Product Change Notification

107938 - 01

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Should you have any issues with the timeline or content of this change, please contact the Intel Representative(s) for your geographic location listed below. No response from customers will be deemed as acceptance of the change and the change will be implemented pursuant to the key milestones set forth in this attached PCN.

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Product Change Notification

Change Notification #:	**107938 - 01**
Change Title:	**Intel® Optical Transceiver, TXN179010850E21, PCN 107938-00, Product Material, Manufacturing Site Assembly and Order Code Changes. Reason for Revision: Order Code typo correction.**
Date of Publication:	**December 5 2007**

Key Characteristics of the Change:

Product Material
Manufacturing Site
Order Code

Forecasted Key Milestones:

Date of Samples Availability:	Nov 26, 2007
Date of Qualification Data Availability:	Nov 26, 2007
Date Customer Must be Ready to Receive Post-Conversion Material:	Jan 12, 2008
Date of First Availability of Post-Conversion Material:	Jan 12, 2008

The date of "First Availability of Post-Conversion Material" is the projected date that a customer may expect to receive the Post-Conversion Materials. This date is determined by the projected depletion of inventory at the time of the PCN publication. The depletion of inventory may be impacted by fluctuating supply and demand, therefore, although customers should be prepared to receive the Post-Converted Materials on this date, Intel will continue to ship and customers may continue to receive the pre-converted materials until the inventory has been depleted.

Description of Change to the Customer:

`Reason for Revision: Corrected product order code typographical error.`

The Intel® TXN179010850E21 Optical Transceiver will transition to the Intel® TXN179010850E31 Optical Transceiver that will have the material and manufacturing site changes detailed below.

1. Firmware Update

During extended qualification testing with the module configured to provide fast periodic DOM update, an issue was found with the Intel TXN179010850E21 related to a bug in how the real-time operating system (RTOS) of the microcontroller handles memory paging. Consequent failure modes include the microcontroller shutting down the optical transmitter and/or resetting the SerDes. The firmware of the TXN179010850E31 has been fixed to completely avoid this bug in the RTOS under all operating conditions.

2. Optics Vendor Related Changes

The Intel® TXN179010850E31 Optical Transceiver uses Advanced Optical Components (AOC) Transmitter Optical Sub-Assembly (TOSA) and AOC Receiver Optical Sub-Assembly (ROSA). The AOC TOSA and ROSA changes are described in detail below.

TOSA

Site Change: AOC will move final TOSA assembly and production testing from Allen, Texas to Fabrinet, Thailand to improve supply.

ROSA

Site Change: AOC will move final ROSA assembly and production testing from Allen, Texas to Fabrinet, Thailand to improve supply.

3. EMI Gasket and Related Changes

Intel will implement the following changes to the EMI gasket used on the TXN179010850E31.

3.1. New EMI gasket that does not protrude beyond flange edge upon compression.
3.2. The thickness of some RF absorbers were changed to accommodate changes to the housing.

4. Enhancements of Mechanical Design

Intel will implement the following changes to enhance the latch mechanism for the TXN179010850E31.

4.1. Latch: the TXN179010850E31 will use a new metal latch to improve latching action. Two spring clips will be added to accommodate the new latch mechanism.
4.2. Latch handle: the latch handle will be revised to improve design for assembly (DFA) and stability and to interface with the new latch mechanism.
4.3. Front cover lid: revised to improve circuit board positioning and DFA, and to ensure EMI performance.
4.4. Heat sink: revised to accommodate the new latch mechanism, new latch handle, and features required to the enhance circuit board positioning described above.
4.5. Sheet metal cover: revised to provide positive hold down pressure to PBA.
4.6. New shim added within PCB mounting hole to improve positional tolerance relative to heat sink
4.7. New TOSA/ROSA clip with larger screw clearance hole to accommodate more robust attachment, and color change (same material and properties) to differentiate from similar clip used on other products.

5. New End Cap

To enhance the end cap design used on the TXN179010850E31, Intel will replace the two single end caps for each Tx and Rx port with one end cap for both ports.

6. New Packaging Box

Intel will use a new packaging box to accommodate the new end cap design and reduce overall packaging box size.

7. Product Assembly Site Change

The Intel® TXN179010850E31 Optical Transceiver assembly site will change to Bangkok, Thailand. The previous assembly site for the Intel® TXN179010850E21 Optical Transceiver was Penang, Malaysia.

Customer Impact of Change and Recommended Action:

Intel will perform full quality and reliability including 2000 hours testing and complete design verification testing for TXN179010850E31 to ensure that there is no quality, reliability or functional implications to our customers. Please contact your local Intel sales representative to request the qualification reports.
First samples of the TXN179010850E31 with changes related to this PCN will be available on Nov 26, 2007.

Intel will change the product SKU and Material master ID (mm#) with this PCN change. Please refer to the chart below for the changes.

Products Affected / Intel Ordering Codes:

Affected Product SKU	Affected MM#	Post Change SKU	Post-Change MM#
TXN179010850E21	876337	TXN179010850E31	894739

Reference Documents / Attachments:

Document:	**Location #:**
Qual Data	Please Contact your Local Intel Field Sales Representative

PCN Revision History:

Date of Revision:	**Revision Number:**	**Reason:**
October 12, 2007	00	Originally Published PCN
December 5, 2007	01	Corrected post change mm# typographical error