



# Product Change Notification

## 109337 – 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 #: 109337 - 00**

**Change Title: Tray Intel® Core™ 2 Quad Processor Q8300, Intel® Pentium® Processors E5300 and E5400, and Intel® Core™ 2 Duo Processors E7400 and E7500, PCN 109337-00, Product Design, Adding Intel® Virtualization Technology**

**Date of Publication: April 15, 2009**

## Key Characteristics of the Change:

Product Design

## Forecasted Key Milestones:

<b>Date of Samples Availability:</b>	May 25 – June 5, 2009
<b>Date of Qualification Data Availability:</b>	June 05, 2009
<b>Date Customer Must be Ready to Receive Post-Conversion Material:</b>	July 15, 2009
<b>Date of First Availability of Post-Conversion Material:</b>	June 12, 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 a conversion on the R stepping of Tray Intel® Core™ 2 Quad Processor Q8300, Intel® Pentium® Processors E5300 and E5400, and Intel® Core™ 2 Duo Processors E7400 and E7500 to add Intel® Virtualization Technology (Intel® VT). The processors above will undergo the following changes:

- o Addition of Intel® Virtualization Technology (Intel® VT).
- o New S-spec and MM numbers for the converting products

## Customer Impact of Change and Recommended Action:

Intel anticipates no change to customer platforms designed to Intel guidelines. Minimal re-qualification and/or validation is expected for features already supported on R-0 stepping. These processors may require a BIOS change to enable Intel® Virtualization Technology (Intel® VT). Customers should be ready to receive a combination of both R-0 stepping material and “R-0 stepping with VT” 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 with Intel® Virtualization Technology (Intel® VT). Please contact your local Intel representative for further technical questions.

For details of the new features and power states, please refer to the following documents:

- o Intel® Core 2 Quad processor Q8300: Intel® Core™2 Extreme Processor QX9000 Series and Intel® Core™2 Quad Processor Q9000, Q9000S, Q8000 and Q8000S Electrical, Mechanical, and Thermal Specifications (EMTS)
- o Intel® Core 2 Duo processors E7400 and E7500: Intel® Core™2 Duo Processor E8000 and E7000 Series Electrical, Mechanical and Thermal Specifications (EMTS)
- o Intel® Pentium processors E5300 and E5400: Intel® Pentium® dual-core Processor E5000 Series Electrical, Mechanical and Thermal Specifications (EMTS)

## Products Affected / Intel Ordering Codes:

### Intel® Core™ 2 Quad Processor Q8300

Processor #	GHz	Pre Conversion				Qualification Samples		Post Conversion			
		Product Code	S-Spec	MM#	Stepping	QDF#	MM#	Product Code	S-Spec	MM#	Stepping
Q8300	2.50 GHz	AT80580PJ0604MN	SLB5W	898378	R	QLSG	902129	AT80580PJ0604ML	SLGUR	902513	R

### Intel® Pentium® Processors E5300 and E5400

Processor #	GHz	Pre Conversion				Qualification Samples		Post Conversion			
		Product Code	S-Spec	MM#	Stepping	QDF#	MM#	Product Code	S-Spec	MM#	Stepping
E5300	2.60 GHz	AT80571PG0642M	SLB9U	898314	R	QLQG*	902644*	AT80571PG0642ML	SLGTL	902627	R
E5400	2.70 GHz	AT80571PG0682M	SLB9V	898310	R	QLQG	902644	AT80571PG0682ML	SLGTK	902626	R

\* Intel® Pentium® dual-core E5400 processor qualification samples (Wolfdale M, 2.70 GHz) on the R-0 stepping with Virtualization Technology (VT) will be sampled in May 2009. These samples are limited to the 2.70 GHz frequency, but are not frequency locked. Customers are required to down clock the samples and use them also for qualification of Intel® Pentium® dual-core E5300 (2.60GHz) with Virtualization Technology (VT).

### Intel® Core™ 2 Duo processors E7400 and E7500

Processor #	GHz	Pre Conversion				Qualification Samples		Post Conversion			
		Product Code	S-Spec	MM#	Stepping	QDF#	MM#	Product Code	S-Spec	MM#	Stepping
E7400	2.80 GHz	AT80571PH0723M	SLB9Y	898339	R	QLUH*	902589*	AT80571PH0723ML	SLGW3	902977	R
E7500	2.93 GHz	AT80571PH0773M	SLB9Z	898340	R	QLUH*	902589*	AT80571PH0773ML	SLGTE	902622	R

\* Intel® Core™2 Duo E7600 processor qualification samples (Wolfdale M, 3.06 GHz) on the R-0 stepping with Virtualization Technology (VT) were sampled in March 2009 ( see DCL < insert link>). These samples are limited to the 3.06 GHz frequency, but are not frequency locked. Customers are required to down clock the samples and use them also for qualification of Intel® Core 2 Duo processors E7400 and E7500 with Virtualization Technology (VT).

## **Reference Documents / Attachments:**

**Document:**

**Location #:**

## **PCN Revision History:**

**Date of Revision:**

April 15, 2009

**Revision Number:**

00

**Reason:**

Originally Published PCN