

Date Created : **2007/03/30**
Date Issued On : **2007/05/11**
PCN# : **Q1071307**

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:

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Implementation of change:

Expected 1st Device Shipment Date: 2007/11/24

Earliest Year/Work Week of Changed Product: D0744

Change Type Description: Die Attach Method

Description of Change (From): TiNiAg Backmetal and eutectic die attach process

Description of Change (To): TiNiAg backmetal and skip cure adhesive die attach process

Reason for Change : Process and Device improvement

Qual/REL Plan Numbers : Q20070126

Qualification :

Adhesive Die Attach and TiNiAg backmetal Qualification builds for SSOT-6L pass assembly level and reliability stress test requirements. Adhesive Die Attach process and TiNiAg backmetal is recommended for use on SSOT-6L package.

Results/Discussion

Test: (Autoclave)					
Lot	Device	96-HOURS	Failure Code		
Q20070126AAACLV	FDC6401N	0/77			
Q20070126ABACLV	FDC6401N	0/77			
Q20070126ACACLV	FDC6401N	0/77			
Test: (Power Cycle)					
Lot	Device	5000-CYCLES	10000-CYCLES	15000-CYCLES	Failure Code
Q20070126AAPRCL	FDC6401N	0/77			
		0/77			

				0/77	
Q20070126ABPRCL		0/77			
			0/77		
				0/77	
Q20070126ACPRCL		0/77			
			0/77		
				0/77	
Test: -65C, 150C (Temperature Cycle)					
Lot	Device	100-CYCLES	500-CYCLES	1000	Failure Code
Q20070126AATMCL1		0/77			
			0/77		
				0/77	
Q20070126ABTMCL1		0/77			
			0/77		
				0/77	
Q20070126ACTMCL1		0/77			
			0/77		
				0/77	
Test: 130C (Highly Accelerated Stress Test)					
Lot	Device	96-HOURS		Failure Code	
Q20070126AAHAST1	FDC6401N	0/77			
Q20070126ABHAST1	FDC6401N	0/77			
Q20070126ACHAST1	FDC6401N	0/77			
Test: MSL(1), PKG(Small), PeakTemp(260c), Cycles(3) (Precondition)					
Lot	Device	Results		Failure Code	
Q20070126AAPCNL1A	FDC6401N	0/308			
Q20070126ABPCNL1A	FDC6401N	0/308			
Q20070126ACPCNL1A	FDC6401N	0/308			

Product Id Description :

Affected FSIDs :

FDC608PZ	FDC6301N	FDC6301N_NL
FDC6302P	FDC6302P_NL	FDC6303N
FDC6303N_NL	FDC6304P	FDC6320C
FDC6320C_NL	FDC6321C	FDC6321C_NL
FDC634P	FDC634P_F073	FDC634P_NF073
FDC634P_NL	FDC636P	FDC636P_F073
FDC638P	FDC638P_F073	FDC638P_NBAD009
FDC638P_NF073	FDC638P_NL	FDC638P_SBAD006A
FDC640P	FDC640P_F073	FDC640P_NBAD004A
FDC640P_NF073	FDC640P_NL	FDC642P
FDC642P_F073	FDC642P_NB4N006	FDC642P_NF073
FDC642P_NL	FDC654P	FDC654P_F073
FDC654P_NBGT006	FDC654P_NBGT007	FDC654P_NF073
FDC654P_NL	FDC655BN	FDC655BN_F073
FDC655BN_NBNN007	FDC655BN_NL	FDC658AP
NDC7003P		