APPLICABILITY: This FCO is for any DECpc AXP150 and DEC2000 Model 300 AXP Server that is experiencing BIU memory parity errors and machine check code 214. This FCO is need only in unusual cases where the system is extremely loaded and is experiencing the described symptoms. This FCO should not be routinely installed on systems.

PROBLEM & SYMPTOM: The machine will crash with machine check 214 error code.

SOLUTION: If you are experiencing this symptom, first check to see if you have the correct revision mother board. The following is a revision matrix for the motherboard. If you have a motherboard that is at the revision listed below, then you do not need to do this FCO. Any motherboard with revisions LOWER that what is listed below, AND having the symptoms described should install this FCO.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Supported Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>54-20674-01F05</td>
<td>F05</td>
</tr>
<tr>
<td>54-20674-02C03</td>
<td></td>
</tr>
<tr>
<td>54-20674-04B03</td>
<td></td>
</tr>
</tbody>
</table>

QUICK CHECK: None

PRE/CO-REQUISITED FCO: None

TOOL/TEST EQUIPMENT: Power-up self-test and system boot is all that is that is needed.

FCO PARTS INFORMATION

<table>
<thead>
<tr>
<th>FCO KIT NO.</th>
<th>DESCRIPTION OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ-01737-01</td>
<td>54-20674-04 motherboard</td>
</tr>
<tr>
<td>FA-05072-01</td>
<td></td>
</tr>
</tbody>
</table>

FCO CHARGING INFORMATION

Digital Employees should use the attached information to complete their LARS report.
Use ALL ESD safety precautions to prevent DOA’s on material in kit.

*****************************************************************
*                     C A U T I O N                             *
*                                                               *
* The module, as with all modules, contain electrostatic         *
* discharge sensitive devices (ESDS).  The use of the Velostat  *
* Kit or ESD module box is essential to prevent damage which    *
* may not be noticed immediately.                               *
*****************************************************************

Setting up Velostat Kit

a. Unfold the Velostat mat to full size (24" x 24")
b. Attach the 15 foot ground cord to the Velostat snap fastener
   on the mat.
c. Attach the alligator clip end of the ground cord to a good
   ground on the cabinet.
d. Attach the wrist strap to either wrist and the alligator clip
   to a convenient portion of the mat.
e. Remove the module from it’s CPU option slot and place it on
   the mat.

Or:
e. Remove the module from the spares kit and lay it on the
   velostat mat.
If using a module in an ESD box, insure wrist strap is connected to the box and the box is connected to chassis of the device being upgraded.

CAUTION

* * *

WEAR A STATIC WRIST STRAP AND USE A STATIC MAT.

NOTE

Refer to sections "9, 10, & 11" of the DECpc AXP150 and DEC2000 Model 300 AXP Customer Technical Information manual (EK-A0636-TM) for more detailed instructions.

1. If the system is running, have the customer run shutdown on the system. After the system has been shutdown, turn off the power to the system and all peripheral devices.

2. Remove all cables from back of system and move the system to a place were you will be able to work on it.

3. Looking from the front of the system, remove the left side panel by turning the chassis key counterclockwise, loosening the two captive screws at the rear of the panel, and then sliding the cover towards the rear of the system.
4. Remove the inside covers by inserting your finger into the top circular hole and lifting the cover out. Now remove the two screws located at the front of the lower cover. Inserting your fingers into the two circular holes inside the cover, then slide it towards the front of the system and remove it.

5. Remove all option cards from the motherboard.

6. Remove all memory simms from the motherboard.

7. Disconnect all power cables/connectors from the motherboard.

8. Install the new motherboard FCO.

9. Reverse steps 1 thru 7.

10. Run the power-up self-test and boot the system. If there are no failures, fill out the LARS report and you done.

11. Report this FCO activity on the LARS form in the "Fail Area/Module/FCO/Comments" column as follows: FCO PB22H-FA-F001

12. Digital field engineers should report this FCO activity on their LARS form per the attached instructions.

13. AWSP engineers should submit their normal claim form for reimbursement.
### Activity - Caverage Code

(a) Contract
- Warranty
- Inhouse
- Invoiced per Call

(b) IN-DEC Contract
- Non Contract/Non Warranty

(c) RTD/Off-site Agreement

#### Mkt/FS/Seg Code
- Code for W,K: 111 111
- Code for F: 031 031
- Code for K,W,A: 111
- Code for F: 031

#### DEC Option
- Option ID: X N/A N/A
- Type of Call: M M
- Request Type: I
- Action Taken: D D Y
- Quality Codes: M,L,J,R,X,A,Y,Z

#### Fail Area-Module
- PB22H-CX-F001

#### FCO-Comments

#### Material Used
- EQ-01737-01

(a) Warranty Optimum, Warranty Standard and Warranty Basic (on-site) Agreements; * Note material (only) free of charge for all customers.

(b) Applies to IN-DEC Area Only

(c) RTD=Return to Digital or Off-site Agreements; If Field Engineer On-site, use Activity Code "F".

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**FCO CHARGING INFORMATION**

<table>
<thead>
<tr>
<th>WARRANTY/CONTRACT</th>
<th>NONWARRANTY/NONCONTRACT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ON-SITE</strong></td>
<td><strong>OFF-SITE</strong></td>
</tr>
<tr>
<td>TRAVEL/INSTALL</td>
<td>EQ</td>
</tr>
<tr>
<td>INSTALL KIT</td>
<td>INSTALL KIT</td>
</tr>
<tr>
<td>DEC</td>
<td>DEC</td>
</tr>
</tbody>
</table>

DIGITAL INTERNAL USE ONLY