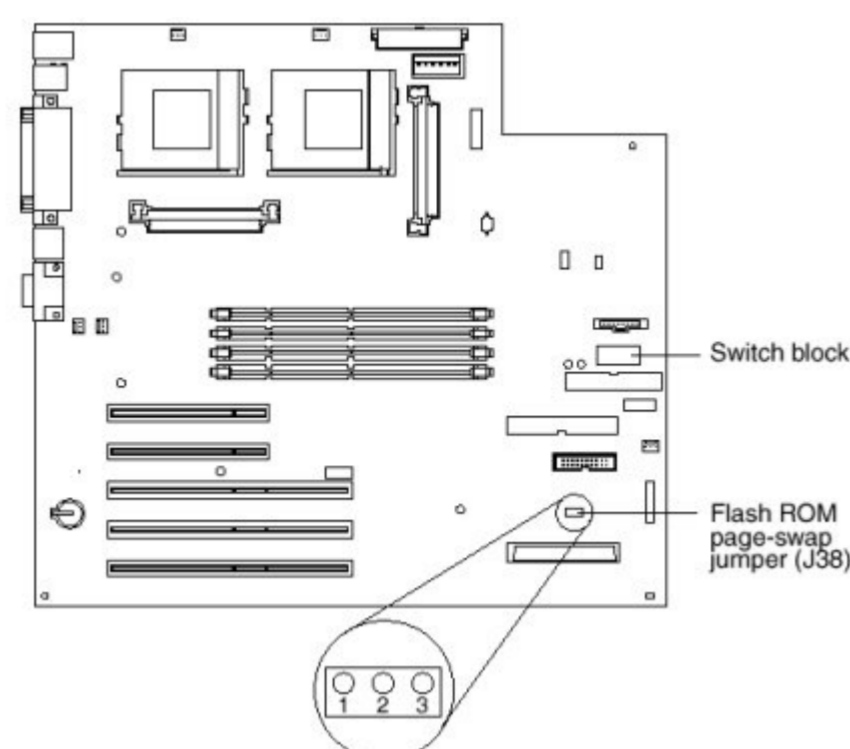
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Jumper	Description	Default
J14	Automatic Server Restart (ASR)	No jumper
J15	Forces an non maskable interrupt (NMI) signal	No jumper
J16	Onboard Ethernet controller	No jumper
J20	Automatic BIOS Recovery (ABR)	No jumper
J28	Onboard video controller	No jumper
J33	Reserved	.
J37	Onboard SCSI controller	No jumper
J38	Flash ROM page jumper	Jumper pins 2 and 3

#### Flash ROM page jumper



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Flash ROM page jumper (J38) determines whether primary or secondary (backup) POST/BIOS code is used by the system to start up. The default setting for J38 is a jumper between pins 2 and 3 (primary POST/BIOS). For backup POST/BIOS, place a jumper between pins 1 and 2 of J38. Normally this action is not required, but if the primary BIOS is damaged, and ABR is not functioning properly, the jumper can be moved for troubleshooting purposes. Changing the jumper position after system power on is not permitted; it may cause unpredictable problems.

**Note:** The BIOS Flash Update Utility always updates the primary BIOS.

#### Automatic BIOS Recovery (ABR) Jumper

The default setting for J20 is no jumper. If it is necessary to disable ABR during trouble shooting, install a jumper on J20.

#### Automatic Server Restart (ASR)

To enable Automatic Server Restart, a special device driver must be loaded. This device driver enables the ASR watch-dog timer and then periodically resets it (within 5 minutes). If not reset, the ASR watch-dog timer will expire and boot the system. The watch-dog timer will re-arm itself after being reset. To disable the ASR hardware, a jumper must be installed between pins 1 and 2 of J14. The default is no jumper installed (ASR enabled).

#### System board switch block

The switch block contains microswitches 1 through 8. Switch 8 is at the right of the switch block, and switch 1 is at the left. The following table describes the function for each switch. The default setting is Off for all switches in the switch block.

#### Switches 1 through 8

Switch number	Switch description	Default
8	Power-on password-override switch. When toggled to the side that is opposite the default position, bypasses the power-on password, if one is set.	Off
7	Reserved	Off
6	Reserved	Off
5	Force power on.	Off
4	Reserved	Off
3	Reserved	Off
2	Reserved	Off
1	Reserved	Off

#### Additional information

- [IBM eServer xSeries 220 \(Type 8646\) - System service part number listing](#)
- [IBM eServer xSeries 220 \(Type 8646\) - Hardware Maintenance Manual](#)

#### Applicable countries and regions

- Worldwide