



Product Change Notification

109154 - 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 #: 109154 - 00

Change Title: Tray Intel® Core 2 Quad Q8200 Processor, PCN 109154-00, Product Design, M1 to R0 Stepping Conversion

Date of Publication: January 20, 2009

Key Characteristics of the Change:

Product Design

Forecasted Key Milestones:

Date of Samples Availability:	Feb 16 through Feb 20, 2009
Date of Qualification Data Availability:	January 20 , 2009
Date Customer Must be Ready to Receive Post-Conversion Material:	April 20, 2009
Date of First Availability of Post-Conversion Material:	Februray 23 , 2009

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 is initiating an M-1 to R-0 conversion for Intel® Core 2 Quad Q8200 Processor where they will undergo the following changes:

- New S-spec and MM numbers for the converting products
- CPUID will change from 10677 to 1067A
- New Low power states (Extended Stop Grant State, Deep Sleep State and Deeper Sleep State)
- Power State Indicator (PSI) support with Intel 4 series chipsets
- New instructions added – XSAVE/XRSTOR
- Package change to halide free package
- R-0 package is pin compatible with M-1 package

Customer Impact of Change and Recommended Action:

Intel anticipates no change to customer platforms designed to Intel guidelines. For details of the new features and power states, please refer to

- Intel® Core™2 Extreme Processor QX9000 Series and Intel® Core™2 Quad Processor Q9000, Q9000S, Q8000 and Q8000S Series EMTS

Minimal re-qualification and/or validation is expected for features already supported on M-1 stepping. These processors will require a BIOS change, because of the new CPUID. Once customers implement the BIOS update, they will be able to accept both M-1 and R-0 stepping material. Customers should be ready to receive a combination of both M-1 stepping material and R-0 stepping material 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 Microcode Update (MCU) to support the R-0 stepping. Please contact your local Intel representative for further technical questions.

Products Affected / Intel Ordering Codes:

Intel® Core™2 Quad Processors											
Processor #	GHz	Pre Conversion				Qualification Samples		Post Conversion			
		Product Code	S-Spec	MM#	Stepping	QDF#	MM#	Product Code	S-Spec	MM#	Stepping
Q8200	2.33GHz	EU80580PJ0534MN	SLB5M	898065	M-1	QJLG	899120	AT80580PJ0534MN	SLG9S	899122	R-0

Reference Documents / Attachments:

Document:

Location #:

PCN Revision History:

Date of Revision:

January 20 , 2009

Revision Number:

00

Reason:

Originally Published PCN