

Date Created : 2007/09/26
Date Issued On : 2007/10/03
PCN# : Q2071603-B

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: 2007/10/29

Earliest Year/Work Week of Changed Product: 0744

Change Type Description: Alternate Assembly/Test Location/Qualification

Description of Change (From): AUK in Korea

Description of Change (To): Jiangsu Changjiang Electronics Technology (JCET) in China is being qualified as an additional SOT89 package assembly/test site, There is no difference in package dimension, process and electrical specification between the two sites. (Marketing outline drawing refer to MKT-MA03C)

Reason for Change : Alternative Assembly/Test site to increase capacity

Qual/REL Plan Numbers : Q20070104

Qualification :

Passed and meet the Fairchild reliability performance requirement

Change To

BOM comparison result

SOT89	Current AUK Korea	Alternative source JCET China
Lead frame	PMC90	KFC/Ning Bo KangQian
Die attach	Eutectic	Eutectic
	Ag epoxy/843-1/ABLESTIK	Ag epoxy/84-1/ABLESTIK
	Solder 93.5Pb5Sn1.5Ag (HANYANG PRECISION)	Solder 92.5Pb5.0Sn2.5Ag (WuXi LiHong)
Wire	Au wire 1.0/1.2/2.0 mil (M.K Electron)	Au wire 1.0/1.2/2.0 mil (Heraeus)
EMC	KTMC1050TM /KCC	EME7026N/SUMITOMO
Plating	Matte tin (Ishihara)	Matte Tin (XinYang SYT843)

Results/Discussion

Test: (Autoclave)					
Lot	Device	96-HOURS	Failure Code		
Q20070104AAACLV	FJC2383OTF	0/77			
Q20070104BACLV	FJC2383OTF	0/77			
Q20070104BAACLV	FJC1386RTF	0/77			
Q20070104CAACLV	KA78L12AMTF	0/77			
Q20070104CBACLV	KA78L12AMTF	0/77			
Q20070104DAACLV	LM431SCCMLX	0/77			
Test: (High Temperature Op Life)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070104CAHTOL	KA78L12AMTF	0/77			
			0/77		
				0/77	
Q20070104CBHTOL		0/77			
			0/77		
				0/77	
Q20070104DAHTOL	LM431SCCMLX	0/77			
			0/77		
				0/77	
Test: (High Temperature Reverse Bias)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070104AAHTRB	FJC2383OTF	0/77			
			0/77		
				0/77	
Q20070104ABHTRB		0/77			
			0/77		
				0/77	
Q20070104BAHTRB	FJC1386RTF	0/77			
			0/77		
				0/77	
Test: (High Temperature Storage Life)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070104CAHTSL	KA78L12AMTF	0/77			
			0/77		
				0/77	
Q20070104CBHTSL		0/77			
			0/77		

				0/77	
Q20070104DAHTSL	LM431SCCMLX	0/77			
			0/77		
				0/77	

Test: (Power Cycle)

Lot	Device	5000-CYCLES	10000-CYCLES	Failure Code
Q20070104AAPRCL	FJC2383OTF	0/77		
Q20070104AAPRCL	FJC2383OTF		0/77	
Q20070104ABPRCL	FJC2383OTF	0/77		
Q20070104ABPRCL	FJC2383OTF		0/77	
Q20070104BAPRCL	FJC1386RTF	0/77		
Q20070104BAPRCL	FJC1386RTF		0/77	

Test: (Temperature Humidity Biased Test)

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070104AATHBT	FJC2383OTF	0/77			
			0/77		
				0/77	
Q20070104ABTHBT		0/77			
			0/77		
				0/77	
Q20070104BATHBT	FJC1386RTF	0/77			
			0/77		
				0/77	
Q20070104CATHBT	KA78L12AMTF	0/77			
			0/77		
				0/77	
Q20070104CBTHBT		0/77			
			0/77		
				0/77	
Q20070104DATHBT	LM431SCCMLX	0/77			
			0/77		
				0/77	

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

Lot	Device	200-CYCLES	500-CYCLES	Failure Code
Q20070104AATMCL1	FJC2383OTF	0/77		
Q20070104AATMCL1	FJC2383OTF		0/77	
Q20070104ABTMCL1	FJC2383OTF	0/77		
Q20070104ABTMCL1	FJC2383OTF		0/77	
Q20070104BATMCL1	FJC1386RTF	0/77		
Q20070104BATMCL1	FJC1386RTF		0/77	
Q20070104CATMCL1	KA78L12AMTF	0/77		
Q20070104CATMCL1	KA78L12AMTF		0/77	
Q20070104CBTMCL1	KA78L12AMTF	0/77		
Q20070104CBTMCL1	KA78L12AMTF		0/77	
Q20070104DATMCL1	LM431SCCMLX	0/77		
Q20070104DATMCL1	LM431SCCMLX		0/77	

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

Lot	Device	Results	Failure Code
Q20070104AAPCNL1A	FJC2383OTF	0/308	
Q20070104ABPCNL1A	FJC2383OTF	0/308	
Q20070104BAPCNL1A	FJC1386RTF	0/385	
Q20070104CAPCNL1A	KA78L12AMTF	0/231	
Q20070104CBPCNL1A	KA78L12AMTF	0/231	
Q20070104DAPCNL1A	LM431SCCMLX	0/231	

Product Id Description :

Affected FSIDs :

FJC1308PTF	FJC1308QTF	FJC1308RTF
FJC1386PTF	FJC1386QTF	FJC1386RTF
FJC1386RTF_NL	FJC1963QTF	FJC1963QTF_NL
FJC1963RTF	FJC1963STF	FJC2098QTF
FJC2098RTF	FJC2383OTF	FJC2383OTF_NL

FJC2383YTF	FJC2383YTF_NL	FJC690TF
FJC790TF	KA75250MTF	KA75270MTF
KA75290MTF	KA75310MTF	KA75420MTF
KA75420MTF_NL	KA75450MTF	KA78L05AMTF
KA78L08AMTF	KA78L12AMTF	KA78L12AMTF_NL
KA79L05AMTF	KSA1201OTF	KSA1201YTF
KSA1203OTF	KSA1203YTF	KSB1121STF
KSB1121STF_NL	KSB1121STM	KSB1121TTF
KSB798GTF	KSB798YTF	KSC2881OTF
KSC2881YTF	KSC2881YTF_NL	KSC2883OTF
KSC2883YTF	KSC2883YTF_NL	KSC2982ATF
KSC2982BTF	KSC2982BTF_NL	KSC2982CTF
KSC2982DTF	KSD1621RTF	KSD1621STF
KSD1621STF_NL	KSD1621TTF	KSD1621TTF_NL
KSD1621UTF	LM431SACMLX	LM431SBCMLX
LM431SCCMLX	MC78L05ACHX	MC78L08ACHX
MC79L05ACHX	MC79L05ACHX_NL	