## intel « Action Alert

AA-0760-3

update

5200 NE Elam Young Parkway Hillsboro, OR 97124

June 21, 2005

# Intel® Server Chassis SR2400 - Active PCI-X Riser Card Option Heat Sink Falling Off

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#### **Products Affected**

Product Code	MM#	Product Description
ADRACTRIS	856546	Active PCI-X Riser Option
ADR2UEESPRKIT	857585	SR2400 Electrical Spares Kit

### Description

Intel believes that a long term reliability issue may exist with the Active PCI-X riser card where, over time within the warranty period, the on board heat sink may detach and fall off. See Figure 1 below.



Figure 1: PCI-X Active Riser Card for the Intel Server Chassis SR2400

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#### **Root Cause**

Intel has determined that the solder joints for the U-Anchors used to hold down the heat sink retention clip, may fail over time. Time to failure is highly dependent on system configuration and operating environment. Failure analysis testing has shown that system configurations consisting of several high load add-in cards and/or systems operating in high ambient temperatures may experience a solder joint failure within 2-3 months after deployment. Lesser configurations and/or systems running in lower ambient temperatures may experience a solder failure 9–15 months after deployment.

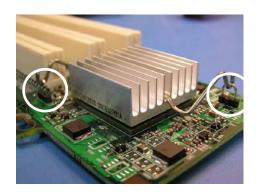


Figure 2: Active PCI-X Riser Card Heat Sink and Retention Mechanism

If a U-anchor failure were to occur, it is possible for the loose heat sink or U-anchor to cause an electrical short on the baseboard causing the server to power off. To date, reported failure data has not indicated any loss of data or specific safety issue related to the system level product.

#### **Corrective Action / Resolution**

Intel has identified a new 'J' hooked U-Anchor design. The new U-Anchor design will retain its hold on the board should its solder joints ever fail, preventing the heat sink from falling off.

At the time the issue was discovered, Intel placed all PCI-X Active riser cards on build and ship hold. All finished goods present in its factory and warehouses were reworked to include the new U-anchor design. Reworked boards will have a **PBA# of C53349-204** and a "**Pack Date**" of **15 MAR 2005 or later**.

All new riser card assemblies will use the new U-Anchor design. All new riser cards will have a **PBA#** of C53349-302 or later and a "Pack Date" of 15 MAR 2005 or later.

See Product Change Notification (PCN) # 104940-xx for product identification number changes for all new board builds.

Note: Pack Date information can be found on the white product label on the outside of the shipping box. The PBA Number can be found on both the white sticker affixed to the component side of the Riser Card and on the white product label on the outside of the shipping box.



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#### **Recommended Customer Action**

The following product identifiers can be used to recognize affected product:

#### ADRACTRIS or ADR2UEESPRKIT with a "Pack Date" before 10 MAR 2005

or PBA# - C53349-203 PBA# - C53349-301

Pack Date information can be found on the white product label on the outside of the shipping box. The PBA number can be found on both a white sticker affixed to the component side of the riser card and the white product label on the outside of the shipping box.

Intel recommends the following:

- 1) Identify and return all in-house inventories affected by this issue.
  - a. In-house, factory sealed inventory can be identified by a "PACK DATE" of 10 MAR 2005 or earlier. Pack Date information is found on the white product label on the outside of the shipping box.
  - b. In house, unpackaged Active PCI-X Riser Cards (including loose board or system integrated) can be identified by **PBA # C53349-203** or **PBA # C53349-301**.
- 2) Work with your Intel product supplier to replace all installed quantities of the Active PCI-X Riser card that have the following two PBA Numbers:

#### PBA # C53349-203 or PBA # C53349-301

All affected product should be returned to Intel using the standard warranty processes. When initiating your request for replacement, please reference **Action Alert # AA-0760** and provide the quantity of material you will be returning

Please contact your Intel Sales Representative if you require more specific information about this issue.

Enterprise Platforms & Services Division Intel Corporation