



Product Change Notification

103037 - 00

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Product Change Notification

Change Notification #: 103037 - 00

Change Title: Intel(R) Stacked Chip Scale Package with 16Mb Advanced+ Boot Block Flash and 2Mb SRAM and 4Mb SRAM, 0.13 Micron Flash Memory Process Conversion, PCN 103037-00, FFF

Date of Publication: January 17, 2003

Type of Change Notification:

FFF - (Form-Fit-Function)

Key Characteristics of the Change:

Process

Forecasted Key Milestones:

Date of Samples Availability:	Feb 14, 2003
Date of Qualification Data Availability:	Apr 11, 2003
Date Customer Must be Ready to Receive Post-Conversion Material:	Apr 18, 2003
Date of First Availability of Post-Conversion Material:	May 19, 2003

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 proliferating the Advanced+ Boot Block Flash Memory product to its new 0.13 μ m lithography in the 16Mb Stacked Chip Scale Package with 2mb and 4mb SRAM.

•This will improve product availability and increase production capacity across Intel's wafer and assembly fabrication network. This will also enable Intel to more effectively respond to the growing demands for Flash.

2Mb SRAMs used with .13 μ lithography flash die are Samsung .18 μ and Cypress .15 μ .

4Mb SRAMs used with .13 μ lithography flash die are Samsung .15 μ and Cypress .15 μ .

	Product	Package Size	Speed	SRAM
Previous	16/2 .18μ	10x8x1.4	70ns	Samsung .18μ Cypress .15μ
New	16/2 .13μ	10x8x1.2	70ns	Samsung .18μ Cypress .15μ
Previous	16/4 .25μ	12x8x1.4	90ns	NEC .25μ Cypress .25μ Etron .15μ
New	16/4 .13μ	10x8x1.2	70ns	Samsung .15μ Cypress .15μ

Customer Impact of Change and Recommended Action:

• Intel does not anticipate any impact to customer applications. The Advanced+ Boot Block Flash Memory products on 0.13μm lithography will meet Intel's quality and reliability standards and is backwards compatible with Intel's current Advanced+ Boot Block Flash Memory products on 0.25μm lithography for the 16/4 and 0.18μm lithography for the 16/2.

• Stacked Chip Scale Package densities affected by this conversion: only 16/2 and 16/4 at this time.

• Read speed enhancements have been realized with this newer generation product line. Read speed specifications for the Advanced+ Boot Block Flash Memory devices with 16Mb flash and 2Mb and 4Mb SRAM will change from 90ns on .25μm to 70ns on .13μm.

• Customers must be positioned to accept and use 0.13μm lithography products with all SRAM combinations. Customers must be positioned to accept .13μm lithography Advanced+ Boot Block Flash Memory products interchangeably with current 0.25μm and .18μm lithography Advanced+ Boot Block Flash Memory products. Any customer using the 0.18μm version of the 16Mb Advanced+ Boot Block Flash and 2Mb SRAM in the Stacked Chip Scale Package must be ready to receive the 0.13μm 16Mb Advanced+ Boot Block Flash and 2Mb SRAM version by the indicated milestones for this product. Any customer using the 0.25μm version of the 16Mb Advanced+ Boot Block Flash and 4Mb SRAM in the Stacked Chip Scale Package must be ready to receive the 0.13μm 16Mb Advanced+ Boot Block Flash and 4Mb SRAM version by the indicated milestones for this product. Orders for the 0.25μm and 0.18μm version will be converted to the 0.13μm version upon depletion of the current 0.25μm 16Mb Advanced+ Boot Block Flash and 4Mb SRAM inventory and the current 0.18μm 16Mb Advanced+ Boot Block Flash and 2Mb SRAM inventory.

Products Affected / Intel Ordering Codes:

16/2 and 16/4 Affected Products

Pre-Conversion Product Code	Pre-Conversion Spec/ROM	Pre-Conversion MM#
RD28F1604C3B90 829338		829338
RD28F1604C3B110830106		830106
RD28F1604C3B90 S L4PF	S L4PF	831084
RD28F1604C3T90 S L4Q7	S L4Q7	831173
RD28F1604C3B90 S L55B	S L55B	833736
RD28F1604C3T90 S L64G	S L64G	842883
RD28F1602C3T70 S B48	S B48	849290

Pre-Conversion Product Code	Pre-Conversion Spec/ROM	Pre-Conversion MM#
RD28F1602C3T70 849311		849311
RD28F1602C3T70 S B93	S B93	849441
RD28F1602C3B70 852706		852706
RD28F1602C3B70 S B93	S B93	852915

16/2 and 16/4 Samples

Sample Product Code	Sample Spec/ROM	Sample MM#	Description	SRAM
RD28F1602C3BD70Q P07	Q P07	853161	100 pc Tape and Reel	Cypress .15
RD28F1602C3BD70Q P08	Q P08	853162	300 pc Tray	Cypress .15
RD28F1602C3BD70Q P09	Q P09	853164	2 pc Tube	Cypress .15
RD28F1602C3TD70Q P10	Q P10	853165	2 pc Tube	Cypress .15
RD28F1602C3TD70Q P11	Q P11	853166	1000 pc Tape and Reel	Cypress .15
RD28F1602C3TD70Q P12	Q P12	853168	100 pc Tape and Reel	Cypress .15
RD28F1604C3BD70QP47	Q P47	853238	300 PC Tray	Cypress .15
RD28F1604C3TD70QP48	Q P48	853239	100 pc Tape and Reel	Cypress .15
RD28F1604C3BD70QP49	Q P49	853240	2 pc Tube	Cypress .15
RD28F1604C3TD70QP50	Q P50	835241	2 pc Tube	Cypress .15

Reference Documents / Attachments:

Document:

Location #:

PCN Revision History:

Date of Revision:

Revision Number:

Reason:

January 17, 2003

00

Originally Published PCN