



# Product Change Notification

## 110462 - 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.

Americas Contact: [asmo.pcn@intel.com](mailto:asmo.pcn@intel.com)

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# Product Change Notification

**Change Notification #:** 110462 - 01  
**Change Title:** Intel® Atom™ Processors E640, E640T, E660, E660T, PCN 110462-01, Product Design, B0 to B1, Reason for Revision: Additional Part Mark Information  
**Date of Publication:** April 21, 2011

## Key Characteristics of the Change:

Product Design

## Forecasted Key Milestones:

<b>Date of Samples Availability:</b>	Jun 17, 2011
<b>Date of Qualification Data Availability:</b>	Jul 22, 2011
<b>Date of First Availability of Post-Conversion Material:</b>	Aug 19, 2011
<b>Date Customer Must be Ready to Receive Post-Conversion Material:</b>	Dec 29, 2011

*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.*

*A customer may request an extension to receive pre-conversion material after the Ready-To-Receive (RTR) date contained in this Product Change Notification. Provided Intel can support the volume and timing of the extension request, all confirmed extension support must be booked by the customer within 7 days of receiving confirmation or the volume will be made available to support other requests. All requests are supported on a first come, first serve basis.*

*Unless otherwise agreed to in writing by Intel, all material booked on orders corresponding to the approved extension requests beyond RTR date are Non Cancellable, Non returnable (NCNR). Please contact your local Intel representative for product availability.*

## Description of Change to the Customer:

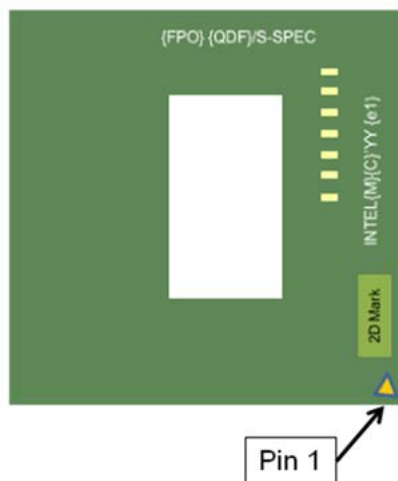
### Reason for Revision: Additional Part Mark Information

In addition to the changes listed below, Intel will also be making a change to the product mark. The changes include new marking location, content and font size (see below diagrams).

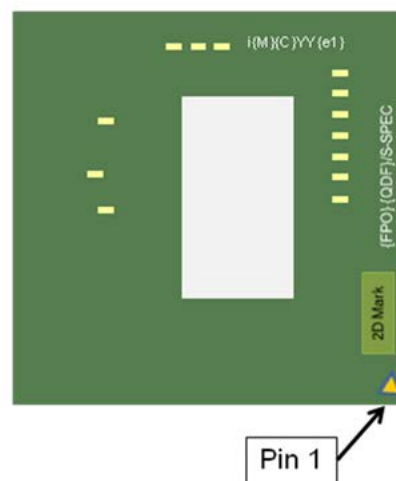
The Intel® Atom™ Processor E6x0 series will undergo the following changes for the B-0 to B-1 processor changes:

- B-1 is pin compatible with B-0
- There will be 6 additional capacitors on the package (see below diagrams).
- Intel anticipates no changes to customer platforms designed to Intel guidelines.
- Silicon fixes for the following errata: BI38, BI39, BI42, BI43 and BI44. Details of these errata are documented in the Intel® Atom™ Processor E6xx Series Specification Update Rev 003US.
- Customer BIOS change will be required to incorporate the latest Chipset Microcode Update (CMC) to support B-1.
- New Product order number (Intel MM#) - See Pre and Post conversion information in the Products Affected / Intel Ordering Codes section below.
- New Product S-spec marking - See Pre and Post conversion information in the Products Affected / Intel Ordering Codes section below.

**B-0**



**B-1**



## Customer Impact of Change and Recommended Action:

The changes to the silicon die consist of metal layer routing changes only. The changes to the package consist of the addition of 6 new capacitors and trace routing in the component substrate. The Intel® Atom™ Processor E640, E640T, E660, E660T B-1 will require a BIOS update to incorporate the latest Chipset Microcode Update (CMC).

For the fix to errata BI43, customers would have implemented a BIOS change to disable the VRM and a circuit change for the VccRTC pin in order to use B-0. With the fix implemented in B-1, customers could but are not required to remove the errata documented circuit change. If however, the customer chooses to remove that circuit change, a BIOS change will be required to enable the VRM.

All other changes should be transparent to the customer, with no hardware or software changes being required.

### Products Affected / Intel Ordering Codes:

<b>Intel® Atom™ Processors</b>											
<b>Pre Conversion</b>						<b>Post Conversion</b>					
Processor#	Frequency	Product Code	S-Spec	MM#	Stepping	Qual Samples QDF#	Qual Samples MM#	Product Code	S-Spec	MM#	Stepping
E660	1.3 GHz	CT80618003201AA	S LH54	905523	B0	QP7M	915061	CT80618003201AA	S LJ34	913720	B1
E640	1.0 GHz	CT80618005841AA	S LH55	905528	B0	QP7L	915062	CT80618005841AA	S LJ33	913761	B1
E660T	1.3 GHz	CT80618003201AB	S LH5L	905804	B0	QP7R	915057	CT80618003201AB	S LJ38	913571	B1
E640T	1.0 GHz	CT80618005841AB	S LH5M	905805	B0	QP7Q	915058	CT80618005841AB	S LJ37	913650	B1

### PCN Revision History:

**Date of Revision:**

February 27, 2011

April 21, 2011

**Revision Number:**

00

01

**Reason:**

Originally Published PCN

Additional Part Mark Information