



Product Change Notification

107893- 00

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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 #: 107893– 00
Change Title: Boxed Quad-Core Intel® Xeon® 5300 Series Processors (Clovertown), PCN 107893-00, Product Design, B3 to G0 Stepping Change
Date of Publication: September 4, 2007

Key Characteristics of the Change:

Product Design

Forecasted Key Milestones:

	Boxed Quad-Core Intel® Xeon® 5300 Series Processors
Date Customer Must be Ready to Receive Post-Conversion Material:	October 4, 2007
Date of First Availability of Post-Conversion Material:	October 4, 2007

Description of Change to the Customer:

The Boxed Quad-Core Intel® Xeon® 5300 Series processors (Clovertown) will convert from B-3 to G-0. Clovertown will undergo the following change as it converts to G-0:

- Increased Energy Efficiency
 - Certain SKUs will receive some amount of C1E power reduction on G-step
 - SKUs already at the lowest bus to core frequency ratio or lowest voltage operating point cannot drop to the lower power state required for Extended HALT
- Enhanced Virtualization Technology
 - APIC Task Priority Register (TPR) Virtualization
 - NMI-window exiting
 - Advanced VM-exit information for INS & OUTS
- Clovertown CUID will change from 06F7 to 06FB
- New SSPEC and MM numbers for the converting products

Customer Impact of Change and Recommended Action:

Intel is finalizing a technical solution to allow mixed stepping configurations of B-step and G-step Clovertown on Bensley platforms. This solution requires appropriate microcode updates to be loaded; current microcode updates for Clovertown B-3 will need to be replaced. Solution requires BIOS change; BIOS will detect mixed stepping configuration and set a bit in a Model Specific Register (MSR).

Customers creating their own BIOS should adhere to the guidelines provided in the “Quad-Core Intel(R) Xeon(R) Processor 5300 Series [Clovertown] Mixed Steppings Support Guide, May 2007” that can be found on IBL

- IBL Path: IBL Home > Information Desk > Processors > Server/Workstation > Quad Core Intel® Xeon® Processor 5300 Series > Technical
- IBL Path: IBL Home > Information Desk > Processors > Server/Workstation > Dual Core Intel® Xeon® Processor 5100 Series > Technical

Once customers implement the BIOS update, they will be able to support same stepping and mixed stepping configurations. Customers should be ready to receive a combination of both B-3 stepping material and G-0 stepping material by the “Date Customer Must be Ready to Receive Post-Conversion Material” above.

Products Affected / Intel Ordering Codes:

Boxed Dual-Core Intel® Xeon® 5300 Series (Clovertown)

Processor#	Frequency	Pre Conversion			Post Conversion		
		Product Code	S-Spec	MM#	Product Code	S-Spec	MM#
X5355	2.66G 8M 1333	BX80563X5355A	SLAC4	890824	BX80563X5355A	SLAEG	892325
X5355	2.66G 8M 1333	BX80563X5355P	SLAC4	890825	BX80563X5355P	SLAEG	892344
E5345	2.33G 8M 1333	BX80563E5345A	SLAC5	890853	BX80563E5345A	SLAEJ	892328
E5345	2.33G 8M 1333	BX80563E5345P	SLAC5	890852	BX80563E5345P	SLAEJ	892334
E5335	2.00G 8M 1333	BX80563E5335A	SLAC7	890826	BX80563E5335A	SLAEK	892329
E5335	2.00G 8M 1333	BX80563E5335P	SLAC7	890827	BX80563E5335P	SLAEK	892335
L5320	1.86G 8M 1066	BX80563L5320A	SLAC9	890830	BX80563L5320A	SLAEP	892332
L5320	1.86G 8M 1066	BX80563L5320P	SLAC9	890831	BX80563L5320P	SLAEP	892338
E5310	1.60G 8M 1066	BX80563E5310A	SLACB	890832	BX80563E5310A	SLAEM	892333
E5310	1.60G 8M 1066	BX80563E5310P	SLACB	890833	BX80563E5310P	SLAEM	892327

Reference Documents / Attachments:

Document:

Location #:

PCN Revision History:

Date of Revision:

September 4, 2007

Revision Number:

00

Reason:

Originally Published PCN