

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: 2011/01/23

Earliest Year/Work Week of Changed Product: D1105

Change Type Description: Mold Compound

Description of Change (From): SSOT-3 products assembled with AMC-2RC or KTMC5200G mold compound.

Description of Change (To): SSOT-3 products assembled with AMC-2RC, KTMC5200G or CK5000A mold compound.

Reason for Change : This is a change in mold compound used for Fairchild products assembled in the SSOT-3 package. The qualified alternate mold compound is a low halogen material with improved thermal-mechanical properties. 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. Products incorporating this change may be shipped interchangeably with existing unchanged products. 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. Please contact your local Customer Quality Engineer or Fairchild Sales representatives within 30 days of receipt of this notification if you require any additional data or samples.

Qual/REL Plan Number(s): Q20090640, Q20100459

Qualification :

The mold compound used for SSOT-3 package have met all the Fairchild Semiconductor's qualification requirements.

Change To

**PACKAGE: SSOT-3**

**DETAILS OF CHANGES:**

ITEM	CHANGE FROM	CHANGE TO
MOLD COMPOUND	COOKSON AMC-2RC	KTMC 5200G / COOKSON CK5000A

**Results/Discussion for Qual Plan Number(s): Q20090640**

Test: (Autoclave)   Conditions: 100%RH, 121C   Standard: JESD22-A102					
Lot	Device	96-HOURS		Failure Code	
Q20090640AAACLV	FDN338P	0/77			
Q20090640ABACLV	FDN338P	0/77			
Test: (High Humidity, High Temp, Rev. Bias)   Conditions: 85%RH, 85C, 80% BvV   Standard: JESD22-A101B					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20090640AAH3TRB	FDN338P	0/77			
			0/77		
				0/77	
Q20090640ABH3TRB		0/77			
			0/77		
				0/77	
Test: (High Temperature Gate Bias)   Conditions: 150C, 100% Bv V   Standard: JESD22-A108					
Lot	Device	500-HOURS		Failure Code	
Q20090640BAHTGB	FDN371N	0/77			
Q20090640BAHTGB	FDN371N			0/77	
Test: (High Temperature Gate Bias)   Conditions: 150C, 100% VgV   Standard: JESD22-A108					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20090640AAHTGB	FDN338P	0/77			
			0/77		
				0/77	
Q20090640ABHTGB		0/77			
			0/77		
				0/77	
Test: (High Temperature Gate Bias)   Conditions: 150C, 80% BvV   Standard: JESD22-A108					
Lot	Device	500-HOURS		Failure Code	
Q20090640BAHTGB	FDN371N	0/77			
Q20090640BAHTGB	FDN371N			0/77	
Test: (High Temperature Reverse Bias)   Conditions: 150C, 80% Bv V   Standard: JESD22-A108					
Lot	Device	500-HOURS		Failure Code	
Q20090640BAHTRB	FDN371N	0/77			
Q20090640BAHTRB	FDN371N			0/77	
Test: (High Temperature Reverse Bias)   Conditions: 150C, 80% BvV   Standard: JESD22-A108					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20090640AAHTRB	FDN338P	0/77			
			0/77		
				0/77	
Q20090640ABHTRB		0/77			
			0/77		
				0/77	
Test: (Highly Accelerated Stress Test)   Conditions: 85%RH, 110C, 80% Bv V   Standard: JESD22-A110					
Lot	Device	132-HOURS	134-HOURS	264-HOURS	Failure Code
Q20090640AAHAST2			0/77		
				0/77	
Q20090640ABHAST2			0/77		
				0/77	
Q20090640BAHAST2	FDN371N	0/77			

			0/77	
Test: (Power Cycle)   Conditions: Delta 100C, 2 Min cycle   Standard: MIL-STD-750-1036				
Lot	Device	5000-CYCLES	10000-CYCLES	Failure Code
Q20090640AAPRCL	FDN338P	0/77		
Q20090640AAPRCL	FDN338P		0/77	
Q20090640ABPRCL	FDN338P	0/77		
Q20090640ABPRCL	FDN338P		0/77	
Test: (Power Cycle)   Conditions: Delta 100CC, 2 Min cycle   Standard: MIL-STD-750-1036				
Lot	Device	5000-CYCLES	10000-CYCLES	Failure Code
Q20090640BAPRCL	FDN371N	0/77		
Q20090640BAPRCL	FDN371N		0/77	
Test: (Precondition)   Conditions:   Standard: JESD22-A113				
Lot	Device	Results		Failure Code
Q20090640AAPCNL1A	FDN338P	0/308		
Q20090640ABPCNL1A	FDN338P	0/308		
Q20090640BAPCNL1A	FDN371N	0/308		
Test: (Resistance to Solder Heat)   Conditions:   Standard: JESD22-B106				
Lot	Device	Results		Failure Code
Q20090640AARSDH	FDN338P	0/30		
Q20090640ABRSDH	FDN338P	0/30		
Q20090640BARSDH	FDN371N	0/30		
Test: (Temperature Cycle)   Conditions: -65C, 150C   Standard: JESD22-A104				
Lot	Device	100-CYCLES	500-CYCLES	Failure Code
Q20090640AATMCL1	FDN338P	0/77		
Q20090640AATMCL1	FDN338P		0/77	
Q20090640ABTMCL1	FDN338P	0/77		
Q20090640ABTMCL1	FDN338P		0/77	
Q20090640BATMCL1	FDN371N	0/77		
Q20090640BATMCL1	FDN371N		0/77	
Test: (Unbiased HAST)   Conditions: 85%RH, 130C   Standard: JESD22-A118				
Lot	Device	96-HOURS		Failure Code
Q20090640BAUHAST1	FDN371N	0/77		

## Results/Discussion for Qual Plan Number(s): Q20100459

Test: (Autoclave)   Conditions: 100%RH, 121C   Standard: JESD22-A102					
Lot	Device	96-HOURS		Failure Code	
Q20100459AAACLV	FDN338P	0/77			
Test: (High Humidity, High Temp, Rev. Bias)   Conditions: 85%RH, 85C, 16V   Standard: JESD22-A101B					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20100459AAH3TRB	FDN338P	0/77			
			0/77		
				0/77	
Q20100459ABH3TRB		0/77			
			0/77		
				0/77	
Test: (High Temperature Gate Bias)   Conditions: 150C, 12V   Standard: JESD22-A108					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20100459BAHTGB	FDN371N	0/77			
			0/77		
				0/77	
Test: (High Temperature Gate Bias)   Conditions: 150C, 8V   Standard: JESD22-A108					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20100459AAHTGB	FDN338P	0/77			
			0/77		
				0/77	
Q20100459ABHTGB		0/77			
			0/77		
				0/77	
Test: (High Temperature Reverse Bias)   Conditions: 150C, 16V   Standard: JESD22-A108					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20100459AAHTRB		0/77			
			0/77		

			0/77	
Q20100459ABHTRB		0/77		
			0/77	
			0/77	
Q20100459BAHTRB	FDN371N	0/77		
			0/77	
			0/77	
Test: (Highly Accelerated Stress Test)   Conditions: 85%RH, 110C, 16V   Standard: JESD22-A110				
Lot	Device	132-HOURS	264-HOURS	Failure Code
Q20100459AAHAST2	FDN338P	0/77		
Q20100459AAHAST2	FDN338P		0/77	
Q20100459BAHAST2	FDN371N	0/77		
Q20100459BAHAST2	FDN371N		0/77	
Test: (Power Cycle)   Conditions: Delta 100°C, 2 Min cycle   Standard: MIL-STD-750-1036				
Lot	Device	5000-CYCLES	10000-CYCLES	Failure Code
Q20100459AAPRCL	FDN338P	0/77		
Q20100459AAPRCL	FDN338P		0/77	
Q20100459ABPRCL	FDN338P	0/77		
Q20100459ABPRCL	FDN338P		0/77	
Q20100459BAPRCL	FDN371N	0/77		
Q20100459BAPRCL	FDN371N		0/77	
Test: (Precondition)   Conditions:   Standard: JESD22-A113				
Lot	Device	Results	Failure Code	
Q20100459AAPCNL1A	FDN338P	0/308		
Q20100459ABPCNL1A	FDN338P	0/231		
Q20100459BAPCNL1A	FDN371N	0/231		
Test: (Resistance to Solder Heat)   Conditions:   Standard: JESD22-B106				
Lot	Device	Results	Failure Code	
Q20100459AARSDH	FDN338P	0/30		
Q20100459ABRSDH	FDN338P	0/30		
Q20100459BARSDH	FDN371N	0/30		
Test: (Temperature Cycle)   Conditions: -65C, 150C   Standard: JESD22-A104				
Lot	Device	100-CYCLES	500-CYCLES	Failure Code
Q20100459AATMCL1	FDN338P	0/77		
Q20100459AATMCL1	FDN338P		0/77	
Q20100459ABTMCL1	FDN338P	0/77		
Q20100459ABTMCL1	FDN338P		0/77	
Q20100459BATMCL1	FDN371N	0/77		
Q20100459BATMCL1	FDN371N		0/77	
Test: (Unbiased HAST)   Conditions: 100%RH, 121C   Standard: JESD22-A118				
Lot	Device	96-HOURS	Failure Code	
Q20100459ABUHAST1	FDN338P	0/77		
Q20100459BAUHAST1	FDN371N	0/77		

Product Id Description : This final notification covers all Fairchild Semiconductor devices in SSOT-3 package. For a complete listing of products covered in the PCN, please refer to the affected FSID listing.

**Affected FSIDs :**

0332_B03005A	FDN302P	FDN302P_F095
FDN302P_G	FDN304PZ	FDN304P
FDN304P_F095	FDN306P	FDN306P_F095
FDN306P_G	FDN308P	FDN327N
FDN327N_G	FDN335N	FDN335N_GF095
FDN336P	FDN336P_G	FDN337N
FDN337N_G	FDN338P	FDN338P_SB82280
FDN339AN	FDN3400	FDN340P
FDN340P_F095	FDN340P_G	FDN342P
FDN352AP	FDN352AP_G	FDN352AP_NBAL001

FDN357N	FDN358P	FDN358P_GF095
FDN358P_G	FDN359AN	FDN359BN
FDN359BN_F095	FDN360P	FDN360P_F095
FDN360P_G	FDN360P_NBGT003B	FDN361BN
FDN361BN_G	FDN371N	FDN372S
FDN372S_F095	FDN5618P	FDN5618P_F095
FDN5618P_SB4N007	FDN5630	FDN5630_F095
FDN5630_G	FDN5630_NB5N008A	FMMT449
FMMT549	FSB560A	FSB560
FSB619	FSB649	FSB660A
FSB749	MMBF5434	MMBFJ108
MMBFJ110	MMBTA28	NDS331N
NDS332P	NDS351AN	NDS351AN_G
NDS351AN_SBNL001	NDS351N	NDS352AP
NDS355AN	NDS355AN_G	NDS355AN_NB9L007A
NDS355N	NDS356AP	NDS356AP_NB8L005A