

Intel[®] RAID Controller RS2BL080 Installation Guide

Intel Order Number: E71516-001



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1 Hardware Installation

Requirements

- An Intel® RAID Controller RS2BL080 with the provided cables
- A host system with an available x8 or x16 PCI-Express* slot
- The Resource CD, which contains drivers and documentation

Note: The Resource CD will not be shipped with the product at launch, but the files will be made available on Intel's support web site at <http://support.intel.com/support/motherboards/server/>.

- SAS or SATA 3.0 hard drives

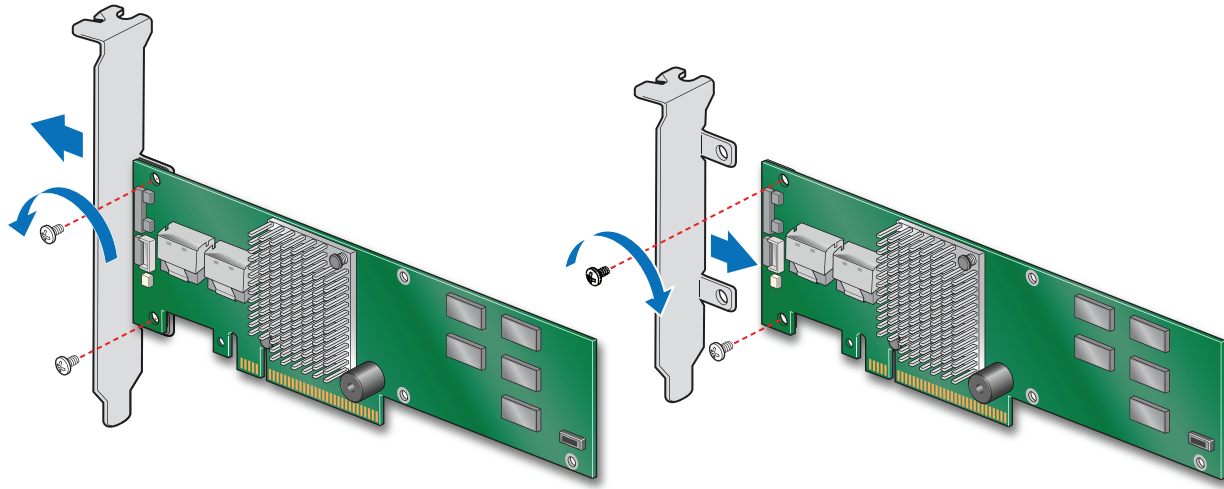
Note: SATA II is the only type of SATA supported by this RAID Controller.

In addition, Intel Corporation strongly recommends using an uninterruptible power supply (UPS).

Installing the RAID Controller

To install the RAID Controller, follow these steps:

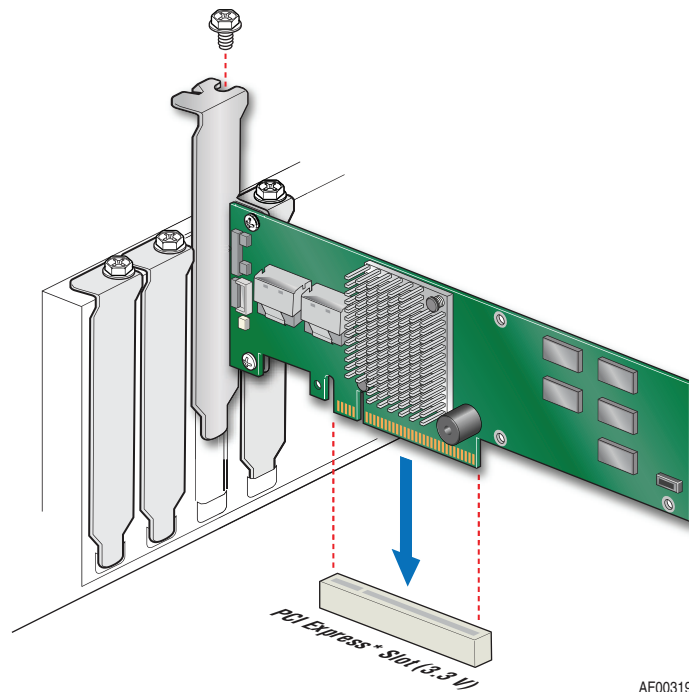
1. Turn off the power to the system, all drives, enclosures, and system components. Remove the power cord(s).
2. Remove the server system cover. For instructions, see the server system documentation.
3. If necessary, change the bracket on the RAID controller to fit the height of the server system (see [Figure 1](#)).



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Figure 1. Changing the Bracket

4. Install the RAID controller into an available server system x8 or x16 PCI-Express* slot (see [Figure 2](#)). To locate an appropriate slot and for instructions on installing an add-in card, see your server system documentation.



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Figure 2. Installing the Intel® RAID Controller RS2BL080

5. For the first four drives (ports 0 - 3), connect one 4-port combined end of an internal cable to the right connector (see letter “A” in [Figure 3](#)). If you are using more than four drives without using an expander backplane, connect the second cable to the left connector (see letter “B” in [Figure 3](#)). Connect the other end of the cables to SATA drives or to the ports on a SATA or SAS backplane (see letter “C” in [Figure 3](#)).

To prevent throughput problems:

- ✧ Use the cables provided or use the shortest possible cable.
- ✧ Do not use cables longer than one meter.
- ✧ Decrease the maximum length by one foot if you are using a backplane.
- ✧ Do not use cross-over cables.
- ✧ Only connect to a SATA drive, SAS or SATA backplane, or an expander device.
- ✧ Route the cables carefully.
- ✧ Check that the controller and cables are all properly attached.

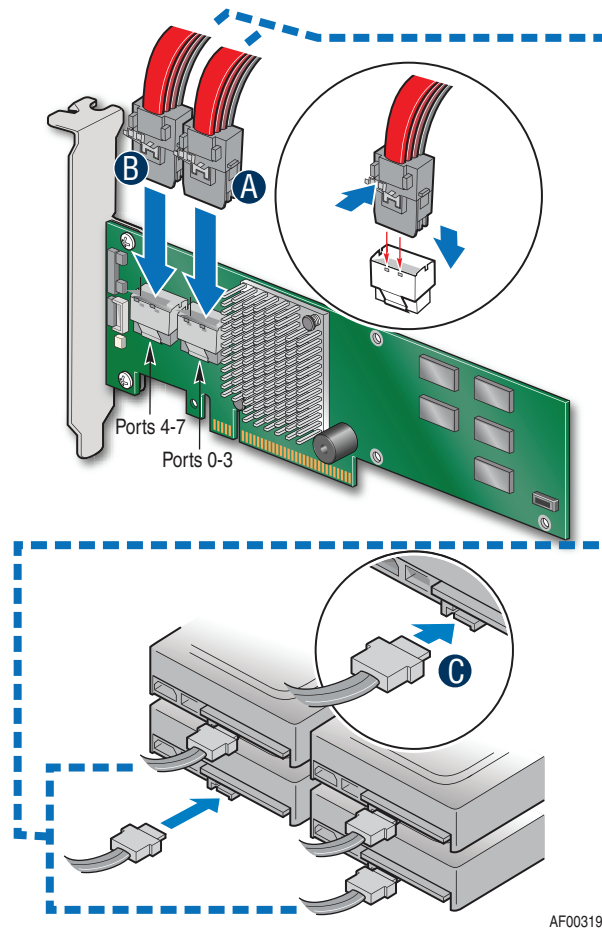


Figure 3. Connecting Cables between the RAID Controller and Drives/Backplane

6. Install the server system cover and connect the power cords. For instructions, see your server system documentation.

Configuring the RAID Controller

To configure the RAID Controller, follow these steps:

1. Turn on the system power and listen to be sure that the SATA devices power up before or at the same time as the system.
2. During the boot, a BIOS message displays to state the keys to press to enter the Intel® RAID BIOS Console 2, such as
`Press <CTRL><G> to run BIOS Console 2.`
This message times out after several seconds. If you miss it, you need to restart the system.
After you press the keys to enter the Intel® RAID BIOS Console 2 software, the firmware takes several seconds to initialize and then display the Intel® RAID Controller RS2BL080 number and firmware version. The numbering of the RAID controller follows the PCI slot scanning order used by the server board.
3. See the *Quick Start User's Guide* and the *Software User's Guide* for instructions to configure the RAID controller and to install the operating system drivers.

Replacing a Controller

To replace the RAID controller, see your server system documentation for instructions to remove and then install an add-in adapter.

Resolving a Configuration Mismatch

If the newly installed RAID controller was previously configured, a message displays during POST, stating that there is a configuration mismatch because the configuration data in the NVRAM differs from that in the hard drives. Use these steps to resolve the mismatch:

1. Press <Ctrl> + <G> when prompted during boot up to access the BIOS Configuration Utility.
2. Select Configure > View/Add Configuration to see the NVRAM and drive configurations.
3. Since the drives contain the correct configuration, use configuration from the disks.
4. Press <Esc> and select YES to update the NVRAM.
5. Exit and reboot.

