Date: December 16, 1998  Bulletin No: 99001  Rev: 1.0

Approvals:  CSE  ENG  PPL

Products: ORN-DSP-AQ and ORN-DSP-A2 ORION DSP Cards

Title: Improper Triggering or Clearing of ASEN@, BSEN@ and ZREF@ High Speed Sensors

Purpose:
To advise customers of the solution to a problem that may cause the ASEN@, BSEN@ and ZREF@ high speed sensor inputs to be falsely triggered or improperly cleared.

Description:
Due to a design change (die shrink) by the manufacturer of the Electronically Programmable Logic Device (EPLD) used on the above parts, recently purchased affected ORION DSP Cards may experience false triggering or improper clearing of high speed sensor inputs.

Specifically, on revision 1.1a cards, executing an ASEN@ = 0, BSEN@ = 0 or ZREF@ = 0 statement may cause both the targeted sensor input and one or more of the other inputs to be cleared. On 1.0h cards, high-speed sensor inputs may be subject to false triggering.

Products Affected:
ORN-DSP-AQ  (with any combination of / options), revisions 1.0h and 1.1a
ORN-DSP-A2  (with any combination of / options), revisions 1.0h and 1.1a

Revisions 1.0g or earlier and 1.1b or later are not affected

Revision 1.0h and 1.1a cards with a MOD263 sticker attached have been corrected and will not exhibit this problem.

Most revision 1.0h cards were manufactured before the EPLD die shrink was implemented and will not exhibit these problems. See “Solution” below for an explanation of how to find out whether your revision 1.0h cards are affected.

If the controller is located at a remote location and you have arranged a remote MotionDESK connection, you may determine the revision level of the installed cards using the MotionDESK System Information (SysInfo) window. Connect to the ORION controller, open SysInfo window and check the Hardware Revisions line. A hardware ID X:020F indicates rev. 1.0h, X:021F indicates rev. 1.1a. X represents the axis ID switch setting.
**Solution:**

If you have revision 1.1a cards, please call ORMEC’s Service Department at (716) 385-3520 to arrange for a warranty replacement or upgrade.

If you have revision 1.0h cards, you should inspect them to see which version of the EPLD they have. Remove the card and find the component identified as U33 (see diagram below).

If the label on U33 is either UDP036 or UPD037, please call ORMEC’s Service Department at (716) 385-3520 to arrange for a warranty replacement or upgrade.