

Date Created : 2008/07/29
Date Issued On : 2008/08/20
PCN# : Q3083103

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:

Name: Song, Heeyung
E-mail: SONGHY@fairchildsemi.co.kr
Phone: 82-32-680-1216

PCN Originator:

Name: Song, Heeyung
E-mail: SONGHY@fairchildsemi.co.kr
Phone: 82-32-680-1216

Implementation of change:

Expected 1st Device Shipment Date: 2008/11/20

Earliest Year/Work Week of Changed Product: 0847

Change Type Description: Mold Compound

Description of Change (From): Non-Green EMC name: KTMC1060SC(Vendor: KCC)

Description of Change (To): Green EMC name: KTMC1050GS(Vendor: KCC)

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 affected products 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 : Q20080344

Qualification :

Qualification of Green Mold compound for SOT523F and SOT-563F packages.

Change From

Bill of Materials:

Location	AUK_KOREA	AUK_KOREA
Package	SOT-523F	SOT-563F
Pin count	3-Leads	6-Leads
Lead frame	CAC92-SH	CAC92-SH
Die attach	Eutectic	Eutectic
Wire	Gold	Gold
EMC	KTMC1060SC (Vendor:KCC)	KTMC1060SC (Vendor:KCC)
Lead Finish	Matte Sn	Matte Sn

Change To

Bill of Materials:

Location	AUK_KOREA	AUK_KOREA
Package	SOT-523F	SOT-563F
Pin count	3-Leads	6-Leads
Lead frame	CAC92-SH	CAC92-SH
Die attach	Eutectic	Eutectic
Wire	Gold	Gold
EMC	KTMC1050GS (Vendor:KCC)	KTMC1050GS (Vendor:KCC)
Lead Finish	Matte Sn	Matte Sn

Results/Discussion for Qual Plan Number Q20080344

Test: (Autoclave)					
Lot	Device	96-HOURS			Failure Code
Q20080344AAACLV	FDY2000PZ	0/79			
Q20080344BAACLV	FDY300NZ	0/79			
Q20080344CAACLV	FDY400CZ	0/79			
Test: (High Temperature Gate Bias)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20080344AAHTGB	FDY2000PZ		0/79		
				0/79	

Q20080344BAHTGB	FDY300NZ	0/79			
			0/79		
				0/79	
Q20080344CAHTGB	FDY4000CZ	0/79			
			0/79		
				0/79	
Test: (High Temperature Reverse Bias)					
Lot	Device	500-HOURS	1000-HOURS	Failure Code	
Q20080344AAHTRB	FDY2000PZ	0/79			
Q20080344AAHTRB	FDY2000PZ		0/79		
Q20080344BAHTRB	FDY300NZ	0/79			
Q20080344BAHTRB	FDY300NZ		0/79		
Q20080344CAHTRB	FDY4000CZ	0/79			
Q20080344CAHTRB	FDY4000CZ		0/79		
Test: (Power Cycle)					
Lot	Device	5000-CYCLES	Failure Code		
Q20080344AAPRCL	FDY2000PZ	0/79			
Q20080344BAPRCL	FDY300NZ	0/79			
Q20080344CAPRCL	FDY4000CZ	0/79			
Test: (Temperature Humidity Biased Test)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20080344AATHBT	FDY2000PZ	0/79			
			0/79		
				0/79	
Q20080344BATHBT	FDY300NZ	0/79			
			0/79		
				0/79	
Q20080344CATHBT	FDY4000CZ	0/79			
			0/79		
				0/79	
Test: -65C, 150C (Temperature Cycle)					
Lot	Device	200-CYCLES	500-CYCLES	Failure Code	
Q20080344AATMCL1	FDY2000PZ	0/79			
Q20080344AATMCL1	FDY2000PZ		0/79		
Q20080344BATMCL1	FDY300NZ	0/79			
Q20080344BATMCL1	FDY300NZ		0/79		
Q20080344CATMCL1	FDY4000CZ	0/79			
Q20080344CATMCL1	FDY4000CZ		0/79		

Product Id Description : All devices packaged with SOT-523F and SOT-563F.

Affected FSIDs :

2N7002T	2N7002VA	2N7002V
FDY100PZ	FDY101PZ	FDY2000PZ
FDY2001PZ	FDY3000NZ	FDY3001NZ
FDY300NZ	FDY301NZ	FDY302NZ
FDY4000CZ	FDY4001CZ	FJY3001R
FJY3002R	FJY3003R	FJY3004R
FJY3005R	FJY3006R	FJY3007R
FJY3008R	FJY3009R	FJY3010R
FJY3011R	FJY3012R	FJY3013R
FJY3014R	FJY3015R	FJY4001R
FJY4002R	FJY4003R	FJY4004R
FJY4005R	FJY4006R	FJY4007R
FJY4008R	FJY4009R	FJY4010R
FJY4011R	FJY4012R	FJY4013R
FJY4014R	FJYF2906TF	MMBT2222AT
MMBT3904T	MMBT3906T	