Date Created : **2008/08/05**
Date Issued On : **2008/08/27**
PCN# : **Q1080802-A**

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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Implementation of change:
Expected 1st Device Shipment Date: 2009/01/01

Earliest Year/Work Week of Changed Product: 0836

Change Type Description: Mold Compound

Description of Change (From): VSOP package assembly at all FSC approved manufacturing locations using non Green mold compound, Nitto MP-8000AN.

Description of Change (To): VSOP package assembly at all FSC approved manufacturing locations using Green mold compound, Sumitomo G600.

Reason for Change : Green initiative by Fairchild Semiconductor. Fairchild Semiconductor is dedicated to being a good corporate citizen. All Fairchild Semiconductor products are 2nd level interconnect lead-free and RoHS compliance. The referenced material changes have been made to provide a Full Green (Halogen Free Flame Retardant) package. For additional details on the corporate wide green initiative please visit our Web site at : http://www.fairchildsemi.com/company/green/index.html Manufacturing will occur at the same assembly facilities producing the current non-green products. Package outline drawings of the VSOP package remain un-changed. Green products will be fully compliant to all published data sheet specifications and will be interchangeable with current non-green product. Quality and reliability will remain at the highest standards already demonstrated with Fairchild's existing products.

Qual/REL Plan Numbers : Q20070506

Qualification :

Attached are the Reliability Test results to qualify the Green conversion of the VSOP package assembled at Hana-Ayutthaya.

Change From

Assembly Site	Hana
Leadframe	Samsung C194 with Sn plated
Die Attach	Ablestik 84-1LMISR4
Wire	Au, 0.8 mil
Mold Compound	Nitto MP-8000AN

Change To

Assembly Site	Hana
Leadframe	Samsung C194 with Sn plated
Die Attach	Ablestik 84-1LMISR4
Wire	Au, 0.8 mil
Mold Compound	Sumitomo G600

Results/Discussion for Qual Plan NumberQ20070506

Test: (Gate Leakage Negative)

Lot	Device	Results	Failure Code
Q20070506AAGATE-	GTLP2T152K8X	0/3	
Q20070506ABGATE-	GTLP2T152K8X	0/3	
Q20070506BAGATE-	FSUSB31K8X	0/3	
Q20070506CAGATE-	FSA1259K8X	0/3	
Q20070506CBGATE-	FSA1259K8X	0/3	
Q20070506CCGATE-	FSA1259K8X	0/3	

Test: (Gate Leakage Positive)

Lot	Device	Results	Failure Code
Q20070506AAGATE+	GTLP2T152K8X	0/3	
Q20070506ABGATE+	GTLP2T152K8X	0/3	
Q20070506BAGATE+	FSUSB31K8X	0/3	
Q20070506CAGATE+	FSA1259K8X	0/3	
Q20070506CBGATE+	FSA1259K8X	0/3	
Q20070506CCGATE+	FSA1259K8X	0/3	

Test: (High Temperature Storage Life)

Lot	Device	168-HOURS	1000-HOURS	Failure Code
Q20070506AAHTSL	GTLP2T152K8X	0/77		
Q20070506AAHTSL	GTLP2T152K8X		0/77	
Q20070506ABHTSL	GTLP2T152K8X	0/77		
Q20070506ABHTSL	GTLP2T152K8X		0/77	
Q20070506BAHTSL	FSUSB31K8X	0/77		
Q20070506BAHTSL	FSUSB31K8X		0/77	
Q20070506CAHTSL	FSA1259K8X	0/77		
Q20070506CAHTSL	FSA1259K8X		0/77	
Q20070506CBHTSL	FSA1259K8X	0/77		
Q20070506CBHTSL	FSA1259K8X		0/77	
Q20070506CCHTSL	FSA1259K8X	0/77		
Q20070506CCHTSL	FSA1259K8X		0/77	
Q20070506DAHTSL	NC7NZ04K8X	0/77		
Q20070506DAHTSL	NC7NZ04K8X		0/77	

Test: (Static Op Life)

Lot	Device	168-HOURS	1000-HOURS	Failure Code
Q20070506AASOPL1	GTLP2T152K8X	0/77		
Q20070506AASOPL1	GTLP2T152K8X		0/77	
Q20070506ABSOPL1	GTLP2T152K8X	0/77		
Q20070506ABSOPL1	GTLP2T152K8X		0/77	
Q20070506BASOPL1	FSUSB31K8X	0/77		
Q20070506BASOPL1	FSUSB31K8X		0/77	
Q20070506CASOPL1	FSA1259K8X	0/77		
Q20070506CASOPL1	FSA1259K8X		0/77	
Q20070506CBSOPL1	FSA1259K8X	0/77		

Q20070506CBSOPL1	FSA1259K8X		0/77	
Q20070506CCSOPL1	FSA1259K8X	0/77		
Q20070506CCSOPL1	FSA1259K8X		0/77	

Test: -65C, 150C (Temperature Cycle)

Lot	Device	500-CYCLES	Failure Code
Q20070506AATMCL1	GTLP2T152K8X	0/77	
Q20070506ABTMCL1	GTLP2T152K8X	0/77	
Q20070506BATMCL1	FSUSB31K8X	0/77	
Q20070506CATMCL1	FSA1259K8X	0/77	
Q20070506CBTMCL1	FSA1259K8X	0/77	
Q20070506CCTMCL1	FSA1259K8X	0/77	
Q20070506DATMCL1	NC7NZ04K8X	0/77	

Test: 110C (Highly Accelerated Stress Test)

Lot	Device	264-HOURS	Failure Code
Q20070506AAHAST2	GTLP2T152K8X	0/45	
Q20070506ABHAST2	GTLP2T152K8X	0/45	
Q20070506BAHAST2	FSUSB31K8X	0/45	
Q20070506CAHAST2	FSA1259K8X	0/45	
Q20070506CBHAST2	FSA1259K8X	0/45	
Q20070506CCHAST2	FSA1259K8X	0/45	
Q20070506DAHAST2	NC7NZ04K8X	0/45	

Test: MSL(1), PKG(Small), PeakTemp(260c), Cycles(3) (Precondition)

Lot	Device	Results	Failure Code
Q20070506AAPCNL1A	GTLP2T152K8X	0/276	
Q20070506ABPCNL1A	GTLP2T152K8X	0/276	
Q20070506BAPCNL1A	FSUSB31K8X	0/276	
Q20070506CAPCNL1A	FSA1259K8X	0/276	
Q20070506CBPCNL1A	FSA1259K8X	0/276	
Q20070506CCPCNL1A	FSA1259K8X	0/276	
Q20070506DAPCNL1A	NC7NZ04K8X	0/199	

Product Id Description : This change notification covers Fairchild Semiconductor?s VSOP 8-Lead package assembled at Hana. Please refer to the affected FSID listing below for specific part numbers.

Affected FSIDs :

FIN1017K8X	FIN1018K8X	FIN1027K8X
FIN1101K8X	FSA266K8X	FSA3357K8X
FSUSB31K8X	FSUSB46K8X	GTLP1B151K8X
GTLP2T152K8X	NC7NP04K8X	NC7NP14K8X
NC7NP34K8X	NC7NZ04K8X	NC7NZ14K8X
NC7NZ17K8X	NC7NZ34K8X	NC7NZU04K8X
NC7SP74K8X	NC7SV74K8X	NC7SZ74K8X
NC7WB3125K8X	NC7WB66K8X	NC7WBD3125K8X
NC7WBD3306K8X	NC7WP00K8X	NC7WP02K8X
NC7WP08K8X	NC7WP125K8X	NC7WP240K8X
NC7WP32K8X	NC7WP86K8X	NC7WV125K8X
NC7WZ00K8X	NC7WZ02K8X	NC7WZ08K8X
NC7WZ125K8X	NC7WZ126K8X	NC7WZ132K8X
NC7WZ240K8X	NC7WZ241K8X	NC7WZ32K8X
NC7WZ38K8X	NC7WZ86K8X	