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 Code
Q20070092AAACLV	FSBS10CH	160	0/20		
Test: (High Tempe	rature Storage Life	•)			
Lot	Device	168-HOURS	500-HOUR	S 1000-HOUR	S Failure Code
Q20070092AAHTSL	FSBS10CH60	0/20			
			0/20		
				0/20	
Test: (Temperature	P Humidity Biased Device	Test) 168-HOURS	500-HOUR	S 1000-HOUR	S Failure Code
Q20070092AATHBT		0/20			
			0/20		
				0/20	
Test: -40C, 125C (	Temperature Cycle	9)			
Lot	Device	100	-CYCLES	200-CYCLES	Failure Code
Q20070092AATMCL2	FSBS10CH60	0/20	)		
Q20070092AATMCL2	FSBS10CH60			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