

>TECHNICAL SUPPORT TECHNICAL BULLETIN



# Ethernet Routing Switch (ERS) 8600 8692SF Modules may experience an issue at initial power up.

## Notice:

This bulletin replaces bulletin 2007007885.2. This update has been issued to communicate some new information regarding the issue.

BULLETIN ID: 2007007885, Rev 3 PUBLISHED: 2008-03-28 STATUS: Retired REGION: APAC CALA EMEA GC NA PRIORITY: Major TYPE: Bulletin

### **Reissue Reason:**

The Bulletin has been re-issued from Rev 2 to Rev 3, to include additional information on how to identify affected units.

# **Background:**

A compatibility issue has been identified with the ERS 8600 8692SF module's power-up circuitry when used concurrently with the ERS 8600 8005AC chassis power supply and pre-E, E and/or M modules. In such a configuration, the 8692SF may fail to initialize properly at power-up. The issue occurs ONLY at power-on or (cold start), is random and occurs infrequently. Cold start is defined as power-on of the chassis from a powered-off state. Hot-swapping or resetting of the 8692SF module without cycling the power WILL NOT cause an 8692SF initialization failure.

Impacted order numbers and model numbers are: DS1404065 and DS1404065-E5\* 8692SF DS1404066 and DS1404066-E5\* 8692SF with SuperMezz DS1404103 and DS1404103-E5\* 8692omSF

\*Note- -E5 specifies European Union Environmental Directive Removal of Hazardous Substances (EUED RoHS) compliant model numbers.

# Analysis:

If the 8692SF cold-start initialization failure occurs, the observed symptoms are,

1) No output or communications via the 8692SF's console port.

2) All LEDs on the 8692SF face plate are illuminated.

It's important to note all of the following regarding the 8692SF cold-start initialization failure:

1) The issue may occur when the configuration includes the 8692SF modules with 8005AC power supplies and pre-E, E and/or M modules installed in the system.

2) The issue may occur when the chassis is configured with 8692SF modules, 8005AC power supplies, and a mix of pre-E, E and/or M modules as well as R modules.

3) The issue is most likely to occur under conditions 1 and 2 above as the number of interface modules installed in the system increases.

4) System configurations with the 8692SF, 8005AC power supplies and ONLY R modules are NOT impacted.

- 5) System configurations utilizing the 8005DC, 8004AC or 8004DC power supplies are NOT impacted.
- 6) System configurations utilizing the 8691SF are NOT impacted.

A fix has been implemented on the 8692SF module's power-up circuitry for all units manufactured after 01-January 2007.

To distinguish 8692SF modules with improved circuitry preventing cold-start initialization failures, the hardware revision of the 8692SF was to be incremented, although a number of units were shipped prior to the application of the new hardware revision label. Suspect hardware revisions are (BackHWRevision) of 00, 01, 02 or 50 on the E-5 version, however not all units at these hardware revisions are affected - due to a previous manufacturing deviation and the late application of the hardware revision label. Fixed modules have a minimum BackHWRevision 03 or 51 on the E-5 version. Further details on how to identify non-affected units are provided below.

PLEASE NOTE: That any card with an MDF-2365 or MDF-2366 label should not be returned, all cards with this label have been reworked to incorporate the fix, and WILL NOT see this issue, even though the command above will not show the Revision update. The labels can be found on the sheet metal tray of the PCB, and on the outer shipping carton (see photos).

Please check for the MDF-2365 or MDF-2366 label prior to returning any modules to Nortel.



# **Recommendations:**

Work-Around:

If an 8692SF exhibits the symptoms of a cold-start initialization failure as described above, a possible workaround to correct the issue is to power cycle the system a second time. As the issue occurs randomly and infrequently, it is possible the 8692SF will initialize correctly the second time.

Power cycling the system to resolve an 8692SF cold-start initialization failure is only a workaround, and Nortel

recommends a longer-term resolution as described in the Resolution section below.

As a second alternative, if these symptoms occur, is to remove the I/O modules from the system and power up using only the 8692SF. Then once the 8692SF is on-line, each module can be added back into the system and allowed to configure. This would avoid the non-initialization of the 8692SFs. This is only a workaround, however the network will remain operable until the next scheduled maintenance window, or until corrected modules become available.

#### **Resolution:**

To determine if the units are affected please apply the following criteria prior to any replacement. For any 8692SF modules that are determined as being affected, these should be exchanged for 8692SF modules with the power-on initialization issue fixed.

There are several methods of identifying affected modules which are described below.

Modules manufactured after the official Engineering Change Order release, had their product and hardware revisions increased and can be identified per the revision matrix contained in Step 1. (NOTE:These modules DO NOT require the MDF2365 or 2366 labels)

Modules manufactured or repaired in early 2007, prior to Engineering Change Order release, had the fix cut in via a manufacturing deviation process and did not have their product or hardware revisions increased. These modules can be identified as described in Step 2.

The manufacturing date or the date of repair of the unit can found by checking the label on the outside of the box. If the unit has been removed from the box or is already installed, the manufacturing date can be obtained by checking the sheet metal tray of the board. Please see the pictures below for more details.





1. Modules that have a minimum Back H/W Revision 03 or 51 or Product Revision shown on the table below, have been fixed and should not be returned.

6	Product	211861-A	- S
Product Code	Revision	H/W Revision	Status
DS1404065	17 or Higher	03 or Higher	Not Effected
DS1404066	7 or Higher	03 or Higher	Not Effected
DS1404103	12 or Higher	03 or Higher	Not Effected

Product Code	Product Revision	211861-C H/W Revision	Status
DS1404065-E5	4 or Higher	51 or Higher	Not Effected
DS1404066-E5	4 or Higher	51 or Higher	Not Effected
DS1404103-E5	03 or Higher	51 or Higher	Not Effected

2. Modules that have a Back H/W Revision 02 and below or 50 and below or Product Revision lower than what is shown on the table above, are potentially at risk and should be checked against the following information to determine if it needs to be returned.

- If the date of manufacture or the repair date of the unit is after 01-January 2007 [irrespective of an MDF label], the unit will have had the fix applied and does not need to be returned.

- If the unit, or the packaging has either of the following MDF labels (MDF-2365 or MDF-2366) [irrespective of the date of manufacture or date of repair], the fix will have been applied and the unit does not need to be returned.

- If the date of manufacture or date of repair of the unit is before 01-January 2007 and the unit does not have either of the following MDF labels (MDF-2365 or MDF-2366), the unit will be affected and should be returned.

The identification of the MDF label is described previously in this bulletin.

The identification of the manufacturing date or the date of repair are described previously in this bulletin.

As the failure condition is only randomly occurring at power on or cold start conditions, there is little risk to currently operational networks, and customers are asked to coordinate and organize replacements during a normal scheduled maintenance window. To coordinate your replacements, please contact your local technical support centre and request replacement referencing this Bulletin.

# **Required Actions:**

Note: Initial quantities of replacement 8692SF modules may be limited. Priority will be given to those customers whose network configurations already contain 8692SF and 8005AC Power Supplies and those customers already experiencing the 8692SF cold-start initialization failure conditions. All other customer situations will be taken on an inventory availability and first-come, first-serve basis.

This replacement offer has been extended from its original closure date and will currently expire on December 31, 2008. Any requests for replacement modules after that period will be handled based on the terms and conditions of the customers existing service contract with Nortel.

Notice to Customer Facing leaders and Technical Support Personnel; - Please insure that all replacement RMA's for this issue are properly coded as Return Reason Code CSB/FCO.

### Attachments:

There are no attachments for this bulletin

# **Footer Information:**

#### **Retirement Reason:**

Program is closed to all requests. Bulletin is being retired.

### **Products and Releases:**

The information in this bulletin is intended to be used with the following products and associated releases:

PRODUCT	RELEASE
Ethernet Rtng Switch-Ethrnt Rtng Swt 8600-8692SF	

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#### REFERENCE: PRE-REQUIRED PATCH: PATCH ID: FIXED RELEASE: N/A

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Nortel recommends any maintenance activities, such as those outlined in this bulletin, be completed during a local maintenance window.

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