

Rail Kit Install Guide: Intel® Storage System SSR212MA

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

Intel Order Number: D23739-001



Disclaimer

Information in this document is provided in connection with Intel® products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel® products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel products are not designed, intended or authorized for use in any medical, life saving, or life sustaining applications or for any other application in which the failure of the Intel product could create a situation where personal injury or death may occur. Intel may make changes to specifications and product descriptions at any time, without notice.

Intel® server boards contain a number of high-density VLSI and power delivery components that need adequate airflow for cooling. Intel's own chassis are designed and tested to meet the intended thermal requirements of these components when the fully integrated system is used together. It is the responsibility of the system integrator that chooses not to use Intel developed server building blocks to consult vendor datasheets and operating parameters to determine the amount of airflow required for their specific application and environmental conditions. Intel Corporation can not be held responsible if components fail or the server board does not operate correctly when used outside any of their published operating or non-operating limits.

Intel, Intel Pentium, and Intel Xeon are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

* Other names and brands may be claimed as the property of others.

Copyright © 2005, Intel Corporation. All Rights Reserved

Safety Information

Important Safety Instructions

Read all caution and safety statements in this document before performing any of the instructions. See also Intel Server Boards and Server Chassis Safety Information on the *Intel® Server Deployment Toolkit CD* and/or at <http://support.intel.com/support/motherboards/server/sb/cs-010770.htm>.

Wichtige Sicherheitshinweise

Lesen Sie zunächst sämtliche Warnung und Sicherheitshinweise in diesem Dokument, bevor Sie eine der Anweisungen ausführen. Beachten Sie hierzu auch die Sicherheitshinweise zu Intel-Serverplatinen und Servergehäusen auf der *Intel® Server Deployment Toolkit CD* oder unter <http://support.intel.com/support/motherboards/server/sb/cs-010770.htm>.

Consignes de sécurité

Lisez attention toutes les consignes de sécurité et les mises en garde indiquées dans ce document avant de suivre toute instruction. Consultez Intel Server Boards and Server Chassis Safety Information sur le *Intel® Server Deployment Toolkit CD* ou bien rendez-vous sur le site <http://support.intel.com/support/motherboards/server/sb/cs-010770.htm>.

Instrucciones de seguridad importantes

Lea todas las declaraciones de seguridad y precaución de este documento antes de realizar cualquiera de las instrucciones. Vea Intel Server Boards and Server Chassis Safety Information en el *Intel® Server Deployment Toolkit CD* y/o en <http://support.intel.com/support/motherboards/server/sb/cs-010770.htm>.

重要安全指导

在执行任何指令之前，请阅读本文档中的所有注意事项及安全声明。和/或 <http://support.intel.com/support/motherboards/server/safecert.htm> 上的 *Intel Server Boards and Server Chassis Safety Information* (《Intel 服务器主板与服务器机箱安全信息》)。

Warnings

Heed safety instructions: Before working with your server product, whether you are using this guide or any other resource as a reference, pay close attention to the safety instructions. You must adhere to the assembly instructions in this guide to ensure and maintain compliance with existing product certifications and approvals. Use only the described, regulated components specified in this guide. Use of other products / components will void the UL listing and other regulatory approvals of the product and will most likely result in noncompliance with product regulations in the region(s) in which the product is sold.

System power on/off: The power button DOES NOT turn off the system AC power. To remove power from system, you must unplug the AC power cord from the wall outlet. Make sure the AC power cord is unplugged before you open the chassis, add, or remove any components.

Hazardous conditions, devices and cables: Hazardous electrical conditions may be present on power, telephone, and communication cables. Turn off the server and disconnect the power cord, telecommunications systems, networks, and modems attached to the server before opening it. Otherwise, personal injury or equipment damage can result.

Electrostatic discharge (ESD) and ESD protection: ESD can damage disk drives, boards, and other parts. We recommend that you perform all procedures in this chapter only at an ESD workstation. If one is not available, provide some ESD protection by wearing an antistatic wrist strap attached to chassis ground any unpainted metal surface on your server when handling parts.

ESD and handling boards: Always handle boards carefully. They can be extremely sensitive to ESD. Hold boards only by their edges. After removing a board from its protective wrapper or from the server, place the board component side up on a grounded, static free surface. Use a conductive foam pad if available but not the board wrapper. Do not slide board over any surface.

Installing or removing jumpers: A jumper is a small plastic encased conductor that slips over two jumper pins. Some jumpers have a small tab on top that you can grip with your fingertips or with a pair of fine needle nosed pliers. If your jumpers do not have such a tab, take care when using needle nosed pliers to remove or install a jumper; grip the narrow sides of the jumper with the pliers, never the wide sides. Gripping the wide sides can damage the contacts inside the jumper, causing intermittent problems with the function controlled by that jumper. Take care to grip with, but not squeeze, the pliers or other tool you use to remove a jumper, or you may bend or break the pins on the board.

Contents

Safety Information	iii
Important Safety Instructions	iii
Wichtige Sicherheitshinweise	iii
Consignes de sécurité	iii
Instrucciones de seguridad importantes	iii
Warnings.....	iv
Rail Kit Install Guide	1
Tools Needed	1
Kit Contents	1
Rail Kit Installation Instructions	1
Prepare System	1
Prepare Right Inner Rails	2
Prepare Left Inner Rails	3
Prepare Rack	3
Install System in Rack	5
Complete Setup	5

List of Figures

Figure 1. Preparing Right Inner Rail.....	2
Figure 2. Preparing Left Inner Rail	3
Figure 3. Attaching Outer Rail to Rack.....	4
Figure 4. Securing System to Rack.....	5

Rail Kit Install Guide

The Intel® Storage System SSR212MA chassis is designed to be installed in cabinets that are 19 in (483 mm) wide by up to 36 in (914 mm) deep. A set of rack mounting rails is provided in this kit and will accommodate either square or round hole rack-mounting methods.

When mounting the storage system into a cabinet, the front mount brackets are attached to the front of the chassis and a set of rear support brackets are attached to the back of the cabinet. This allows the weight of the system to be as evenly distributed as possible.

Tools Needed

- #2 Phillips* screwdriver
- A/F Hex driver

Kit Contents

Rail Kit (FXSRAIL)

Item	Quantity
Inner rail	2
Outer rail	2
Hex screw, 1.0-mm	8
Chassis latch	2
Hex screw, 2.0-mm	2
#2 Phillips* screw	8
Washer (square hole)	8
Rail Kit Install Guide	1

Rail Kit Installation Instructions

Warning: :Lifting the storage system and attaching it to the rack is a two-person operation. If needed, use an appropriate lifting device.

Prepare System

1. Read all caution and safety statements listed in this document before performing any of the steps. See the *Intel® Server Boards and Server Chassis Safety Information*

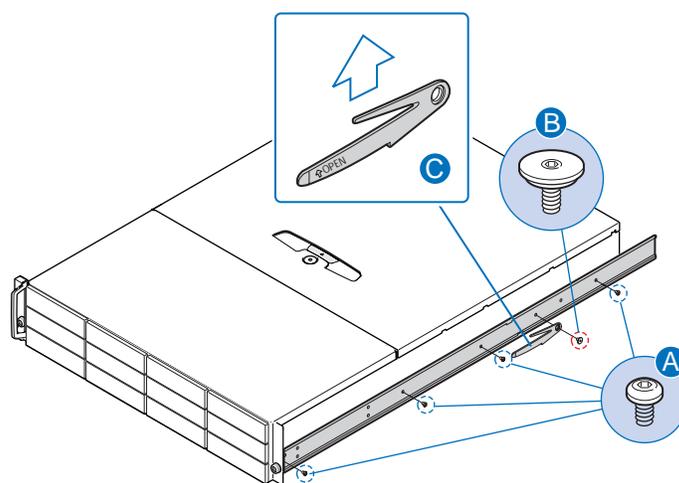
document at <http://support.intel.com/support/motherboards/server/sb/cs-010770.htm> for a complete listing of all caution and safety statements.

Caution: Before performing any maintenance on the system, back up the data. Follow the instructions in the Intel® Storage System SSR212MA Software User Manual for shutting down the system.

2. Turn off all peripheral devices connected to the storage system. Turn off the storage system.
3. Disconnect the AC power cord(s).
4. Remove the inner and outer rails from their packaging. Separate the inner rail from the outer rail by sliding it out toward the front of the rail assembly.

Prepare Right Inner Rails

5. Perform the following steps on the right inner rail.
 - a. Using a 2.0-mm hex driver, attach the right inner rail to the chassis using four screws (see letter “A” in the following figure).
 - b. Using a 2.0-mm hex driver, attach the latch to the right inner rail (see letter “B”).
 - c. Ensure that the latch is oriented with the spring arm located against the stop. For the right rail, the longer arm of the latch should be toward the bottom with the “OPEN” arrow on the latch pointing up (see letter “C”).

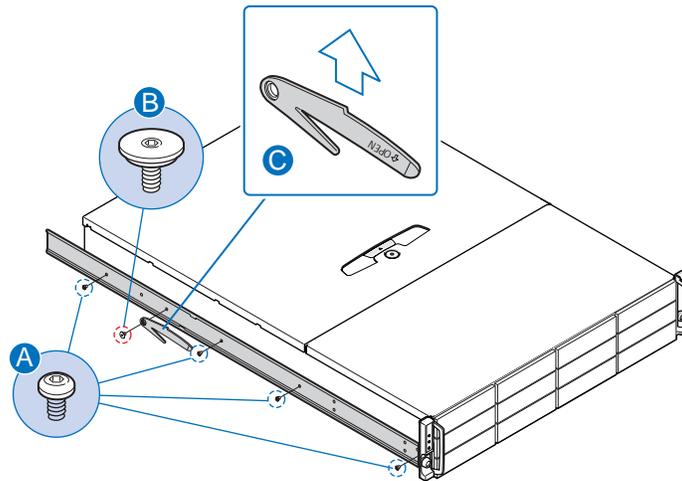


TP02027

Figure 1. Preparing Right Inner Rail

Prepare Left Inner Rails

6. Perform the following steps on the left inner rail.
 - a. Using a 2.0-mm hex driver, attach the left inner rail to the chassis using four screws (see letter “A” in the following figure).
 - b. Using a 2.0-mm hex driver, attach the latch to the side rail (see letter “B”).
 - c. Ensure that the latch is oriented with the spring arm located against the stop. For the left inner rail, the longer arm of the latch should be toward the top and the “OPEN” arrow pointing down (see letter “C”).

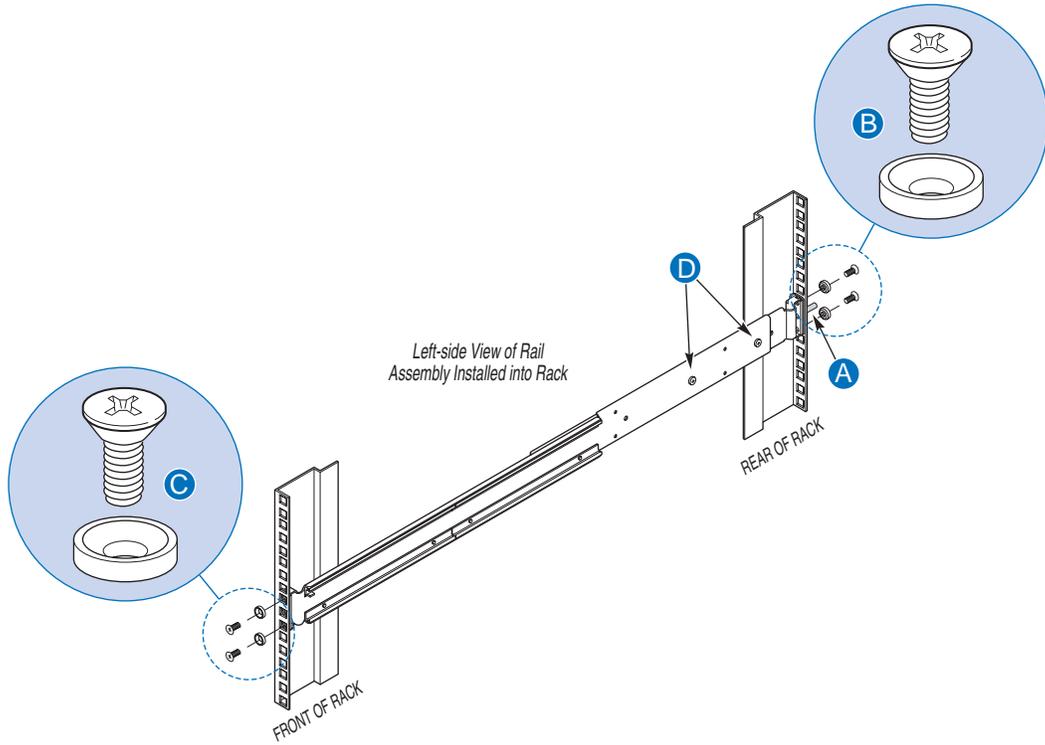


TP02026

Figure 2. Preparing Left Inner Rail

Prepare Rack

7. Perform the following steps on both the **left and right outer rails**:
 - a. Align the location pin at the rear of the outer rail with the rear rack post (see letter “A” in the following figure).
 - b. Extend the outer rail to fit between the front and rear rack posts.
 - c. Using a #2 Phillips screwdriver, secure the rear (see letter “B”) and front (see letter “C”) of the outer rail to the rack using four screws and washers. The screws should be left loose enough to allow sideways movement of the outer rail in the rack slots.
 - d. With a Phillips screwdriver, tighten the clamping screws (see letter “D”).



TP02028

Figure 3. Attaching Outer Rail to Rack

Install System in Rack

8. Lift the storage system and align chassis with the mounted outer rails.
9. Insert the inner rails of the chassis into the mounted outer rails and push system toward the rear of the rack.
10. Tighten the rear screws on both the right and left side of the chassis.
11. Withdraw the chassis until it reaches a hard stop (about 400 mm or 16 in).
12. Tighten the front screws on both the right and left side of the chassis and then return the storage system to its fully home position.
13. Secure the storage system to the rack by tightening the captive fasteners on the front of the rack handles (see letter “A” in the following figure).

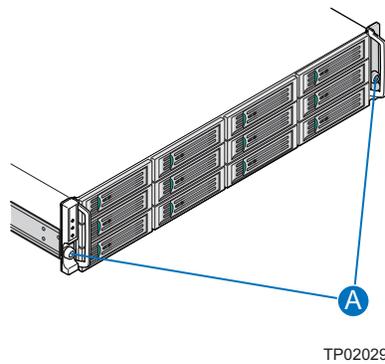


Figure 4. Securing System to Rack

Complete Setup

14. Re-connect all peripheral devices and the AC power cable(s). Power up the storage system.

