



# Product Change Notification

## 109840 - 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 #:** 109840 - 00  
**Change Title:** Additional Box Fan Heat-Sink Assembly Optimization for Assorted Desktop Processors, PCN 109840-00, Product Design  
**Date of Publication:** February 26, 2010

## Key Characteristics of the Change:

Product Design

## Forecasted Key Milestones:

<b>Date Customer Must be Ready to Receive Post-Conversion Material:</b>	April 1, 2010
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## Description of Change to the Customer:

No changes have been made to the processor. Changes were only made to the Fan Heat-sink Assembly (FHSA) from one supplier source. Other suppliers will continue to ship the current design of the FHSA, and customers can expect to receive either design with the products listed in the product table. See Description of Change table and the photos shown below for further details.

Change #	change	impact	FCLGA4-M2 E30206-001	FCLGA4-T E18764-001	FCLGA4-U E30307-001
1	slightly smaller fan impeller	fan to spin slightly faster, but acoustics are unchanged	Yes	Yes	Yes
2	Fan shroud hub diameter increased due to minor change in fan electronics	none	Yes	Yes	Yes

# FHSA Design change

**Design change points**

Supplier changes following points.

#1: Impeller design change

#2: Diameter change of fan shroud hub from 34mm to 40mm



Current FHSA design



New FHSA design

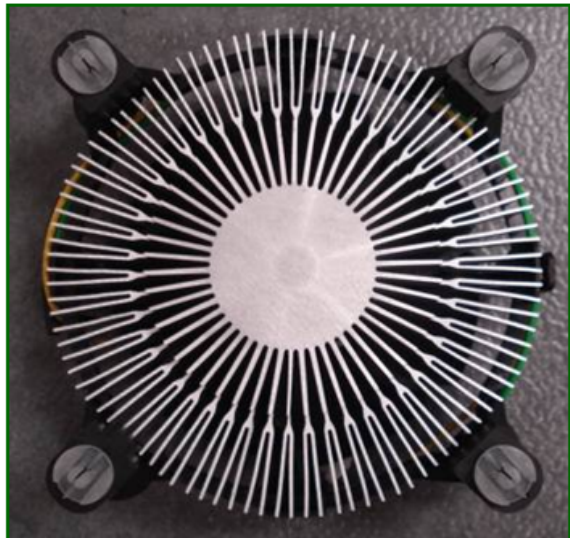
Change #	change	impact	FCLGA4-M2 E30206-001	FCLGA4-T E18764-001	FCLGA4-U E30307-001
3	Heat-sink changed slightly from a curved radial fin to straight radial fin	No change in thermals	Yes	Yes	--
4	Heat-sink profile changed slightly	No change in thermals	Yes	Yes	--

## #3: Fins changed from curved to straight

## #4: Impeller design change



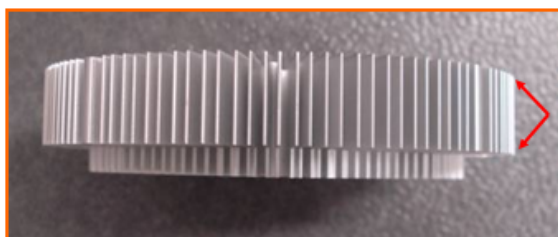
Bottom view  
Current FHSA design



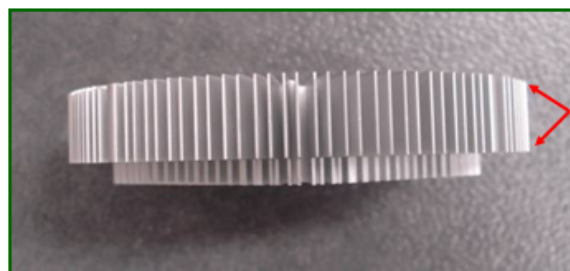
Bottom view  
New FHSA design

			FCLGA4-M2	FCLGA4-T	FCLGA4-U
Change #	change	impact	E30206-001	E18764-001	E30307-001
5	HS height decreases 0.4mm	No change in thermals	--	--	Yes

## #5: HS height change from 18.9mm to 18.47mm



Side view  
Current FHSA design



Side View  
New FHSA design

### Customer Impact of Change and Recommended Action:

Intel anticipates no impact to customers as the current and new design are functionally interchangeable.

### Products Affected / Intel Ordering Codes:

Marketing Name	Processor#	Frequency	Stepping	Product Code	S-Spec	MM#
Boxed Intel® Celeron® Processor	440	2.00	A	BX80557440	S L9XL	890201
Boxed Intel® Celeron® Processor	430	1.80	A	BX80557430	S L9XN	890233
Boxed Intel® Pentium® Processor	E2200	2.20	M	BX80557E2200	S LA8X	895884
Boxed Intel® Pentium® Processor	E2200	2.20	M	BXC80557E2200	S LA8X	896784
Boxed Intel® Xeon® Processor	X3360	2.83	C	BX80569X3360	S LAWZ	897358
Boxed Intel® Core™2 Quad Processor	Q9300	2.50	M	BX80580Q9300	S LAWE	897360
Boxed Intel® Core™2 Duo Processor	E8600	3.33	E	BX80570E8600	S LB9L	899033

Boxed Intel® Core™2 Duo Processor	E8500	3.16	E	BX80570E8500	S LB9K	899034
Boxed Intel® Core™2 Duo Processor	E8400	3.00	E	BX80570E8400	S LB9J	899035
Boxed Intel® Core™2 Quad Processor	Q9550	2.83	E	BX80569Q9550	S LB8V	899133
Boxed Intel® Core™2 Quad Processor	Q9650	3.00	E	BX80569Q9650	S LB8W	899134
Boxed Intel® Core™2 Quad Processor	Q9550	2.83	E	BXC80569Q9550	S LB8V	899136
Boxed Intel® Core™2 Quad Processor	Q9400	2.66	R	BXC80580Q9400	S LB6B	899301
Boxed Intel® Core™2 Quad Processor	Q9400	2.66	R	BX80580Q9400	S LB6B	899303
Boxed Intel® Xeon® Processor	X3360	2.83	E	BX80569X3360	S LB8X	899493
Boxed Intel® Xeon® Processor	X3370	3.00	E	BX80569X3370	S LB8Z	899494
Boxed Intel® Xeon® Processor	X3320	2.50	R	BX80580X3320	S LB69	899530
Boxed Intel® Xeon® Processor	X3330	2.66	R	BX80580X3330	S LB6C	899531
Boxed Intel® Xeon® Processor	E3110	3.00	E	BX80570E3110	S LB9C	899605
Boxed Intel® Xeon® Processor	E3120	3.16	E	BX80570E3120	S LB9D	899615
Boxed Intel® Pentium® Processor	E5200	2.50	M	BX80571E5200	S LAY7	899647
Boxed Intel® Core™2 Quad Processor	Q8200	2.33	M	BX80580Q8200	S LB5M	899651
Boxed Intel® Core™2 Quad Processor	Q8200	2.33	M	BXC80580Q8200	S LB5M	899665
Boxed Intel® Core™2 Quad Processor	Q8300	2.50	R	BX80580Q8300	S LB5W	900465
Boxed Intel® Pentium® Processor	E5300	2.60	R	BX80571E5300	S LB9U	900503
Boxed Intel® Core™2 Duo Processor	E7400	2.80	R	BX80571E7400	S LB9Y	900516
Boxed Intel® Core™2 Duo Processor	E7400	2.80	R	BXC80571E7400	S LB9Y	900633

Boxed Intel® Celeron® Processor	E1500	2.20	M	BX80557E1500	S LAQZ	901374
Boxed Intel® Core™2 Duo Processor	E7500	2.93	R	BX80571E7500	S LB9Z	901480
Boxed Intel® Xeon® Processor	L3360	2.83	E	BX80569L3360	S LGPF	901604
Boxed Intel® Xeon® Processor	L3100	3.00	E	BX80570L3110	S LGP9	901636
Boxed Intel® Pentium® Processor	E5400	2.70	R	BX80571E5400	S LB9V	901650
Boxed Intel® Core™2 Quad Processor	Q8200S	2.30	R	BX80580Q8200S	S LG9T	901849
Boxed Intel® Core™2 Quad Processor	Q9400S	2.66	R	BX80580Q9400S	S LG9U	901850
Boxed Intel® Core™2 Duo Processor	E7400	2.80	R	BX80571E7400	S LGQ8	901862
Boxed Intel® Core™2 Quad Processor	Q9550S	2.83	E	BX80569Q9550S	S LGAE	901958
Boxed Intel® Pentium® Processor	E5300	2.60	R	BXC80571E5300	S LGQ6	902230
Boxed Intel® Xeon® Processor	X3380	3.16	E	BX80569X3380	S LGPG	902260
Boxed Intel® Core™2 Quad Processor	Q8200	2.33	R	BXC80580Q8200	S LG9S	902304
Boxed Intel® Core™2 Quad Processor	Q8200	2.33	R	BX80580Q8200	S LG9S	902305
Boxed Intel® Pentium® Processor	E5200	2.50	R	BX80571E5200	S LB9T	902389
Boxed Intel® Pentium® Processor	E5200	2.50	R	BXC80571E5200	S LB9T	902390
Boxed Intel® Core™2 Quad Processor	Q8400	2.66	R	BX80580Q8400	S LGT6	902938
Boxed Intel® Celeron® Processor	E1600	2.40	M	BX80557E1600	S LAQY	903000
Boxed Intel® Core™2 Duo Processor	E7600	3.06	R	BX80571E7600	S LGTD	903061
Boxed Intel® Pentium® Processor	E6300	2.80	R	BX80571E6300	S LGU9	903063
Boxed Intel® Pentium® Processor	E6300	2.80	R	BXC80571E6300	S LGU9	903065

Boxed Intel® Pentium® Processor	E2210	2.20	M	BXC80571E2210	S LB9R	903204
Boxed Intel® Pentium® Processor	E2210	2.20	M	BXC80571E2210	S LB7N	903205
Boxed Intel® Core™2 Quad Processor	Q8400S	2.66	R	BX80580Q8400S	S LGT7	903232
Boxed Intel® Core™2 Quad Processor	Q8300	2.50	R	BXC80580Q8300	S LGUR	903880
Boxed Intel® Core™2 Quad Processor	Q8300	2.50	R	BX80580Q8300	S LGUR	903883
Boxed Intel® Pentium® Processor	E5400	2.70	R	BX80571E5400	S LGTK	903981
Boxed Intel® Pentium® Processor	E5300	2.60	R	BX80571E5300	S LGTL	903982
Boxed Intel® Core™2 Duo Processor	E7400	2.80	R	BX80571E7400	S LGW3	903983
Boxed Intel® Core™2 Duo Processor	E7500	2.93	R	BX80571E7500	S LGTE	903984
Boxed Intel® Pentium® Processor	E5300	2.60	R	BXC80571E5300	S LGTL	903985
Boxed Intel® Pentium® Processor	E5400	2.70	R	BXC80571E5400	S LGTK	903986
Boxed Intel® Core™2 Duo Processor	E7400	2.80	R	BXC80571E7400	S LGW3	903988
Boxed Intel® Core™2 Duo Processor	E7500	2.93	R	BXC80571E7500	S LGTE	903989
Boxed Intel® Celeron® Processor	E3200	2.40	R	BX80571E3200	S LGU5	904039
Boxed Intel® Celeron® Processor	E3300	2.50	R	BX80571E3300	S LGU4	904040
Boxed Intel® Celeron® Processor	E3200	2.40	R	BXC80571E3200	S LGU5	904100
Boxed Intel® Core™2 Quad Processor	Q9505	2.83	R	BX80580Q9505	S LGYY	904174
Boxed Intel® Pentium® Processor	E6500	2.93	R	BX80571E6500	S LGUH	904339
Boxed Intel® Celeron® Processor	E3400	2.60	R	BX80571E3400	S LGTZ	905045
Boxed Intel® Pentium® Processor	E6600	3.06	R	BX80571E6600	S LGUG	905046

Boxed Intel® Pentium® Processor	E6500	2.93	R	BXC80571E6500	S LGUH	907395
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### **Reference Documents / Attachments:**

**Document:**

**Location #:**

### **PCN Revision History:**

**Date of Revision:**

February 26, 2010

**Revision Number:**

00

**Reason:**

Originally Published PCN