

DESIGN/PROCESS CHANGE NOTIFICATION

This is to inform you that a change is being made to the products listed below.

Unless otherwise indicated in the details of this notification, the identified 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 within 30 days of receipt of this notification if you require any additional data or samples. Alternatively, you may send an email request for data, samples or other information to PCNSupport@fairchildsemi.com.

Implementation of change:

Expected First Shipment Date for Changed Product : Feb. 08, 2012

Expected First Date Code of Changed Product :1152

Last Date for Shipment of Unchanged Product : Feb. 08, 2012

Description of Change (From) :

SOT23/923 packages under the following assembly sites using non green mold compound

Mfg site/Subcon	Package	Mold Compound change from	Qual Plan
FSC China Subcontractor	SOT23	E'Dale ELL2K1	Q20110492
FSC Cebu,Philippines	SOT23	KTMC3433NA	Q20070464
FSC China Subcontractor	SOT23	KTMC1050TM	Q20070406
FSC Korea Subcontractor	SOT923	KTMC1060SC	Q20080449

Description of Change (To) :

Products assembled in the SOT23/923 packages using the new green Mold Compound as shown below

Mfg site/Subcon	Package	Mold Compound change to	Qual Plan
FSC China Subcontractor	SOT23	CK5000A / ELER-8-100HFE	Q20110492

FSC Cebu,Philippines	SOT23	CK5000A	Q20070464
FSC China Subcontractor	SOT23	KTMC1050GR	Q20070406
FSC Korea Subcontractor	SOT923	KTMC1050GS	Q20080449

Reason for Change:

This is a change to mold compounds used for Fairchild products assembled in SOT23/923 packages. The qualified green Mold Compounds are low halogen material with improved thermal & mechanical properties. There are no changes to the currently approved assembly facilities or any other materials used to produce these products. Package outline drawings of the affected products remain un-changed. Affected products will be fully compliant to all published data sheet specifications. Quality and reliability will remain at the highest standards already demonstrated with Fairchild's existing SOT23/923 products. If you require data or samples to evaluate this change, please contact Fairchild Semiconductor within 30 days of receipt of this notification.

Affected Product(s):

1049 B10209A	1649 B16063A	2G49 B2G005A
2K49 B2K002A	2K49 NB2K001	2L49 B2L003A
2N7002	2N7002K	2N7002MTF
2N7002_D87Z	2N7002_G	2V49 NB2V001
2V49 NB2V003D	3G49 B3G005A	3K49 B3K002A
4249 NB42102E	4249 NB42112B	5149 NB51374B
5249 B52069B	5449 NB54014	5449 NB54015
5X49 BG7002B	6549 NB65115	7449 B74042A
7449 B74043A	9V49 NB9V004	BAR43
BAR43C	BAR43S	BAS16
BAS16_D87Z	BAS19	BAS20
BAS21	BAS29	BAS31
BAS31_D87Z	BAS35	BAS35_G
BAT54	BAT54A	BAT54A_G
BAT54C	BAT54C_G	BAT54S
BAT54S_D87Z	BAT54S_G	BAT54S_NBKA001
BAT54_D87Z	BAT54_G	BAV23S
BAV23S_G	BAV70	BAV74
BAV99	BAV99_D87Z	BAV99_G
BAW56	BAW56_G	BAW74
BAW74_D87Z	BC80716MTF	BC80725MTF
BC80740MTF	BC80840MTF	BC81716MTF
BC81725MTF	BC81740MTF	BC81816MTF
BC81825MTF	BC81840MTF	BC846AMTF
BC846BMTF	BC846CMTF	BC847AMTF
BC847BMTF	BC847CMTF	BC848BMTF
BC848CMTF	BC850AMTF	BC850CMTF
BC856BMTF	BC856CMTF	BC857AMTF
BC857BMTF	BC858BMTF	BC858CMTF
BC859BMTF	BC860BMTF	BCV26
BCV27	BCV71	BCV72
BCW61BMTF	BCW66G	BCW68G
BCW71	BCW89	BCX17
BCX19	BCX70G	BCX70H
BCX70J	BCX70K	BCX71J
BCX71K	BSR14	BSR15
BSR16	BSR17A	BSR18A
BSR56	BSR57	BSR58
BSS123	BSS138	BSS138K
BSS138_D87Z	BSS138_G	BSS63

Affected Product(s):

BSS64	BSS84	BSS84 G
BSV52	BZX84C10	BZX84C11
BZX84C12	BZX84C13	BZX84C15
BZX84C16	BZX84C18	BZX84C20
BZX84C20_D87Z	BZX84C22	BZX84C24
BZX84C27	BZX84C30	BZX84C33
BZX84C3V3	BZX84C3V6	BZX84C3V9
BZX84C4V3	BZX84C4V3_D87Z	BZX84C4V7
BZX84C5V1	BZX84C5V6	BZX84C6V2
BZX84C6V8	BZX84C6V8_G	BZX84C7V5
BZX84C8V2	BZX84C9V1	FDV301N
FDV301N_G	FDV301N_NB9V003	FDV302P
FDV303N	FDV304P	FDV304P_D87Z
FDV305N	FJV1845EMTF	FJV1845FMTF
FJV1845PMTF	FJV3101RMTF	FJV3102RMTF
FJV3103RMTF	FJV3104RMTF	FJV3105RMTF
FJV3110RMTF	FJV3113RMTF	FJV3114RMTF
FJV3115RMTF	FJV4101RMTF	FJV4102RMTF
FJV4103RMTF	FJV4104RMTF	FJV4113RMTF
FJV4114RMTF	FJV42MTF	FJV92MTF
FJV992FMTF	FJV992PMTF	FLLD261
FYV0704SMTF	KSA1182YMTF	KSA1298YMTF
KSA812YMTF	KSC1623GMTF	KSC1623LMTF
KSC1623YMTF	KSC2223YMTF	KSC3265YMTF
KST05MTF	KST06MTF	KST10MTF
KST13MTF	KST14MTF	KST2222AMTF
KST2222AMTF_G	KST2907AMTF	KST2907AMTF_G
KST3904LGEMTF	KST3904MTF	KST3906MTF
KST42MTF	KST42MTF_D87Z	KST43MTF
KST4401MTF	KST4401MTF_G	KST4403MTF
KST4403MTF_G	KST5087MTF	KST5401MTF
KST5550MTF	KST5551MTF	KST55MTF
KST56MTF	KST92MTF	MMBD1201
MMBD1202	MMBD1203	MMBD1204
MMBD1205	MMBD1401	MMBD1401A
MMBD1403	MMBD1403A	MMBD1404
MMBD1404A	MMBD1405	MMBD1405A
MMBD1501A	MMBD1503A	MMBD1503A_D87Z
MMBD1504A	MMBD1505A	MMBD1703A
MMBD1705A	MMBD2838	MMBD4148

Affected Product(s):

MMBD4148CA	MMBD4148CA_F136	MMBD4148CC
MMBD4148CC_G	MMBD4148SE	MMBD4148_D87Z
MMBD4148_G	MMBD4448	MMBD6050
MMBD7000	MMBD7000_G	MMBD914
MMBD914_G	MMBF102	MMBF170
MMBF170_G	MMBF4091	MMBF4092
MMBF4093	MMBF4117	MMBF4117_G
MMBF4118	MMBF4119	MMBF4391
MMBF4392	MMBF4393	MMBF4416
MMBF4416A	MMBF5103	MMBF5457
MMBF5458	MMBF5459	MMBF5460
MMBF5461	MMBF5462	MMBF5484
MMBF5485	MMBF5485_NB50012	MMBF5486
MMBFJ111	MMBFJ112	MMBFJ112_SB51338
MMBFJ113	MMBFJ175	MMBFJ176
MMBFJ177	MMBFJ177_G	MMBFJ201
MMBFJ201_G	MMBFJ202	MMBFJ211
MMBFJ270	MMBFJ271	MMBFJ305
MMBFJ309	MMBFJ310	MMBT100
MMBT100_SB10217	MMBT200	MMBT200_SB68107
MMBT2222	MMBT2222A	MMBT2222A_D87Z
MMBT2222A_F065	MMBT2222A_G	MMBT2369
MMBT2369A	MMBT2484	MMBT2907
MMBT2907A	MMBT2907A_D87Z	MMBT2907A_G
MMBT2907_D87Z	MMBT3640	MMBT3646
MMBT3904	MMBT3904SL	MMBT3904_D87Z
MMBT3904_G	MMBT3904_L98Z	MMBT3906
MMBT3906SL	MMBT3906_D87Z	MMBT3906_G
MMBT4124	MMBT4126	MMBT4354
MMBT4400	MMBT4401	MMBT4401K_G
MMBT4401_D87Z	MMBT4401_F065	MMBT4401_G
MMBT4403	MMBT4403_D87Z	MMBT4403_F065
MMBT5087	MMBT5087_NB68106	MMBT5088
MMBT5088_NB10216	MMBT5089	MMBT5179
MMBT5210	MMBT5401	MMBT5401_D87Z
MMBT5401_SB74046	MMBT5550	MMBT5551
MMBT5771	MMBT5962	MMBT6427
MMBT6428	MMBT6428_SB10220	MMBT6515
MMBT918	MMBTA05	MMBTA06
MMBTA13	MMBTA14	MMBTA14_NB05232

Affected Product(s):

MMBTA42	MMBTA42 G	MMBTA55
MMBTA56	MMBTA63	MMBTA64
MMBTA92	MMBTH10	MMBTH10RG
MMBTH11	MMBTH24	MMBTH81
MMBZ5221B	MMBZ5223B	MMBZ5226B
MMBZ5226B G	MMBZ5227B	MMBZ5228B
MMBZ5228B G	MMBZ5229B	MMBZ5230B
MMBZ5231B	MMBZ5232B	MMBZ5232BR
MMBZ5233B	MMBZ5234B	MMBZ5235B
MMBZ5236B	MMBZ5237B	MMBZ5238B
MMBZ5238B G	MMBZ5239B	MMBZ5240B
MMBZ5241B	MMBZ5242B	MMBZ5243B
MMBZ5244B	MMBZ5245B	MMBZ5246B
MMBZ5247B	MMBZ5248B	MMBZ5249B
MMBZ5250B	MMBZ5251B	MMBZ5252B
MMBZ5253B	MMBZ5254B	MMBZ5255B
MMBZ5256B	MMBZ5257B	MMBZ5V6B
MMBZ5V6B G	NDS0605	NDS0610
NDS0610 G	NDS7002A	

Qualification Plan	Device	Package	Description	No. of Lots
Q20110492	BAT54C	SOT23	Green EMC CK5000A	1
	MMBT3904	SOT23	Green EMC CK5000A	1
	FDV301N	SOT23	Green EMC CK5000A	1
	BAT54C	SOT23	Green EMC ELER-8-100HFE	1
	MMBT3904	SOT23	Green EMC ELER-8-100HFE	1
	FDV301N	SOT23	Green EMC ELER-8-100HFE	1

Qualification Plan	Device	Package	Process	No. of Lots
Q20110492 – Sub Group 1 (Green EMC CK5000A)	BAT54C	SOT23	DIODE	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113	5 Cycles 24 hrs	0/154
High Humidity,High Temp,Rev.Bias	85C, 85%RH, 80% BV	JESD22-A101B	168,500,1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% BV	JESD22-A108	168 , 500 , 1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	5000cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20110492 – Sub Group 2 (Green EMC CK5000A)	MMBT3904	SOT23	BIPLR	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113	5 Cycles 24 hrs	0/154
High Humidity,High Temp,Rev.Bias	85C, 85%RH, 80% BV	JESD22-A101B	168,500,1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% BV	JESD22-A108	168 , 500 , 1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	5000cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20110492 – Sub Group 3 (Green EMC CK5000A)	FDV301N	SOT23	05.0 N/DMOS	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113	5 Cycles 24 hrs	0/154
High Humidity,High Temp,Rev.Bias	85C, 85%RH, 80% BV	JESD22-A101B	168,500,1000 hrs	0/77

High Temperature Reverse Bias	150C, 80% BV	JESD22-A108	168 , 500 , 1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	5000cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20110492 – Sub Group 4 (Green EMC ELER-8-100HFE)	BAT54C	SOT23	DIODE	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113	5 Cycles 24 hrs	0/154
High Humidity,High Temp,Rev.Bias	85C, 85%RH, 80% BV	JESD22-A101B	168,500,1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% BV	JESD22-A108	168 , 500 , 1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	5000cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20110492 – Sub Group 5 (Green EMC ELER-8-100HFE)	MMBT3904	SOT23	BIPLR	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113	5 Cycles 24 hrs	0/154
High Humidity,High Temp,Rev.Bias	85C, 85%RH, 80% BV	JESD22-A101B	168,500,1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% BV	JESD22-A108	168 , 500 , 1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	5000cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20110492 – Sub Group 6 (Green EMC ELER-8-100HFE)	FDV301N	SOT23	05.0 N/DMOS	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113	5 Cycles 24 hrs	0/154
High Humidity,High Temp,Rev.Bias	85C, 85%RH, 80% BV	JESD22-A101B	168,500,1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% BV	JESD22-A108	168 , 500 , 1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	5000cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20070406	KST42MTF	SOT23	SS TR	3

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113	5 Cycles 24 hrs	0/231
Autoclave	121C, 100%RH	JESD22-A102	96hrs	0/231
High Temperature Reverse Bias	150C, 240V	JESD-A108	168,500,1000 hrs	0/231
High Temperature Storage Life	150C	JESD22-A103	168,500,1000 hrs	0/231
Power Cycle	Delta 100CC, 2Min cycle	MIL-STD-750-1036	1000, 5000 cycles	0/231
Temperature Cycle	-65C, 150C	JESD22-A104	200, 500 Cycles	0/231
Temperature Humidity Biased Test	85C, 85%RH, 100V	JESD22-A101	168,500,1000 hrs	0/231

Qualification Plan	Device	Package	Process	No. of Lots
Q20080449	MMBT3904SL	SOT923F	SS TR	3

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113	5 Cycles 24 hrs	0/154
High Temperature Reverse Bias	150C, 48V	JESD-A108	168,500,1000 hrs	0/231
Power Cycle	Delta 100CC, 2Min cycle	MIL-STD-750-1036	1000, 5000 cycles	0/231
Temperature Cycle	-65C, 150C	JESD22-A104	100, 500 Cycles	0/231
Temperature Humidity Biased Test	85C, 85%RH, 48V	JESD22-A101	168,500,1000 hrs	0/231

Qualification Plan	Device	Package	Description	No. of Lots
Q20070415	MMBT2907A	SOT23	Green EMC CK5000A	1
	BAT54S	SOT23	Green EMC CK5000A	1
	2N7002	SOT23	Green EMC CK5000A	1

Qualification Plan	Device	Package	Process	No. of Lots
Q20070415 – Sub Group 1 (Green EMC CK5000A)	MMBT2907A	SOT23	SS TR	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113	5 Cycles 24 hrs	0/231
Temperature Humidity Bias Test	85C, 85%RH, 10V	JESD22-A101B	168, 500,1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% BV	JESD22-A108	168, 500,1000 hrs	0/77
High Temperature Gate Bias	150C, 100%VGS	JESD22-A108-B	168, 500,1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle on/off	Mil Std 750 Method 1037 JESD22-A105	5000, 10000 cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	100, 500 cycles	0/77
Autoclave	121°C, 15psi, 100%RH	JESD22-A102	96 hrs	0/77
Unbiased Highly Accelerated Stress	85%RH, 130C	JESD22-A102	96 hrs	0/77

Test 1				
Highly Accelerated Stress Test 2	85%RH, 110C, 80% BV	JESD22-A110-B JESD22A-101	96 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20070415 – Sub Group 2 (Green EMC CK5000A)	BAT54S	SOT23	DIODE	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113	5 Cycles 24 hrs	0/154
Temperature Humidity Bias Test	85C, 85%RH, 10V	JESD22-A101B	168, 500,1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% BV	JESD22-A108	168, 500,1000 hrs	0/77
High Temperature Gate Bias	150C, 100%VGS	JESD22-A108-B	168, 500,1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle on/off	Mil Std 750 Method 1037 JESD22-A105	5000, 10000 cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	100, 500 cycles	0/77
Autoclave	121°C, 15psi, 100%RH	JESD22-A102	96 hrs	0/77
Unbiased Highly Accelerated Stress Test 1	85%RH, 130C	JESD22-A102	96 hrs	0/77
Highly Accelerated Stress Test 2	85%RH, 110C, 80% BV	JESD22-A110-B JESD22A-101	96 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20070415 – Sub Group 3 (Green EMC CK5000A)	2N7002	SOT23	DMOS	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113	5 Cycles 24 hrs	0/231
Temperature Humidity Bias Test	85C, 85%RH, 10V	JESD22-A101B	168, 500,1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% BV	JESD22-A108	168, 500,1000 hrs	0/77
High Temperature Gate Bias	150C, 100%VGS	JESD22-A108-B	168, 500,1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle on/off	Mil Std 750 Method 1037 JESD22-A105	5000, 10000 cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	100, 500 cycles	0/77
Autoclave	121°C, 15psi, 100%RH	JESD22-A102	96 hrs	0/77
Unbiased Highly Accelerated Stress Test 1	85%RH, 130C	JESD22-A102	96 hrs	0/77
Highly Accelerated Stress Test 2	85%RH, 110C, 80% BV	JESD22-A110-B JESD22A-101	96 hrs	0/77