



Product Change Notification

110952 - 03

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

A "Mission Critical Application" is any application in which failure of the Intel Product could result, directly or indirectly, in personal injury or death. SHOULD YOU PURCHASE OR USE INTEL'S PRODUCTS FOR ANY SUCH MISSION CRITICAL APPLICATION, YOU SHALL INDEMNIFY AND HOLD INTEL AND ITS SUBSIDIARIES, SUBCONTRACTORS AND AFFILIATES, AND THE DIRECTORS, OFFICERS, AND EMPLOYEES OF EACH, HARMLESS AGAINST ALL CLAIMS COSTS, DAMAGES, AND EXPENSES AND REASONABLE ATTORNEYS' FEES ARISING OUT OF, DIRECTLY OR INDIRECTLY, ANY CLAIM OF PRODUCT LIABILITY, PERSONAL INJURY, OR DEATH ARISING IN ANY WAY OUT OF SUCH MISSION CRITICAL APPLICATION, WHETHER OR NOT INTEL OR ITS SUBCONTRACTOR WAS NEGLIGENT IN THE DESIGN, MANUFACTURE, OR WARNING OF THE INTEL PRODUCT OR ANY OF ITS PARTS.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

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.

Americas Contact: asmo.pcn@intel.com

Asia Pacific Contact: apacgccb@intel.com

Europe Email: eccb@intel.com

Japan Email: jccb.ijkk@intel.com

Copyright © Intel Corporation 2013. Other names and brands may be claimed as the property of others.

BunnyPeople, Celeron, Celeron Inside, Centrino, Centrino Inside, Cilk, Core Inside, i960, Intel, the Intel logo, Intel AppUp, Intel Atom, Intel Atom Inside, Intel Core, Intel Inside, Intel Insider, the Intel Inside logo, Intel NetBurst, Intel NetMerge, Intel NetStructure, Intel SingleDriver, Intel SpeedStep, Intel Sponsors of Tomorrow, the Intel Sponsors of Tomorrow logo, Intel StrataFlash, Intel vPro, Intel XScale, InTru, the InTru logo, the InTru Inside logo, InTru soundmark, Itanium, Itanium Inside, MCS, MMX, Moblin, Pentium, Pentium Inside, Puma, skool, the skool logo, Sound Mark, The Creators Project, The Journey Inside, Thunderbolt, vPro Inside, VTune, Xeon, and Xeon Inside are trademarks of Intel Corporation in the U.S. and/or other countries.

Learn how to use Intel Trademarks and Brands correctly at <http://www.intel.com/intel/legal/tmusage2.htm>.



Product Change Notification

Change Notification #:	110952 - 03
Change Title:	Intel 82571EB Gigabit Ethernet Controllers (Ophir Tray & T&R), Intel 82572EI Gigabit Ethernet Controllers (Rimon Tray & T&R), Intel 82575EB Gigabit Ethernet Controllers (Zoar Tray & T&R), Intel 82576EB/NS Gigabit Ethernet Controllers (Kawela Tray & T&R) and Intel 82598EB 10 Gigabit Ethernet Controllers (Oplin Tray & T&R) PCN 110952-03 Reason for Revision: Add additional information regarding Stepping version Product Material, Product Marking, Order Code, Label FLI (First Level Interconnect) Material Change from Lead (PB) to Pb-Free Copper (CU) Technology
Date of Publication:	January 31, 2013

Key Characteristics of the Change:

Product Material

Product Marking

Order Code

Label

Forecasted Key Milestones:

Date of Samples Availability, QSPEC LF Samples:	Oct 17, 2011
Date Customer Must be Ready to Receive Post-Conversion Material:	Apr 01, 2012
Date Customer Can Start Placing Orders for Post-Conversion LF Material:	Jan 01, 2012
Last Order Date, Leaded Material	Dec 31, 2011
Moving out Last Order Date for Leaded Material from Nov 25, 2011 to Dec 31, 2011.	New Last Order Date

Description of Change to the Customer:

Reason for Revision:

Revision -01>PCN 110952-00 is being revised to move out the Last Order Date (leaded material) from November 25, 2011 to December 31, 2011 and to add SPEC numbers to affected products table (by post conversion MM#'s)

Revision -02> PCN 110952-01 is being revised to clarify changes are affecting the Silicon FLI (First Level Interconnect) only.

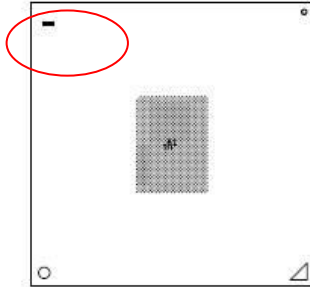
Revision -03>PCN110952-02 is being revised to include additional information regarding Stepping version. See Product table. See bolded items within this PCN revision noted in Red.

The Intel 82571EB Gigabit Ethernet Controllers (Ophir Tray & T&R), Intel 82572EI Gigabit Ethernet Controllers (Rimon Tray & T&R), Intel 82575EB Gigabit Ethernet Controllers (Zoar Tray & T&R), Intel 82576EB/NS Gigabit Ethernet Controllers (Kawela Tray & T&R) and Intel 82598EB 10 Gigabit Ethernet Controllers (Oplin Tray & T&R) will undergo the following changes:

In order to be compliant with Intel's corporate Green initiative, Intel is moving its products manufactured on the P1213 process from RoHS Compliant Leaded FLI (First Level Interconnect) products to RoHS Compliant 100% Lead Free (LF) FLI products. There is no Form, Fit, or Function or die changes on any of the impacted silicon. Intel anticipates no impact to the customer. Since this is an internal package change to provide a material solution that is RoHS compliant, Intel has qualified and certified this change in the same way as all products supplied to our customers. The customer could use either pre-PCN or Post-PCN material in the same way with no change to electrical performance, mechanical use, or stated reliability.

- A stepping change may be noted for each of impacted silicon. This new MM# does not reflect a change to the silicon die for the impacted controllers and was used for factory identification and tracking for the new components. There is no form-fit-function change for any of the impacted silicon.
- FLI (First Level Interconnect) material will change from Lead (Pb) based solder bump technology to Pb-Free Copper (Cu) technology.
- There is no change to the second level interconnects for these products. This change affects First Level Interconnects only.
- Material Master numbers (MM#'s) will change to the new LF MM#'s, as shown in the products affected table within this PCN notice.
- As part of the conversion to Copper (Cu), the FLI of the substrate will be upgraded to Nickel (Ni)/Palladium (Pd)/Gold (Au).

- In addition to the above changes, Intel is incorporating an internal designator of a dash mark "-" that will be visible on the die side of the package and is approximately 300 x 1000um in size. Actual location may differ from example below. This mark is intended for internal purposes only and does not affect the product performance as designed. Customer's visual inspection system should be updated to allow for this feature.



Standard Intermediate Box Labels will change from 2nd LVL Interconnect = e1 to RoHS Compliant, e1 as noted in the pictures below. Pictures are example only and may not reflect actual product noted within this PCN notice. Label details, including product specifications and reflow temperatures, are for representative purpose and not meant as product specifications called out in this PCN. Actual max reflow temperatures are now noted within the affected products table within this PCN notice.

Current Label

(P) CUST PROD:	(1B) BOX: XX000038
(V) SUPPLIER: 04195 (M): (C):	MAX REFLOW 260 °C TEMP LEVEL 3 HOURS 168 BAG SEAL DATE 06APR04
(1P) IPN: LE80536GE0252M	
(S) SPEC: Q AHU (30P) MM#: 861633	(SD) DATE: 0415
(1T) LOT: 54151234 (Q) QTY: 336	
(1T) LOT:	(Q) QTY:
END LVL INTERCONNECT=e1	

ASSEMBLED IN CHINA

New Label

(P) CUST PROD:	(1B) BOX: KKP00091
(V) SUPPLIER: 04195 INTEL	MAX REFLOW 250 °C
(1P) IPN: AU80610003495AA	TEMP
(S) SPEC: S LBMF (32P) MM#: 904708	LEVEL 3 HOURS 168
(1T) LOT:	PACK DATE
(C) QTY: 1320	(SD) DATE:
(1T) LOT:	(C) QTY:
(SD) DATE:	(SD) DATE:

ASSEMBLED IN MALAYSIA

RoHS COMPLIANT, e1

Customer Impact of Change and Recommended Action:

Intel recommends that customer plan to order new MM#'s for the impacted silicon for their platforms when available. Customers need to contact their local Intel Field Sales rep to place orders for any required QSPEC samples, subject to supply availability, see products affected table within this PCN notice for a list of QSPEC sample ordering MM#'s. Please note that all QSPEC samples are only available in Tray (no T&R Samples).

- Silicon QSPEC samples will be available for those customers requesting them starting October 17, 2011.
- Customers can start placing orders for post conversion LF material Jan 1, 2012.
- Customers can start expecting delivery of Post Conversion Material after April 1, 2012.
- The Last Order Date for those customers not choosing to convert to the new MM#'s for the impacted SKUs is November 25, 2011, **moved out to December 31, 2011.**

Customers may receive both versions until current inventory is depleted. The MM#'s would differ and not be mixed in the same shipping box.

Customers visual inspection system should be updated to allow for the dash mark feature (as noted above).

Products Affected / Intel Ordering Codes:

Marketing Name	Pre Conversion Product Code	Pre - Conversion MM#	Post Conversion Product Code	Post Conversion MM#	Post Conversion Stepping*	Post Conversion SPEC#	Media Type	QSPEC Sample MM#	Max Reflow Temp
Intel® 82571EB Gigabit Ethernet Controller, Ophir	HL82571EB	875300	HL82571EB	916297	D1	S LJAY	Tray	916477	220
Intel® 82571EB Gigabit Ethernet Controller, Ophir	HL82571EB	875296	HL82571EB	916298	D1	S LJAZ	T&R	N/A	220
Intel® 82571EB Gigabit Ethernet Controller, Ophir	JL82571EB	875303	JL82571EB	916663	D1	S LJB4	Tray	916483	260
Intel® 82571EB Gigabit Ethernet Controller, Ophir	JL82571EB	875298	JL82571EB	916836	D1	S LJB5	T&R	N/A	260
Intel® 82572EI Gigabit Ethernet Controller, Rimon	HL82572EI	875302	HL82572EI	916299	D1	S LJB2	Tray	916478	220
Intel® 82572EI Gigabit Ethernet Controller, Rimon	HL82572EI	875297	HL82572EI	916300	D1	S LJB3	T&R	N/A	220
Intel® 82572EI Gigabit Ethernet Controller, Rimon	JL82572EI	875304	JL82572EI	916939	D1	S LJB8	Tray	916485	260
Intel® 82572EI Gigabit Ethernet Controller, Rimon	JL82572EI	875299	JL82572EI	916940	D1	S LJB9	T&R	N/A	260
Intel® 82575EB Gigabit Ethernet Controller, Zoar	JL82575EB	890990	JL82575EB	916837	A3	S LJBS	T&R	N/A	260
Intel® 82575EB Gigabit Ethernet Controller, Zoar	JL82575EB	890991	JL82575EB	916838	A3	S LJBT	Tray	915244	260
Intel® 82576EB Gigabit Ethernet Controller, Kawela	HL82576EB	898303	HL82576EB	916949	A2	S LJBC	T&R	N/A	220
Intel® 82576EB Gigabit Ethernet Controller, Kawela	HL82576EB	898304	HL82576EB	916950	A2	S LJBD	Tray	916530	220
Intel® 82576EB Gigabit Ethernet Controller, Kawela	JL82576EB	897979	JL82576EB	916955	A2	S LJBG	T&R	N/A	260
Intel® 82576EB Gigabit Ethernet Controller, Kawela	JL82576EB	897983	JL82576EB	916956	A2	S LJBH	Tray	916652	260
Intel® 82576NS Gigabit Ethernet Controller, Kawela	JL82576NS	899825	JL82576NS	916961	A2	S LJBN	T&R	N/A	260
Intel® 82576NS Gigabit Ethernet Controller, Kawela	JL82576NS	899826	JL82576NS	916962	A2	S LJBP	Tray	916655	260
Intel® 82598EB 10 Gigabit Ethernet Controller, Oplin	JL82598EB	890967	JL82598EB	916953	A2	S LJBQ	T&R	N/A	260
Intel® 82598EB 10 Gigabit Ethernet Controller, Oplin	JL82598EB	890968	JL82598EB	916954	A2	S LJBR	Tray	916662	260

* A stepping change may be noted for each of impacted silicon. This new MM# does not reflect a change to the silicon die for the impacted controllers and was used for factory identification and tracking for the new components. There is no form-fit-function change for any of the impacted silicon.

PCN Revision History:

Date of Revision:	Revision Number:	Reason:
September 7, 2011	00	Originally Published PCN
December 12, 2011	01	PCN 110952-00 is being revised to move out the Last Order Date (lead material) from November 25, 2011 to December 31, 2011 and to add SPEC numbers to affected products table (by post conversion MM#'s)
March 1, 2012	02	PCN 110952-01 is being revised to clarify changes are affecting the Silicon FLI (First Level Interconnect) only
January 31, 2013	03	Add additional information regarding Stepping version.