

# intel® Technical Advisory

TA-0288-1

5200 NE Elam Young Parkway  
Hillsboro, OR 97124

July 12, 2000

## C440GX+, SKA4 Systems and AKORETENTION, Pentium® III XEON™ Dual Processor Retention Modules May Have Defective PEM Nut Clips

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Products Affected	MM#	Description
BOX440GX	821095	Boxed Board C440GX+
AKORETENTION	821617	C440GX+ and SKA4 Dual Retention Module Kit
SKODVHI	827640	SKA4 System
ISP4400	827830	SKA4 High Integration System
SKODVBK	830996	SKA4 System
FKODVPLASTIC	827523	Spares Kit
SKOC2BS	830994	SKA4 System
SKOC2BS07	830993	SKA4 System
SKODVBS	830997	SKA4 System
SKOC2HI	821616	SKA4 System

### Description

A few Dual Retention Module (DRM) kit bracket 6X32 ½ screws (A) will not fully turn into the bracket clip with PEM nuts (B) on the retaining bracket as shown in Figure 1 on page 2. Depending upon the torque used, the 6x32 screws may install about two thirds of their length before binding (cross threaded) in the clip's metric PEM nuts. This can be easily determined by attempting to turn the captive washers located under the head of the screws. If the captive washers under the screw heads turn easily with your fingers, the screws are not fully seated. An easy way to test if the PEM nuts are metric is to thread the screws in by hand. They should install very easily for their complete length if correct 6X32 PEM nuts are present. The screws will bind very quickly, at less than 2/3 of their length, if the metric PEM nuts are encountered.

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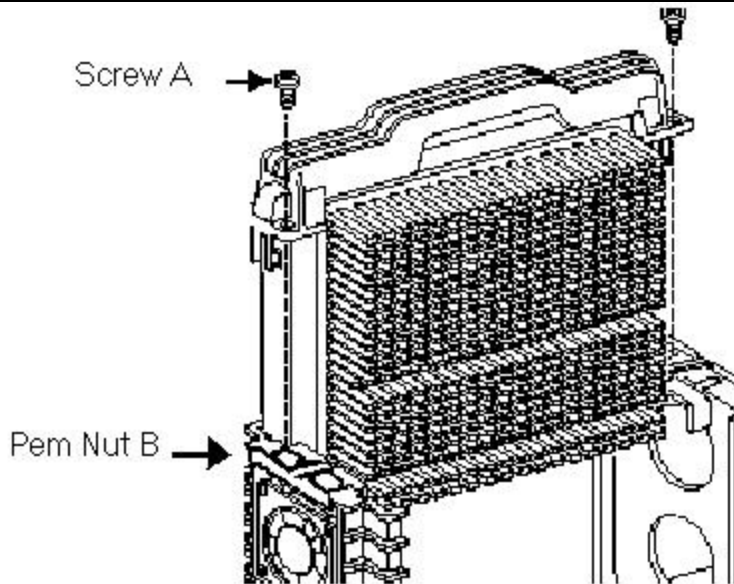


Figure 1. Dual Retention Module

## Root Cause

Metric PEM nuts were mixed with the SAE 6X32 threaded PEM nuts. All of the PEM nuts should be threaded for 6X32 screws. In the C440GX+ boxed board product, the DRM kit (plastic bag of parts) is labeled with part number 711906-001. This kit contains two each base assemblies (with the PEM nut clips), eight each 6X32 X 1/2 screws, and two CPU headers in a sealed plastic bag.

## Scope of Metric PEM Nut Problem

DRM kits (AKORETENTION), Intel part number 711906-001, with package date between April 12, 2000 and June 21, 2000 found in may be defective.

## Corrective Action

The user should check all boxed boards for DRM kits with dates between April 12<sup>th</sup>, 2000 and June 21<sup>st</sup>, 2000 to insure the correct (6X32 threaded) PEM nuts were installed. If you find a defective DRM kit with the incorrect metric PEM nut clips, it may be replaced through the standard warranty replacement procedures. A new DRM kit may be ordered with Product Code AKORETENTION (MM# 821617). The new DRM kit will have an Intel part number 711906-003 or 711906-004. The -003 kit has reworked base assemblies and the -004 kit has new injection molded plastic parts. Both kits will have the correct 6X32 PEM nuts included.

Note: The new replacement DRM (AKORETENTION) kit part number is 711906-003 or -004. An original DRM kit with part number 711906-001 dated before April 12, 2000, will have the correct 6X32 PEM Nuts installed but will not have the reworked base assemblies. The -003 and -004 kits base retention modules have an additional .030" of clearance added for the processor cartridge.

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## **Intel Recommendations**

Customers should test the DRM modules to insure the screws install completely into the PEM nut clips. If they do not install properly, replacements of Intel processor retention modules will be provided at no charge through the standard warranty replacement procedures.

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

Server Products Division  
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