

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:

Technical Contact:

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	3--8%

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	FSBS10CH60	0/20			
Test: (High Temperature Storage Life)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070092AAHTSL	FSBS10CH60	0/20			
			0/20		
				0/20	
Test: (Temperature Humidity Biased Test)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070092AATHBT		0/20			
			0/20		
				0/20	
Test: -40C, 125C (Temperature Cycle)					
Lot	Device	100-CYCLES	200-CYCLES	Failure Code	
Q20070092AATMCL2	FSBS10CH60	0/20			
Q20070092AATMCL2	FSBS10CH60		0/20		

Product Id Description :

Affected FSIDs :

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