



Product Change Notification

108488 - 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 #: 108488 - 00

Change Title: Intel® Core™2 Quad Processor Q9550 and Quad-Core Intel® Xeon® Processors X3360, X3350 and X3320, PCN 108488-00, Product Design, Core Stepping Conversion

Date of Publication: May 30, 2008

Key Characteristics of the Change:

Product Design

Forecasted Key Milestones:

Date of Samples Availability:	May 30, 2008
Date of Qualification Data Availability:	Aug 11, 2008
Date Customer Must be Ready to Receive Post-Conversion Material:	Nov 14, 2008
Date of First Availability of Post-Conversion Material for X3320, 6 Meg	Jul 18, 2008
Date of First Availability of Post-Conversion Material for 12 Meg Products	Jul 7, 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:

Intel® Core™2 Quad processor Q9550 and Quad-Core Intel® Xeon® processors X3360, X3350 and X3320 will undergo the following changes:

- New SSPEC and MM numbers for the converting products
- CPUID will change from 0x10677 to 0x1067A
- Power Status Indicator (PSI) is supported
- PECC implementation change
- New instructions added – XSAVE/XRSTOR
 - New ISA extension for save/restoring context of x87, SSE, and future processor state
- New feature added - ACNT2
 - Improved mechanism for determining processor utilization. To be used for more efficient P-state determination.
- Package change to Halide free package

Customer Impact of Change and Recommended Action:

- No BIOS or board changes required for ACNT2 feature. The operating system (if it supports this feature) will check the feature flag and enable this feature.
- No Bios changes required for XSAVE/XRSTOR. Refer to *Intel® 64 and IA-32 Architectures Software Developer's Manual Volume 3A: System Programming Guide* and *Intel® Advanced Vector Extensions Programming Reference* for details.
- Power state Indicator (PSI) will require new circuits on the board to support the feature. Please refer to the Platform Design guide document for chipset that support the PSI feature.

Qualification required for the new features and instructions supported on these processors. Please refer to the appropriate documents for more details.

Minimal re-qualification and/or validation is expected for features already supported on C-1 and M-1 steppings. Intel® Core™2 Quad Processor Q9550 and Quad-Core Intel® Xeon® processors X3360, X3350 and X3320 will require a BIOS update. Once customers implement the BIOS update, they will be able to accept both stepping materials. Customers should be ready to receive a combination of both stepping materials by the “Date Customer Must be Ready to Receive Post-Conversion Material” above. For customers implementing their own BIOS, it is necessary to incorporate the latest BIOS to support the new steppings. Please contact your local Intel representative for further technical questions.

Products Affected / Intel Ordering Codes:

Intel® Core™2 Quad Processor Q9550 and Quad-Core Intel® Xeon® Processors, 12 Meg										
Processor#, Frequency	Pre Conversion Product Code	Pre Conversion S-Spec	Pre Conversion MM#	Pre Conversion Stepping	Post Conversion Qualification Samples QDF#	Post Conversion Qual Samples MM#	Post Conversion Product Code	Post Conversion S-Spec	Post Conversion MM#	Post Conversion Stepping
Q9550, 2.83 GHz	EU80569PJ073N	SLAWQ	896490	C-1	QGPK	897325	AT80569PJ073N	SLB8V	898645	E-0
X3360, 2.83 GHz	EU80569KJ073N	SLAWZ	896488	C-1	QGPL	897326	AT80569KJ073N	SLB8X	898659	E-0
X3350, 2.66 GHz	EU80569KJ067N	SLAX2	896487	C-1	QGPN	897329	AT80569KJ067N	SLB8Y	898660	E-0

Quad-Core Intel® Xeon® Processor, 6 Meg										
Processor#, Frequency	Pre Conversion Product Code	Pre Conversion S-Spec	Pre Conversion MM#	Pre Conversion Stepping	Post Conversion Qualification Samples QDF#	Post Conversion Qual Samples MM#	Post Conversion Product Code	Post Conversion S-Spec	Post Conversion MM#	Post Conversion Stepping
X3320, 2.5 GHz	EU80580KJ0606M	SLAWF	896620	M-1	QHHZ	898233	AT80580KJ0606M	SLB69	898379	R-0

Reference Documents / Attachments:

Document: _____ **Location #:** _____

PCN Revision History:

Date of Revision:	Revision Number:	Reason:
May 30, 2008	00	Originally Published PCN