Intel[®] ISP1100 Internet Server Quick Start Guide

A Guide for Technically Qualified Assemblers of Intel[®] Identified Subassemblies/Products

Before You Begin	2
FCC/Emissions Disclaimer	2
Cautions and Warnings	2
Safety and Regulatory Reguirements	
Site Criteria	
Unpack and Inspect the Server	
Check the Accessories	4
Check the Power Cord	4
Install Components	5
Tools and Supplies Needed	5
Remove the Cover	5
Install the Processor	6
Install the Memory	8
Install the Hard Drive(s)	10
Install PCI Add-in Card(s)	12
Close the Cover	17
Install the Rackmount Brackets	17
Rackmount the Server	18
Power Up the Server	19
Access the Additional Documents	20
Need Help?	22

The most current version of this document and other documents relating to the Intel[®] ISP1100 Internet Server can be found at **http://www.intel.com/isp**

Copyright © 2000 Intel Corporation. All rights reserved. No part of this document may be copied, or reproduced in any form, or by any means without prior written consent of Intel.

Intel Corporation (Intel) makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Intel assumes no responsibility for any errors that may appear in this document. Intel makes no commitment to update nor to keep current the information contained in this document.

[†] Third-party brands and trademarks are the property of their respective owners.

Order Number: A10529-001

Before You Begin

FCC/Emissions Disclaimer

This equipment has been tested and verified to comply with Class A limits when configured into a compatible host computer, pursuant to Part 15 of the FCC Rules, CISPR 22, and EN55022. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To ensure EMC compliance with your local regional rules and regulations, the final configuration of your end system product may require additional EMC compliance testing. For more information please contact your supplier.

Cautions and Warnings

Read and adhere to all warnings, cautions, and notes in this guide and the documents supplied with the chassis, power supply, server board, and accessories. If the instructions for the chassis, server board, and power supply are inconsistent with these instructions or the instructions for accessories, contact the supplier to find out how you can ensure that your server meets safety and regulatory requirements.

WARNINGS

Make sure the AC power connection is through a properly grounded outlet. See "Check the Power Cord" in the "Unpack and Inspect the Server" procedure for more information.

Pressing the Power button DOES NOT turn off all power to this server. Some circuitry in the server may continue to operate even though the front panel Power button is off. Disconnect the server from the AC power source and from any telecommunications links, networks, or modems before performing any of the procedures in this guide. Failure to do so can result in personal injury or equipment damage.

This guide is for qualified technical personnel with experience installing and configuring servers.

⚠ CAUTIONS

Perform the procedures in this guide only at an ESD workstation since the server components can be extremely sensitive to ESD. If no such station is

available, you can reduce the risk of electrostatic discharge (ESD) damage by doing the following:

- Wear an antistatic wrist strap and attach it to a metal part of the server.
- Touch the metal on the server chassis before touching the server components.
- Keep part of your body in contact with the metal server chassis to dissipate the static charge while handling the server components.
- Avoid moving around unnecessarily.
- Hold the boards and drives only by the edges.
- Place the server components on a grounded, static-free surface. Use a conductive foam pad if available but **not** the component wrappers.

Safety and Regulatory Requirements

See the *Intel® ISP1100 Internet Server Product Guide* for all applicable safety standards, electromagnetic compatibility (EMC) regulations, and product certification markings.

Intended uses: This product was evaluated for use in computer racks within computer rooms and similar locations. Other uses require further evaluation.

Site Criteria

Before beginning to unpack and prepare the server for operation, consider the following site criteria:

- Near a properly earthed, grounded, three-pronged AC power outlet.
 - In the United States and Canada: a NEMA 5-15R outlet for 100-120 VAC.
 - In other geographic areas: a properly earthed, grounded AC power outlet in accordance with the local electrical authorities and electrical code of the region.
- Clean and relatively free of dust.
- Well ventilated and away from sources of heat, with the ventilating openings on the server kept free of obstructions.
- Away from sources of vibration or physical shock.
- Isolated from strong electromagnetic fields and noise caused by electrical devices such as elevators, copy machines, air conditioners, large fans, large electric motors, radio and TV transmitters, and high-frequency security devices. For EMI information, refer to the *Intel ISP1100 Internet Server Product Guide*.
- Access space provided so the server power cord can be easily unplugged from the AC power source (see previous "WARNINGS").

Unpack and Inspect the Server

Remove the server from the packaging container and check that all the accessories are included. Inspect the packaging container for evidence of mishandling during transit. If the packaging container is damaged, photograph it for reference. After removing the contents, keep the damaged container and the packing materials.

Inspect the server and accessories for damage. If the contents appear damaged, file a damage claim with the carrier immediately.

Check the Accessories

Examine the contents of the accessories pouch and make sure the following items are present:

- AC Power Cord
- Rackmount Brackets (2)
- Rackmount Bracket Screws (4)
- Intel[®] ISP1100 Internet Server Quick Start Guide
- Headless Network Installation of Red Hat Linux 6.1 Guide
- Red Hat Linux 6.1 CD-ROM
- Intel ISP1100 Internet Server Resource CD-ROM Contains:
 - Intel ISP1100 Internet Server Quick Start Guide
 - Intel ISP1100 Internet Server Product Guide
 - Intel[®] ISP1100 Internet Server Technical Product Specification
 - Software drivers and utilities

If you find any parts missing, contact the supplier immediately.

⇒ NOTE

Save the packaging container and packing materials in the event you need to package the server for reshipment.

Check the Power Cord

Check that the power cord is the exact type required in the region where the server will be used. Do not modify or use the supplied AC power cord if it is not the correct type. Refer to the following "Power Cord Requirements" for a detailed power cord description.

Power Cord Requirements

- **Rating:** Power cords must be rated for available AC voltage and have a current rating at least 125% of the server current rating. (Refer to the *Intel ISP1100 Internet Server Technical Product Specification* included on the Intel Internet Server Resource CD-ROM shipped with the server for power requirement information.)
- **Connector, wall outlet end:** Power cords must be terminated in a grounding-type male plug designed for use in your region. Cords must have certification marks showing certification by an agency that is acceptable in your region.
- **Connector, power supply end:** The connector that plugs into the AC receptacle on the server power supply must be an IEC 320, sheet C13, type female connector.
- **Cord length and flexibility:** Power cord length must be 4.5 meters (14.76 feet) or less and composed of flexible (harmonized <HAR>) cord or VDE-certified cordage to comply with server safety certifications.

Install Components

The following procedures describe how to install the necessary components that enable you to operate the server system. These procedures are in the recommended installation sequence and should be performed in the order presented.

Before performing the following installation procedures, do not forget to thoroughly familiarize yourself with the safety warnings and cautions in the "Before You Begin" section of this guide.

Tools and Supplies Needed

- Phillips (cross-head) screwdriver (number 1 and 2 bit)
- Antistatic wrist strap and conductive foam pad (recommended)

Remove the Cover

Perform the following procedure to remove the cover and gain access to the server internal components (refer to Figure 1):

- 1. Use a Phillips screwdriver and remove the screw (A) from the front edge of the cover.
- 2. Grasp the back edge of the cover and simultaneously pull from the back edge and push near the front until the cover slides out from under the edge of the server front panel.
- 3. Grasp the notch (B) in the front center of the cover and lift to remove the cover.



Figure 1. Removing the Cover

Install the Processor

This procedure describes how to install the processor chip on the server board. Before proceeding, be sure you are thoroughly familiar with the "Before You Begin" information at the front of this guide. Read the following "Preliminary Considerations" to ensure that you install the correct processor in the server.

Preliminary Considerations

Table 1 lists and describes the Intel® processors supported by the server.

	Table 1.	Supported	Processors
--	----------	-----------	------------

Processor Type	L2 Cache Size (KB)	FSB Speed (MHz)	Speed (MHz)
Intel [®] Celeron™ processor	128	66	566 ¹ , 533, 500
			466, 433, 400
			366
Intel [®] Pentium [®] III processor	256	100	750, 700
			650, 600E
			550E, 500

¹ Coppermine 128 KB; other Intel Celeron processors are based on Mendocino core.

Remove the Processor Fan

Due to space constraints, the server will not accommodate a processor with a fan mounted on top of the heat sink. Sufficient cooling is provided without a processor fan (five fans are mounted on the server chassis). Thus, if the processor you wish to install has a fan mounted on the heat sink, remove the fan as described in the following procedure. Otherwise, proceed to the installation procedure.

Remove the fan from the processor as follows (refer to Figure 2):

- 1. Grasp the fan housing at the four corners.
- 2. Gently press on the corners and lift until the fan releases from the heat sink.



Figure 2. Removing the Processor Fan

Install the Processor Chip

Perform the following procedure to install the processor chip on the server board (refer to Figure 3):

- 1. Grasp the end of the zero-insertion-force (ZIF) arm (A) and bend it out slightly until it disengages from the socket tab (B).
- 2. Swing the ZIF arm up until it stops in the straight up position. The processor socket is now unlocked.
- 3. Face the front of the server and orient the processor chip (C) with the notch (D) in the upper left corner of the processor socket (E).
- 4. Gently place the processor chip on the socket so that the processor pins (F) mate exactly with the corresponding socket pins (G). Do not force the processor into the socket since it takes only a slight pressure to bend the pins.
- 5. With the processor in place, swing the arm (A) down until it snaps into the socket tab (B). The processor is now properly socketed.



Figure 3. Installing the Processor Chip

Install the Heat Sink

Perform the following procedure to install the heat sink on the processor chip (refer to Figure 4):

- 1. Orient the heat sink so the thermal grease pad (A) on the heat sink is exactly aligned with the corresponding thermal grease pad (B) on top of the processor chip.
- 2. With the end of the clamp that has the two slots (C) facing the front of the socket, drop the clamp in the bottom of the heat sink center groove (D).
- 3. Make sure the end of the clamp with the two slots (C) is positioned just below the top edge of the heat sink and press down on the back of the clamp (E) until it snaps onto the socket tab (F).
- 4. With the front of the clamp below the top edge of the heat sink, press down on the front of the clamp (G) until it snaps onto the socket tab (H).



Figure 4. Installing the Heat Sink

Install the Memory

This procedure describes how to install DIMM board memory in the server. Before proceeding, be sure you are thoroughly familiar with the "Before You Begin" information at the front of this guide.

Read the following "Preliminary Considerations" to ensure that you use the correct DIMM board(s) and properly install them in the server.

Preliminary Considerations

- The server board has four DIMM board sockets that can accommodate 16 MB to 1 GB of SDRAM.
- Memory size can vary between sockets.
- DIMM boards can be installed in any order. However, it is easier to start with the back socket and move toward the front.
- Empty sockets between DIMM boards is permitted.
- DIMM memory sizes can be mixed if all installed DIMM memory size is either unbuffered or registered.

		,				
DIMM Size	Configuration	DRAM Technology	DRAM Depth	DRAM Width	Single-sided DIMM (Size x 64 Bit)	Double-sided DIMM (Size x 64 Bit)
16 MB	2 Mbit x 72	16 Mbit	2 Mbit	8 bit	2 MB x 8 B = 16 MB	
32 MB	4 Mbit x 72	16 Mbit	2 Mbit	8 bit		4 MB x 8 B = 32 MB
32 MB	4 Mbit x 72	16 Mbit	4 Mbit	4 bit	4 MB x 8 B = 32 MB	
64 MB	8 Mbit x 72	16 Mbit	4 Mbit	4 bit		8 MB x 8 B = 64 MB
32 MB	4 Mbit x 72	64 Mbit	4 Mbit	16 bit	4 MB x 8 B = 32 MB	
64 MB	8 Mbit x 72	64 Mbit	4 Mbit	16 bit		8 MB x 8 B = 64 MB
64 MB	8 Mbit x 72	64 Mbit	8 Mbit	8 bit	8 MB x 8 B = 64 MB	
128 MB	16 Mbit x 72	64 Mbit	8 Mbit	8 bit		16 MB x 8 B = 128 MB
128 MB	16 Mbit x 72	64 Mbit	16 Mbit	4 bit	16 MB x 8 B = 128 MB	
64 MB	8 Mbit x 72	128 Mbit	8 Mbit	16 bit	8 MB x 8 B = 64MB	
128 MB	16 Mbit x 72	128 Mbit	8 Mbit	16 bit		16 MB x 8 B = 128 MB
128 MB	16 Mbit x 72	128 Mbit	16 Mbit	8 bit	16 MB x 8 B = 128 MB	
256 MB	32 Mbit x 72	128 Mbit	16 Mbit	8 bit		32 MB x 8 B = 256 MB

Table 2. Supported Memory Characteristics

Additional Memory Characteristics

- 168-pin SPD with gold-plated contacts.
- Single or double-sided DIMM boards.
- 66 MHz or 100 MHz unbuffered or registered SDRAM, 72-bit ECC, 3.3V only memory
- Unbuffered 16 MB, 32 MB, 64 MB, 128 MB, and 256 MB DIMMs for a total memory size of 1 GB.
- Registered 64 MB, 128 MB, and 256 MB DIMMs for a total memory size of 1 GB. Doublestacked DIMM boards are not supported due to space limitations on the server board.
- All memory components used with this server must comply with the following PC SDRAM specifications (refer to the *Intel ISP1100 Internet Server Technical Product Specification* included on the Intel Internet Server Resource CD-ROM shipped with the server for information about where to obtain these specifications):
 - *PC SDRAM Specification* (memory component specific)
 - PC Unbuffered SDRAM Specifications
 - PC Serial Presence Detect Specification
- Processors with 100 MHz host bus speed should be paired with 100 MHz SDRAM.
- Processors with 66 MHz host bus speed can be paired with either 66 MHz or 100 MHz SDRAM. However, 100 MHz SDRAM will not increase the performance of a processor with 66 MHz host bus speed.

Install the DIMM Board(s)

Perform the following procedure to install the DIMM boards on the server board (refer to Figure 5):

- 1. Orient the DIMM board so the key slots (A) in the DIMM board edge connector are properly aligned with the corresponding slots in the mating server board socket (B). (The connectors are keyed to mate in only one direction.)
- 2. Firmly press the DIMM board straight down and all the way into the server board socket.
- 3. Make sure the DIMM board is locked in by pressing the levers (C) on each end of the server board socket into the mating notches (D) on each edge of the DIMM board.



Figure 5. Installing the DIMM Boards

Install the Hard Drive(s)

This procedure describes how to install the hard drive(s) in the server drive bays. Each of the two drive bays on the right side of the server accommodates a 1-inch hard drive.

Before proceeding, be sure you are thoroughly familiar with the "Before You Begin" information at the front of this guide.

Remove the Drive Mounting Bracket

Perform the following procedure to remove the drive mounting bracket from the server chassis (refer to Figure 6):

- 1. Grasp the back of the mounting bracket and lift until the bracket releases from the two snaptop standoffs (A).
- 2. Slide the mounting bracket back to release the two tabs from the slots (B) in the server front panel and remove the mounting bracket from the drive bay.



Figure 6. Removing the Mounting Bracket

Install the Drive in the Mounting Bracket

Perform the following procedure to install the hard drive in the mounting bracket (refer to Figure 7):

- 1. Place the drive in the mounting bracket with the component side down and the front of the drive facing the front (tabbed) end (A) of the mounting bracket.
- 2. Align the four mounting bracket screw holes (two on each side) with the mating holes in the drive housing.
- 3. Use a Phillips screwdriver and four screws (B) to securely attach the mounting bracket to the drive. Do not overtighten the screws because the bracket sides can bend inward which affects the alignment of the tabs with the slots in the front panel.



Figure 7. Installing the Drive in the Mounting Bracket

Install the Hard Drive in the Drive Bay

Perform the following procedure to install the mounting bracket with the hard drive attached in the drive bay (refer to Figure 8):

- 1. Connect the power and data cables to the back of the drive (D).
- 2. Position the drive in the server drive bay so that the end of the bracket with the tabs (A) is facing the server front panel.
- 3. Gently guide the bracket tabs into the mating slots (B) in the server front panel.
- 4. Align the two holes in the back of the bracket with the two chassis snaptop standoffs (C).
- 5. Press down on the back of the mounting bracket until the two snaptop standoffs snap into the mating holes in the bracket.



Figure 8. Installing the Hard Drive in the Drive Bay

Install PCI Add-in Card(s)

The vertically mounted riser card accommodates one standard (left side) and one low-profile (right side) PCI add-in card. This procedure describes how to install the add-in card(s) on the server board.

Before proceeding, be sure you are thoroughly familiar with the "Before You Begin" information at the front of this guide.

⇒ NOTE

Set the add-in card jumpers or switches according to the manufacturer's instructions.

Remove the Riser Card

Perform the following procedure to remove the riser card from the server board (refer to Figure 9):

- 1. Grasp the riser card at each end (A) and gently rock and lift the riser card until it is loose from the server board connector (B).
- 2. Remove the riser card from the server board connector.



Figure 9. Removing the Riser Card

Install the Add-in Card(s) on the Riser

Perform the following procedure to install add-in card(s) on the riser card (refer to Figure 10):

Before you begin, examine the length of the bracket at the end of the add-in card you wish to install to determine whether it is a standard or a low-profile type. The low-profile card bracket is shorter than the standard card; approximately 3.11 in. (7.9 cm) compared to approximately 4.75 in. (12.06 cm) long. The low-profile card fits into the right expansion slot (when facing the front of the server) and the standard card fits in the left slot.

1. Align the add-in card edge connector (A) with the proper riser connector (B). For example: If the add-in card is a standard type (C), the component side faces **down** and the add-in card edge connector mates with the connector on the **left** side of the riser card when the riser is pointing toward the back of the server.

If the add-in card is a low-profile type (D), the component side faces **up** and the add-in card edge connector mates with the connector on the **right** side of the riser card.

The connectors are keyed to mate in only one direction.

2. Firmly press the add-in card(s) all the way into the mating connector on the riser card.



Figure 10. Installing Add-in Card(s) on the Riser

Remove the Rear I/O Filler Panel(s)

Perform the following procedure to remove the I/O filler panel(s) from the back panel of the server (refer to Figure 11):

- 1. Use a Phillips screwdriver and remove the two screws (A) securing the filler panel retention bracket (B) to the top edge of the server back panel.
- 2. Remove the retention bracket.
- 3. Remove the filler panel (C) from the expansion slot for the type of add-in card(s) you are installing.



Figure 11. Removing the Rear I/O Filler Panel(s)

Install the Riser/Add-in Card(s)

Perform the following procedure to install the riser, with the add-in card(s) attached, on the server board (refer to Figure 12):

1. Align the riser card edge connector (A) with the mating riser connector on the server board. (The connectors are keyed to mate in only one direction.)

⇒ NOTE

If you installed a low-profile card on the riser, make sure the right side of the low-profile card bracket (B) fits into the narrow slot (C) on the right side of the add-in card expansion slot.

2. Firmly press the riser/add-in card(s) straight down and all the way into the mating connector on the server board.



CAUTION

If you installed only one add-in card, make sure the empty expansion slot has a filler panel installed before you attach the filler panel retention bracket as described in the following step. An open expansion slot will reduce the cooling and EMI integrity of the server.

3. Use the Phillips screwdriver and the two screws (D) removed in the "Remove the Rear I/O Filler Panel(s)" procedure to securely attach the filler panel retention bracket (E) to the top of the server back panel.



Figure 12. Installing the Riser/Add-in Card(s)

Close the Cover

This procedure describes how to close the server cover after you have installed the internal components.

Before proceeding, be sure you have familiarized yourself with the "Before You Begin" information at the front of this guide.

- 1. Orient the cover with the recessed edge facing the server front panel. The sides of the cover fit inside the server chassis.
- 2. Slide the cover forward until the recessed edge is all the way under the front edge of the server front panel.
- 3. Use a Phillips screwdriver and the screw removed in the preceding "Remove the Cover" procedure to securely attach the cover.

Install the Rackmount Brackets

This procedure describes how to install the two rackmount brackets to prepare the server for rackmounting (refer to Figure 13).

- 1. With the smallest flange (A) facing the front of the server chassis, position the rackmount bracket with the two bottom holes in the longest flange(B) aligned with the two mating holes in the side of the server chassis.
- 2. Use a Phillips screwdriver and two of the four screws (C) supplied with the brackets to securely attach the bracket to the side of the server chassis.
- 3. Install the remaining rackmount bracket (D) to the opposite side of the server chassis by repeating steps 1 and 2.



Figure 13. Installing the Rackmount Brackets

Rackmount the Server

This procedure describes how to install the server in a rack (refer to Figure 14).

DISCONNECT AC POWER: Make sure the server is completely disconnected from any AC power source before performing this procedure. Pressing the Power button DOES NOT turn off power to this server. Some circuitry in the server may continue to operate even though the front panel Power button is off. Failure to disconnect the server from its AC power source can result in personal injury or equipment damage.

MAIN AC POWER DISCONNECT: You are responsible for installing an AC power disconnect for the entire rack unit. This main disconnect must be readily accessible, and it must be labeled as controlling power to the entire unit, not just to the server(s).

GROUNDING THE RACK INSTALLATION: To avoid the potential for an electrical shock hazard, you must include a third wire safety grounding conductor with the rack installation. If server power cords are plugged into AC outlets that are part of the rack, then you must provide proper grounding for the rack itself. If server power cords are plugged into wall AC outlets, the safety grounding conductor in each power cord provides proper grounding only for the server. You must provide additional, proper grounding for the rack and other devices installed in it.

OVERCURRENT PROTECTION: The server is designed for an AC line voltage source with up to 20 amperes of overcurrent protection. If the power system for the equipment rack is installed on a branch circuit with more than 20 A of protection, you must provide supplemental protection for the server. If more than one server is installed in the rack, the power source for each server must be from a separate branch circuit.

- 1. Orient the server with the rackmount brackets aligned with the desired mounting holes (A) in the rack posts (B).
- 2. Use a Phillips screwdriver and start the two screws (C) to attach the mounting brackets (one on each side of the server) to the rack posts. Do not tighten.
- 3. Properly align the server in the rack.
- 4. Use a Phillips screwdriver and tighten the two screws (C) to securely attach the mounting brackets to the rack posts.



Figure 14. Rackmounting the Server

Power Up the Server

This procedure describes how to apply AC power and power up the server (refer to Figure 15).

Before proceeding, be sure you are thoroughly familiar with the "Before You Begin" information at the front of this guide.

Â

WARNING

Do not modify or use a supplied AC power cord if it is not the exact type required in the region where the server will be installed and used. Replace the cord with the correct type. Refer to "Check the Power Cord" in the "Unpack and Inspect the Server" section at the front of this guide for power cord requirements.

NOTE

In geographic regions that are susceptible to electrical storms, it is recommended that you plug the server into an AC surge suppressor.

- 1. Attach the female end of the appropriate AC power cord to the mating AC power receptacle on the server back panel.
- 2. Plug the male end of the AC power cord into the AC power source (wall outlet).
- 3. Open the bezel door (A) to access the Power switch (C) as follows:
 - a. Grasp the tab (B) at each end of the hinged bezel door.
 - b. Gently pull the tabs out and down to swing open the hinged bezel door.
- 4. Press the Power switch (C) to apply power to the server and notice that the green LED power indicator (D) is lit.
- 5. Refer to the *Intel ISP1100 Internet Server Product Guide* available on the Intel ISP1100 Internet Server Resource CD-ROM shipped with the server for additional operating information. See the following "Access the Additional Documents" procedure for how to read and print the documents from the CD-ROM.





Figure 15. Powering Up the Server

Access the Additional Documents

This procedure describes how to access the documents included on the Intel ISP1100 Internet Server Resource CD-ROM shipped with the server for additional operating and technical information (refer to Figure 16).

⇒ NOTE

This procedure requires that you use another computer system that has a CD-ROM drive and an operating system installed.

The Intel ISP1100 Internet Server Resource CD-ROM contains **.pdf** files of the *Intel ISP1100 Internet Server Product Guide, Technical Product Specification,* and this *Quick Start Guide* in addition to other related documents. (See "Check the Accessories" under "Unpack and Inspect the Server" for a list of the CD-ROM contents.) You can read and print these **.pdf** files using the Adobe[†] Acrobat[†] Reader included on the CD-ROM.

- 1. Open the CD-ROM tray by pressing the open/close button on the front panel of the CD-ROM drive to slide the tray out of the drive.
- 2. Open the CD-ROM case.

Handle the disk only by the inner and outer edges. Do not touch the data side of the disk (the side without the label).

- 3. Press down on the center hub of the case to release the hub tension on the disk.
- 4. Gently grasp the center hole (A) and outer edge (B) of the disk and remove the disk from the case.
- 5. Place the disk **label-side up** in the tray.
- 6. Press the open/close button (C) or gently push on the CD tray (D) to automatically slide the tray into the drive.
- From the CD-ROM menu bar, select Read/Print Manuals and press <Enter>. The Adobe Acrobat Reader will be automatically installed on RAM disk E: (simulated disk drive in RAM memory) and automatically started. After the Reader starts, a pop-up menu displays a list of the CD-ROM contents.
- 8. Use your mouse or the up/down arrow keys to select the desired document. Double-click the left mouse button or press <Enter> to load the **.pdf** file.
- 9. Use your mouse or the Tab key to select the **.pdf** file for the guide. Double-click the left mouse button or press an arrow key and <Enter> to view and/or print the **.pdf** file.

⇒ NOTE

Printing from Acrobat is time-consuming, for immediate use try printing fewer pages at a time.



Figure 16. Accessing the Additional Documents

Need Help?

World Wide Web

Support for this product may be found at the following URL:

可以在下面的 URL 中找到本产品的支持信息:

可在下列的網址中找到與本產品相關的支援訊息: 다음 URL에서 제품 지원 정보를 얻을 수도 있습니다.

Une assistance pour ce produit est disponible à l'adresse suivante:

Unterstützung zu diesem Produkt erhalten Sie unter der folgenden Webadresse:

È possibile ottenere supporto per questo prodotto al seguente indirizzo:

Сведения о поддержке данного продукта можно найти по адресу:

Podrá encontrar asistencia para este producto en la siguiente dirección URL:

O suporte para este produto pode ser encontrado no seguinte URL:

http://www.intel.com/isp