Date Created : 2007/03/13 Date Issued On : 2007/04/06

PCN#: Q1071103

#### **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:

<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: 2007/12/08

Earliest Year/Work Week of Changed Product: 0750

Change Type Description: Bond Wire Material Composition

Description of Change (From): Au wire bonding in SPM27CA/DA/EA/FA package

Description of Change (To): Copper wire bonding in SPM27CA/DA/EA/FA 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 FSBS10CH60		96-HOURS		Failure Code		
Q20070092AAACLV				0/20				
Test: (High Tempe	rature Sto	rage Life)						
Lot	Device		168-HO	JRS	500-HOURS	5 10	000-HOURS	Failure Code
Q20070092AAHTSL	FSBS100	CH60	0/20					
					0/20			
						0,	/20	
Test: (Temperature	Device	/ Diaseu Te	168-HO	URS	500-HOURS	6 10	000-HOURS	Failure Code
Q20070092AATHBT			0/20					
					0/20			
						0/	/20	
Test: -40C, 125C (	Temperat	ure Cycle)						
Lot	Devi	evice		100-CYCLES 20		200-C	YCLES	Failure Code
Q20070092AATMCL2	FSB	S10CH60		0/20				
Q20070092AATMCL2	FSB	S10CH60				0/20		

# Product Id Description :

## Affected FSIDs:

FCAS50SN60	FPAB30PH60	FPAB50PH60
FPDB20PH60	FPDB30PH60	FPDB50PH60
FSAB20PH60	FSBB15CH60	FSBB15CH60F
FSBB20CH60	FSBB20CH60F	FSBB30CH60