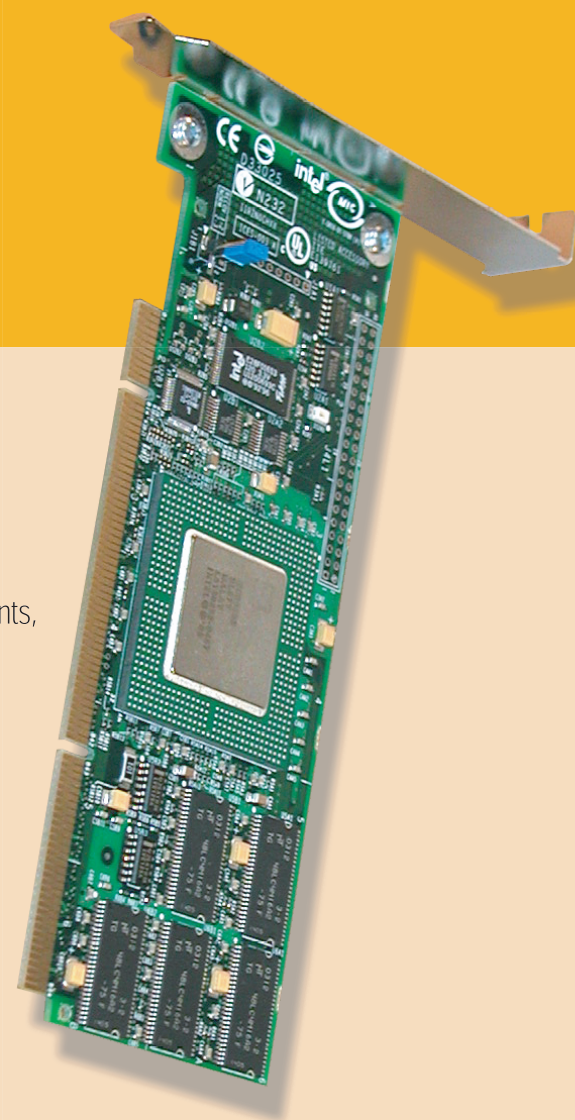# Intel® RAID Controller SRCZCR Quick Start User's Guide

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This guide contains step-by-step instructions for installing Microsoft* Windows* Server 2003/Microsoft* Windows* 2000 Advanced Server or Red Hat* Linux 8.0 on a single RAID volume using available SCSI disk drives. If you plan to use a different operating system, need a more advanced RAID configuration, or need safety and regulation information, you should refer to the hardware and software guides. These guides and other supporting documents, including a list of supported server boards, are located on the Internet at http://support.intel.com/support/motherboards/server. You can also find the hardware and software guides on the Resource CD that accompanied the Intel® RAID Controller SRCZCR.

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, complete ESD procedures are described in your product guide. For more details on Intel Raid Controllers please see: www.intel.com/go/serverbuilder

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[1]Available only to Intel® Channel Program Members, part of Intel® e-Business Network.

What you will need
- SCSI hard disk drives (optional)
- Intel® RAID Controller SRCZCR
- Server board with a RAIDIOS-enabled slot
- Intel® RAID Controller SRCZCR Resource CD
- Blank formatted diskette(s)
- Operating System installation media (Microsoft* Windows* Server 2003/ Microsoft* Windows* 2000 Advanced Server or Red Hat* Linux 8.0)

Important Information

These guides and other supporting documents [including a list of supported server boards] are located on the web at http://support.intel.com/support/motherboards/server.

You can also find the guides on the CD that accompanied the Intel RAID Controller.

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① Make an OS Installation Diskette

1. Boot from the Intel® RAID Controller SRCZCR Software CD.
2. Select "Make Diskettes."
3. Create an operating system installation diskette by following the on-screen instructions.

```
ROMDOS Startup Menu

1. Make Diskettes
2. Flash Recovery Utility
3. Storage Console
4. Exit & Reboot

Enter Choice: 1
```
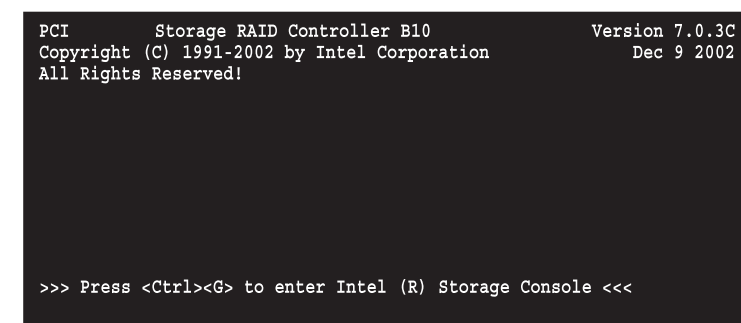
② Install the Intel RAID Controller SRCZCR

The Intel® RAID Controller SRCZCR uses the SCSI controller on the server board. Therefore, there are no SCSI cables to connect to the RAID controller.

1. Power down the system, disconnect power cord(s), and remove the system cover.
2. Refer to your server board documentation to locate the RAIDIOS-enabled PCI slot.
3. Install the SRCZCR card into the RAIDIOS-enabled PCI slot.

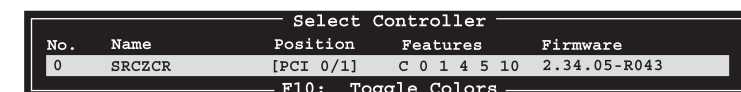## ③ Use Storage Console to Create a RAID Volume

Note: As necessary, refer to "Choosing the Right RAID Level" on the other side of this sheet for a brief description of RAID levels.

1. Power on the system and press <Ctrl> + <G> when the screen below appears.

```
PCI        Storage RAID Controller B10        Version 7.0.3C
Copyright (C) 1991-2002 by Intel Corporation        Dec 9 2002
All Rights Reserved!




>>> Press <Ctrl><G> to enter Intel (R) Storage Console <<<
```
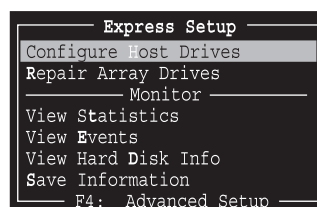
2. The following two messages will appear at the bottom of the screen: "Intel (R) Storage Console to start after POST" and "Please wait to start Intel (R) Storage Console …"
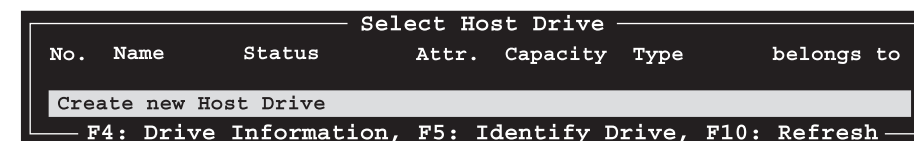
3. When Storage Console starts, it will display the Intel® RAID Controller SRCZCR that is installed. Press <Enter> to select this controller.
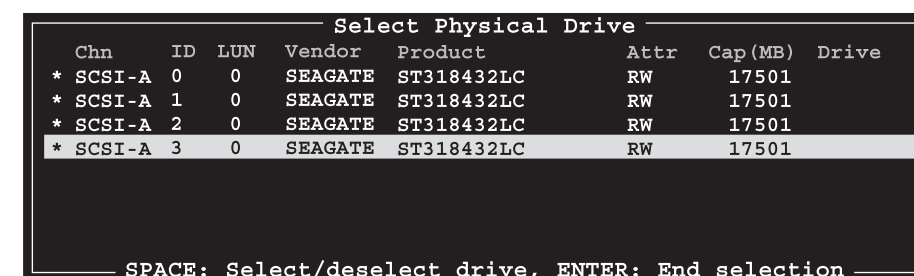
```
         Select Controller
No.  Name      Position   Features       Firmware
0    SRCZCR     [PCI 0/1]  C 0 1 4 5 10  2.34.05-R043
         F10:  Toggle Colors
```

4. Select "Configure Host Drives" and press <Enter>.

```
         Express Setup
Configure Host Drives
Repair Array Drives
         Monitor
View Statistics
View Events
View Hard Disk Info
Save Information
         F4:  Advanced Setup
```

5. Press <Enter> to "Create new Host Drive." Storage Console displays a list of available hard drives. These are drives that do not belong to a logical host drive and can be used for new host drives.

```
         Select Host Drive
No.  Name       Status     Attr.  Capacity  Type     belongs to
Create new Host Drive
   F4: Drive Information, F5: Identify Drive, F10: Refresh
```
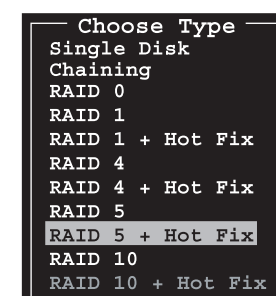
6. Use the arrow keys and the space bar to select the hard drives that you want to be part of the array (these hard drives become marked with an "*"). For this example, we used four hard drives.

```
            Select Physical Drive
   Chn   ID  LUN  Vendor   Product      Attr  Cap(MB)  Drive
*  SCSI-A 0   0   SEAGATE  ST318432LC   RW    17501
*  SCSI-A 1   0   SEAGATE  ST318432LC   RW    17501
*  SCSI-A 2   0   SEAGATE  ST318432LC   RW    17501
*  SCSI-A 3   0   SEAGATE  ST318432LC   RW    17501


   SPACE: Select/deselect drive, ENTER: End selection
```

7. After all drives are selected and marked with an "*", press <Enter>.

8. The "Choose Type" menu highlights the RAID types possible, considering the number of drives selected. For this example we select "RAID 5 + Hot Fix" and press <Enter>.
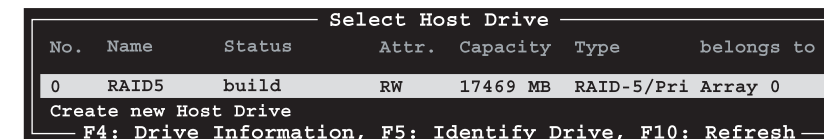
```
      Choose Type
Single Disk
Chaining
RAID 0
RAID 1
RAID 1 + Hot Fix
RAID 4
RAID 4 + Hot Fix
RAID 5
RAID 5 + Hot Fix
RAID 10
RAID 10 + Hot Fix
```

9. Storage Console displays a warning that all data will be destroyed after confirmation. Confirm your choice by pressing <Y>.

```
Do you want to create a Host Drive from the selected disk(s) ?
    (CAUTION: All data will be destroyed !) (Y/N)
```

10. Enter the appropriate drive capacity and press <Enter>.
Note: The capacity entered is the capacity per hard drive, not the capacity of the RAID array you are creating.

```
Used Capacity per Drive  (5..17469 MB):  17469
```
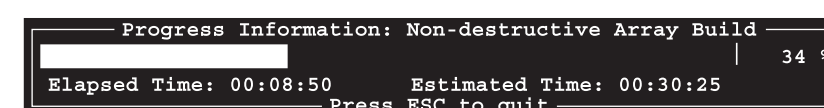
11. The new host drive is created. Press <F10> to refresh the screen. The status indicates "build" and will not change to "ready" until the RAID 5 array has been built.

```
            Select Host Drive
No.  Name     Status     Attr.  Capacity  Type          belongs to
0    RAID5    build      RW     17469 MB  RAID-5/Pri Array 0
Create new Host Drive
   F4: Drive Information, F5: Identify Drive, F10: Refresh
```

The array build will continue as a background task. You can wait for the build to complete before exiting Storage Console or you can exit Storage Console and the array build will continue in the background after BIOS POST completes upon reboot. You can proceed with operating system installation while the array continues the build process in the background.

Note: If the build is interrrupted, it will restart upon reboot. However, it will then run in the slower, non-destructive mode.

12. When leaving Storage Console (by pressing <Esc>), a progress window informs you about the estimated completion time for the build process.

```
   Progress Information: Non-destructive Array Build
                                                     | 34 %
Elapsed Time: 00:08:50     Estimated Time: 00:30:25
                  Press ESC to quit
```

13. Upon successful completion of the build process, the disk array changes to "ready" status.

---

④ Set the System BIOS Boot Order

Enter your system BIOS to set the appropriate boot priority. Because the navigation to the BIOS screens varies by server system, refer to your system documentation for instructions on navigating through the BIOS setup screens.

1. During POST, use the indicated keystroke (e.g. <F2>, <F1>, etc) to enter the system BIOS Setup Utility.
2. Navigate to the menu that allows you to set the "Boot Device Priority." Select a boot order that allows your computer to boot to the CD-ROM drive.
3. Navigate to the menu that allows setting the priority for "(Legacy SCSI Option ROM)". Set this at the top of the priority list.
4. Save your changes and exit the utility. The system will reboot.

You have completed the RAID array setup. Continue to the other side of this sheet for OS installation instructions. If your OS is not listed, refer to the Intel® RAID Controller SRCZCR Hardware and Software Guides.

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