Date Created : 2011/04/15 Date Issued On : 2011/04/28

PCN#: **P145A**

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: Patel, Rasik

E-mail: rasik.patel@fairchildsemi.com

Phone: 408-822-2564

PCN Originator:

Name: Kalabkova, Ivana

E-mail: ivana.kalabkova@fairchildsemi.com

Phone: 408-822-2187

Implementation of change:

Expected 1st Device Shipment Date: 2011/07/26

Earliest Year/Work Week of Changed Product: 3111

Change Type Description: Bond Wire Material Composition, Wafer Diameter

Description of Change (From): Selected products are currently fabricated at Fairchild's facility in South Portland using the 6-inch CS80 line and assembled with 1.5mil gold (Au) bond wire.

Description of Change (To): Selected products will be fabricated at Fairchild's facility in South Portland using the 8-inch CS80 line and assembled with 2mil copper (Cu) bond wire.

Reason for Change: The 6-inch line in South Portland is scheduled to be closed by Q3 2011. This change will have no impact on product quality, reliability, electrical, visual or mechanical performance and affected products will remain fully compliant to all published specifications. Please contact your local Customer Quality Engineer within 30 days of receipt of this notification if you require any additional data or samples. This change is planned to take effect in 90 calendar days from the date of this notification. Please work with your local Fairchild Sales representative to manage your inventory of unchanged product if your evaluation of this change will require more than 90 calendar days.

Qual/REL Plan Number(s): Q20090198

Qualification:

All reliability tests defined in the Qualification Plan No. Q20090198 have been completed without failures.

Results/Discussion for Qual Plan Number(s): Q20090198

Test: (Autoclave) | Conditions: 100%RH, 121C | Standard: JESD22-A102

Lot	Device		96-HOURS		Failure Code	
Q20090198AAACLVC	FAN21SV06M	PX	0/77			
Q20090198ABACLVC	FAN21SV06M		0/77			
Q20090198ACACLVC		FAN21SV06MPX				
			1001/ Standara	N. IECD22 C40	1	
Test: (Charged Device		mullions. TC		JESD22-C10		
Lot Device		DV	Results		Failure Code	
Q20090198AACDMC	FAN21SV06M		0/3			
Test: (Dynamic Op L	ife) Conditions: 12	25C, 0V Sta	andard: JESD2	2-A108		
Lot	Device	168-HOUR	S 500-HOURS	1000-HOUR	S Failure Code	
Q20090198AADOPLC	FAN21SV06MPX	0/77				
			0/77			
				0/77		
Test: (High Tempera	ture Storage Life)	Conditions:	150C Standa	rd: JESD22-A1	103	
Lot	Device	168-HOUR				
Q20090198AAHTSLC		0/77				
		'	0/77			
				0/77		
Q20090198ABHTSLC		0/77				
			0/77			
				0/77		
Q20090198ACHTSLC		0/77				
			0/77			
				0/77		
Test: (Highly Acceler	ated Stress Test)	Conditions:	85%RH, 130C	, 0V Standard	d: JESD22-A110	
Lot	Device		96-HOURS		Failure Code	
Q20090198AAHAST1C FAN21SV06MPX		PX	1/45			
Q20090198ABHAST1C			0/45			
Q20090198ACHAST1C			0/45			
Test: (Human Body N	Model ESD) Condi	itions: 2000	V Standard: J	ESD22-A114		
Lot Device			Results		Failure Code	
Q20090198AAHBMC		AN21SV06MPX				
Test: (Latch-Up) Co			0/3 ESD 79		<u> </u>	
		Siandard: Ji			Failure Oads	
Lot Device Q20090198AALUC FAN21SV06MPX		DV	Results		Failure Code	
			0/3			
Test: (Precondition)	Conditions: Stand	dard: JESD2	22-A113			
Lot Device			Results		Failure Code	
Q20090198AAPCNL1AC			0/211			
Q20090198ABPCNL1AC FAN21SV06MPX			0/211			
Q20090198ACPCNL1AC	FAN21SV06M	PX	0/211			
Test: (Temperature C	Cycle) Conditions:	-65C, 150C	Standard: JE	SD22-A104		
Lot	Device		00-CYCLES	500-CYCLES	Failure Code	
Q20090198AATMCL1C	FAN21SV06MPX	0/	77			
Q20090198AATMCL1C	FAN21SV06MPX			2/77		
Q20090198ABTMCL1C	FAN21SV06MPX	0/	77			
Q20090198ABTMCL1C	FAN21SV06MPX			0/77		
Q20090198ACTMCL1C	FAN21SV06MPX	0/	77			
Q20090198ACTMCL1C	FAN21SV06MPX			0/77		

Product Id Description : Fairchild Semiconductor's selected devices. Refer to the attached FSIDs for complete listing.

Affected FSIDs:

FAN21SV04EMPX FAN21SV04MPX	
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