



Date Created: 1/13/2004
Date Issued: 1/30/2004
PCN # 20040205

DESIGN/PROCESS CHANGE NOTIFICATION -- FINAL

Reference FCST PCN number 20030402-A.

This is to inform you that a design and/or process change will be made to the following product(s). This notification is for your information and concurrence.

If you require data or samples to qualify this change, please contact **Fairchild Semiconductor within 30 days of receipt of this notification.**

If you have any questions concerning this change, please contact:

Name: Rivero, Doug M.
E-Mail: Doug.Rivero@notes.fairchildsemi.com
Phone: 1-408-822-2143

PCN Originator

Name: Knapp, Paul E.
E-mail: Paul.Knapp@notes.fairchildsemi.com
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REL Engineer

Name: Chamberlin, Clint
E-mail: Clint.Chamberlin@notes.fairchildsemi.com
Phone: 570-474-3240

PCN Type: Alternate Fab Location

Effectivity

Expected 1st Device Shipment Date: 3/1/2003
Earliest Year/Work Week of Changed Product: 0410
(Note: Package marking may differ from this format)

Product ID (Description):

This change affect certain products which were run on our 6-inch wafer fab line in Mountain Top, PA. The products affected by this change are listed below in the "Affected FSIDs" section.

Description of Change:

The Fairchild Mountain Top 6-inch fab line has been closed. The Mountain Top 8-inch fab line will continue to remain open. The products are identified in the attached "Affected FSIDs" list, will be transferred to our QS 9000 approved Bucheon, Korea facility for wafer fabrication.

Mountaintop, Pennsylvania and Bucheon, South Korea Fairchild Semiconductor address:

Fairchild Semiconductor
(420-711) 82-3 Todang-Dong
Wonmi-District
Bucheon City, Kyonggi Province
Korea

Fairchild Semiconductor
 Crestwood Industrial Park
 125 Crestwood Road
 Mountain Top, PA 18707

Effect of Change:

The change in wafer fabrication site has no effect on device specifications, function, or reliability. The transfer of wafer fabrication of these devices to another QS9000 approved wafer fab site will have no effect on device specifications, performance, function, quality, or reliability.

Qualification:

Qualification reports follows.

Qual/REL Plan Numbers

Additional Qualification Data

Qual Plan Nbr : **PD03060037**

Title : Qualification of 800-1200V Rectifiers from Bucheon

Background/Description : This technology is being transferred from Mtop to Bucheon, using CPM qualified packages.

Scope : Applies to all currently qualified 800-1200V Rectifier devices listed in this PCN

Process of Record (POR)

PROCESS	DESCRIPTION	
	Mtop Fab 6	Bucheon
Assembly Site	ChipPAC Malaysia	ChipPAC Malaysia
Backmetal	5KA, 3KA, 3.5KA, 20KA (AL-Ti-Ni-Ag)	NiVi, Ag (3KA, 1.5KA)
Front Metal	No Change	No Change
Mask Layout	No Change	No Change
Wafer Dia	6"	4"

Qualification Vehicles

DEVICE	VR Rating	Test Number	PKG
RHRG75120	1200V	13089	TO-247-2L
RHRG75120	1200V	13089	TO-247-2L
RHRG75120	1200V	13089	TO-247-2L

ATTACHMENT 1
RELIABILITY TEST RESULT SUMMARY

COMPONENT LEVEL

TEST DESCRIPTION/CONDITION	DURATION	NBR OF LOTS	SS	Results	Ref Specs
Parametric Verification		3	25	0	Data sheet

Autoclave @ 121 °C, 15psi, 100% RH	96 Hrs	3	77	0	JESD22-A102
Temp Cycle@ -55C to 150 C	1000 cycles	3	77	0	JESD22-A104
THBT 85 C/ 85% RH, 45V	1000 hours	3	77	0	JESD22-A110-B JESD22A-101
Power Cycle @ delta Tj of 100C	TO-220=8.6Kcyc TO-247=5Kcyc	3	77	0	JESD22-A105
HTRB @ 80% of Rated VR, 175C	1000 hrs	3	77	0	JESD22-A108

Affected FSIDs

ISL9K18120G3
ISL9R18120G2
ISL9R30120G2
PCRH75120W_R4800
RHRP15120
RURD4120S9A

ISL9K30120G3
ISL9R18120P2
ISL9R8120P2
RHRG30120
RHRP30120
RURG80100

ISL9K8120P3
ISL9R18120S3ST
ISL9R8120S3ST
RHRG75120
RHRP8120
RURP8100