

Date Created : 2007/05/31
Date Issued On : 2007/06/13
PCN# : Q2072203

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:

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PCN Originator:
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Implementation of change:
Expected 1st Device Shipment Date: 2007/05/31

Earliest Year/Work Week of Changed Product: 0722

Change Type Description: Die Attach Material, Plating Material Change

Description of Change (From): Current Plating Coverage: Full NiPdAu Plating. Current Die attach Material: Tin-Antimony (Sn8.5Sb).

Description of Change (To): Proposed Plating Coverage: Selective NiPdAu plating on the leadposts and exposed pad areas. The rest of the areas will be bare Copper. Proposed Die attach Material: High-Lead (92.5Pb5Sn2.5Ag).

Reason for Change : Fairchild Semiconductor intends to qualify a modified plating coverage on the current leadframe design and change to a High-Lead die attach material as part of its continuing effort to optimize the POWER 56 package manufacturing process.

Qual/REL Plan Numbers : Q20070229

Qualification :

This change will not affect the device specifications, quality and reliability. All qualification tests passed the defined qualification plan requirement and this Die Attach Material and Plating Material Change is now released for production.

Results/Discussion

Test: (Autoclave)			
Lot	Device	96-HOURS	Failure Code
Q20070229AAACL	FDMS8660S	0/77	
Q20070229ABACL	FDMS8660S	0/77	

Q20070229ACACLV	FDMS8660S	0/77		
Test: (Power Cycle)				
Lot	Device	5000-CYCLES	Failure Code	
Q20070229AAPRCL	FDMS8660S	0/77		
Q20070229ABPRCL	FDMS8660S	0/77		
Q20070229ACPRCL	FDMS8660S	0/77		
Test: -65C, 150C (Temperature Cycle)				
Lot	Device	100-CYCLES	500-CYCLES	Failure Code
Q20070229AATMCL1	FDMS8660S	0/77		
Q20070229AATMCL1	FDMS8660S		0/77	
Q20070229ABTMCL1	FDMS8660S	0/77		
Q20070229ABTMCL1	FDMS8660S		0/77	
Q20070229ACTMCL1	FDMS8660S	0/77		
Q20070229ACTMCL1	FDMS8660S		0/77	
Test: 130C (Highly Accelerated Stress Test)				
Lot	Device	96-HOURS	Failure Code	
Q20070229AAHAST1	FDMS8660S	0/77		
Q20070229ABHAST1	FDMS8660S	0/77		
Q20070229ACHAST1	FDMS8660S	0/77		
Test: MSL(1), PKG(Small), PeakTemp(260c), Cycles(3) (Precondition)				
Lot	Device	Results	Failure Code	
Q20070229AAPCNL1A	FDMS8660S	0/231		
Q20070229ABPCNL1A	FDMS8660S	0/231		
Q20070229ACPCNL1A	FDMS8660S	0/231		

Product Id Description : All MOSFET products assembled in Power 56 package will be affected by this change.

Affected FSIDs :

FDMS8660S	FDMS8670S	FDMS8672S
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