Date Created: 4/6/2004
Date Issued: 4/19/2004
PCN # 20041405

DESIGN/PROCESS CHANGE NOTIFICATION -- FINAL

References 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
Phone: 408-822-2133

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: 5/19/2004
Earliest Year/Work Week of Changed Product: 0421
(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 follow..

Qual/REL Plan Numbers

Additional Qualification Data

Qual Plan Nbr : **PD03060040**
Title : Qualification of SMPS IGBT's from Bucheon 6"
:
Background/Description : This technology is being transferred from Mtop to Bucheon, using CPM qualified packages.
Scope : **A**ll currently qualified SMPS IGBT devices voltage rating not to exceed 600 V.

Process of Record (POR)

Qualification Vehicles

DEVICE	VR Rating	Wafer Lot	Test Number	PKG
HGTG40N60A4	600 V	GSZ12	13081/14015	TO-247
HGTG40N60A4	600 V	GRZIN	13081/14015	TO-247
HGTG40N60A4	600 V	GSZOQ	13081/14015	TO-247

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	5Kcyc	3	77	0	JESD22-A105
HTGB @ 100% of Rated VG, 150C	1000 hrs	3	77	0	JESD22-A108
HTRB @ 80% of Rated VD, 150C	1000 hrs	3	77	0	JESD22-A108

Qual Plan Nbr : **PD03060039**
Title : Qualification of high voltage NPT-1 IGBT silicon from Bucheon
:
Background/Description : This technology is being transferred from Mtop to Bucheon, using CPM qualified packages.
Scope : all currently qualified NPT-1 IGBT devices listed in the PCN.

Process of Record (POR)

Qualification Vehicles

DEVICE	+VR Rating	Wafer Lot	Test Number	PKG
HGTG18N120BN	1200 V	CSZ13	13053 /13129	TO-247
HGTG18N120BN	1200 V	CSZOL	13053 /13129	TO-247
HGTG18N120BN	1200 V	CRZ23	13053 /13129	TO-247

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	5Kcyc	3	77	0	JESD22-A105
HTGB @ 100% of Rated VG, 150C	1000 hrs	3	77	0	JESD22-A108
HTRB @ 80% of Rated VD, 150C	1000 hrs	3	77	0	JESD22-A108

Affected FSIDs

FGB20N6S2	FGB20N6S2D	FGB20N6S2DT
FGB20N6S2T	FGB30N6S2	FGB30N6S2D
FGB30N6S2DT	FGB30N6S2T	FGB40N6S2
FGB40N6S2T	FGH20N6S2	FGH20N6S2D
FGH30N6S2	FGH30N6S2D	FGH40N6S2
FGH40N6S2D	FGH50N3	FGH50N6S2
FGH50N6S2D	FGH60N6S2	FGK60N6S2D
FGP20N6S2	FGP20N6S2D	FGP30N6S2
FGP30N6S2D	FGP40N6S2	HGT1N30N60A4D
HGT1N40N60A4D	HGT1S10N120BNS	HGT1S10N120BNST
HGT1S12N60A4DS	HGT1S12N60A4S9A	HGT1S2N120CN
HGT1S3N60A4DS9A	HGT1S7N60A4DS	HGT1S7N60A4DS9A_R4921
HGT1S7N60A4S9A	HGTD1N120BNS9A	HGTD3N60A4S
HGTG10N120BND	HGTG11N120CN	HGTG11N120CND
HGTG12N60A4	HGTG12N60A4D	HGTG18N120BN
HGTG18N120BND	HGTG20N60A4	HGTG20N60A4D
HGTG27N120BN	HGTG30N60A4	HGTG30N60A4D
HGTG40N60A4	HGTG5N120BND	HGTG7N60A4
HGTG7N60A4D	HGTP10N120BN	HGTP12N60A4
HGTP12N60A4D	HGTP20N60A4	HGTP2N120CN
HGTP3N60A4	HGTP3N60A4D	HGTP5N120BND
HGTP7N60A4	HGTP7N60A4D	PCG12N60A4W_R4800
PCG20N60A4W_R4800	PCG2N120CNW_R4800	PCG30N60A4W_R4800
PCG40N60A4W_R4800		