Date Created : 2007/04/19 Date Issued On : 2007/06/06

PCN# : **Q2071605**

DESIGN/PROCESS CHANGE NOTIFICATION -- FINAL

Update affected FSID based on Final PCN Q1071103

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:

<u>Technical Contact:</u> Name: Zhu, Adams

E-mail: Adams.Zhu@notes.fairchildsemi.com

Phone:

PCN Originator: Name: Sun, Brian

E-mail: Brian.Sun@fairchildsemi.com

Phone:

Implementation of change:

Expected 1st Device Shipment Date: 2007/12/07

Earliest Year/Work Week of Changed Product: 0750

Change Type Description: Bond Wire Material Composition

Description of Change (From): Au wire bonding in SPM3/3V package

Description of Change (To): Copper wire bonding in SPM3/3V package

Reason for Change: Add alternative raw material with same quality standard to decrease

material shortage risk

Qual/REL Plan Numbers: Q20070092

Qualification:

Passed and meet the FSC rel performance requirement

Change From

Bonding Wire	Diameter	Metal content	Elongation
Au	1.3mil	99.99%AU	38%

Change To

Bonding Wire	Diameter	Metal content	Elongation	
Copper	1.0mil	Cu	8—16%	

Results/Discussion

Test: (Autoclave)								
Lot		Device		96-HOURS		Failure	Failure Code	
Q20070092AAACLV		FSBS10CH60			0/20			
Test: (High Tempe	rature Sto	rage Life)						
Lot	Device		168-HOL	JRS	500-HOURS	1000-HOUR	S Fai	lure Code
Q20070092AAHTSL	FSBS100	CH60	0/20					
					0/20			
						0/20		
Test: (Temperature		/ Biased Te	· .	IDC	roo HOUDO	4000 110110	o =-:	l O- d-
Lot	Device		168-HOL	JRS	500-HOURS	1000-HOUR	S Fai	lure Code
Q20070092AATHBT			0/20					
					0/20			
						0/20		
Test: -40C, 125C (Temperat	ure Cycle)						
Lot	Devi	ice		100-CY	'CLES	200-CYCLES	Fai	lure Code
Q20070092AATMCL2	FSB	S10CH60		0/20				
Q20070092AATMCL2	FSB	S10CH60				0/20		

Product Id Description :

Affected FSIDs:

FCAS50SN60	FCBS0550	FCBS0650
FPAB30PH60	FPAB50PH60	FPDB20PH60
FPDB30PH60	FPDB50PH60	FSAB20PH60
FSB32560	FSBB15CH60	FSBB15CH60A
FSBB15CH60F	FSBB20CH60	FSBB20CH60A
FSBB20CH60F	FSBB30CH60	FSBB30CH60A
FSBB30CH60F	FSBS10CH60	FSBS10CH60A
FSBS10CH60F	FSBS10CH60L	FSBS10CH60T
FSBS10SM60I	FSBS15CH60	FSBS15CH60A
FSBS15CH60AA	FSBS15CH60F	FSBS15CH60FL
FSBS15CH60L	FSBS15CH60T	FSBS15SM60I
FSBS3CH60	FSBS3CH60A	FSBS5CH60
FSBS5CH60A	FSBS5CH60AS	FSBS8CH60T