

Date Created : 2008/11/12
Date Issued On : 2008/12/01
PCN# : Q4084602

DESIGN/PROCESS CHANGE NOTIFICATION -- FINAL

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.**

Updated process quality documentation, such as FMEAs and Control Plans, are available for viewing upon request.

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

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Implementation of change:
Expected 1st Device Shipment Date: 2009/02/25

Earliest Year/Work Week of Changed Product: 0844

Change Type Description: Wafer Diameter

Description of Change (From): 4" line process with diffusion base doping process

Description of Change (To): 5" line process with implantation doping process

Reason for Change : Closure of 4" substrate line. Better production support due to increase in gross die per wafer and better control of parameters for yield improvement.

Qual/REL Plan Numbers : Q20080495

Qualification :

Qualification results satisfactorily passed Fairchild qualification requirements.

Results/Discussion for Qual Plan Number - Q20080495

Test: (High Temperature Reverse Bias) Conditions: 150C, -240V Standard: JESD22-A108				
Lot	Device	Setpoint	Result	Failure Code
Q20080495AAHTRB	MMBTA92	500-HOURS	0/77	
		1000-HOURS	0/77	
Q20080495ABHTRB		168-HOURS	0/77	
		500-HOURS	0/77	
		1000-HOURS	0/77	
Q20080495ACHTRB		168-HOURS	0/77	
		500-HOURS	0/77	
		1000-HOURS	0/77	

Test: (Highly Accelerated Stress Test) Conditions: 85%RH, 130C, -42V Standard: JESD22-A110				
Lot	Device	Setpoint	Result	Failure Code
Q20080495AAHAST1	MMBTA92	96-HOURS	0/77	
Test: (Power Cycle) Conditions: Delta 100CC, 2 Min cycle Standard: MIL-STD-750-1036				
Lot	Device	Setpoint	Result	Failure Code
Q20080495AAPRCL	MMBTA92	5000-CYCLES	0/77	
		10000-CYCLES	0/77	
Test: (Precondition) Conditions: Standard: JESD22-A113				
Lot	Device	Setpoint	Result	Failure Code
Q20080495AAPCNL1A	MMBTA92		0/231	
Test: (Temperature Cycle) Conditions: -65C, 150C Standard: JESD22-A104				
Lot	Device	Setpoint	Result	Failure Code
Q20080495AATMCL1	MMBTA92	100-CYCLES	0/77	
		500-CYCLES	0/77	

Product Id Description : This change is applicable to Pr76 Bipolar product with non-gold doped process. See affected devices in the attached FSID list below.

Affected FSIDs :

MMBTA92	MMBTA92_D87Z	MPSA92RA
MPSA92	MPSA92_D26Z	MPSA92_D27Z
MPSA92_D74Z	MPSA92_D75Z	MPSA92_D81Z
MPSA92_J22Z	MPSA93	MPSA93_D26Z
MPSA93_D27Z	MPSA93_D74Z	PZTA92