

PCN# : P4C8AAB

Issue Date : Apr. 06, 2015

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: Jul. 05, 2015

Expected First Date Code of Changed Product :1527

Description of Change (From):

Single manufacturing source located in Suzhou China

Description of Change (To):

Alternative manufacturing source located in Shantou China

	Lead Frame	/ Substrate	Die attach		Mold Compound	
Package	Change from	Change to	Change from	Change to	Change from	Change to
	Material	Material	Material	Material	Material	Material
TO264	Copper	Copper	SN80/AG20	SN80/AG20	SL7300HFM	SL7300HFM
		Copper Copper	PB92.5,SN5AG2.5	SN80/AG20	SG8200DL	SG8200DL SL7300HFM
TO247	Copper				SL7300HFM	
					EME6600CS	SE7 3001 II W
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		1			KTMC1030NFE	SG8200DL
ТОЗР	Copper	Copper	PB93.5/SN5/AG1.5	SN80/AG20	EME6600CS	SL7300HXM
					SL7300HXM	SI7200DX2
					SI7200DX2]

Reason for Change:

Manufacturing flexibility. Package outline drawings of the affected products remain unchanged. All of the affected products are fully compliant to all published data sheet and this change will have no impact on their electrical performance. Quality and reliability will remain at the highest standards already demonstrated with Fairchild's existing. Please do not delay in requesting any samples required to approved within the timeframe noted. Please contact your local Fairchild Sales representative to place orders for a sufficient volume of unchanged product if your approval process will require more than 90 days.

Affected Product(s): Please refer to the list of affected products in the addendum attached in the PCN email you received. This list is based on an analysis of your company's procurement history.

Qualification Plan	Device	Package	Process	No. of Lots
Q20140411	FGL40N120ANDTU	TO264	Assembly+Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse	Ta=150°C,80% BV rating	JESD22-A108	1000 hrs	0/77
Bias Test				
High Temperature Gate Bias	Ta=150°C,100% VGS rating	JESD22-A108-B	1000 hrs	0/77
Power Cycle	Delta Tj = 100C, 5 min on, 5	Mil Std 750	6000 cycles	0/77
	min off	Method 1037		
		JESD22-A105		
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C to 150 C, 30 min/cycle	JESD22-A104	500 cycles	0/77
Highly Assoluted Stress Test	130°C 85%, 80% rated	JESD22-A110-B	96 hrs	0/77
Highly Accelerated Stress Test	BV,MAX=42V			
Resistance to solder heat	270°C	JESD22-B106	15sec	0/30

Qualification Plan	Device	Package	Process	No. of Lots
Q20140411	FDL100N50F	TO264	Assembly+Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse	Ta=150°C,80% BV rating	JESD22-A108	1000 hrs	0/77
Bias Test				
High Temperature Gate Bias	Ta=150°C,100% VGS rating	JESD22-A108-B	1000 hrs	0/77
Power Cycle	Delta Tj = 100C, 5 min on, 5	Mil Std 750	6000 cycles	0/77
	min off	Method 1037		
		JESD22-A105		
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C to 150 C, 30 min/cycle	JESD22-A104	500 cycles	0/77
Highly Appolarated Strong Toot	130°C 85%, 80% rated	JESD22-A110-B	96 hrs	0/77
Highly Accelerated Stress Test	BV,MAX=42V			
Resistance to solder heat	270°C	JESD22-B106	15sec	0/30

Qualification Plan	Device	Package	Process	No. of Lots
Q20140411	2SC5200OTU	TO264	Assembly+Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse	Ta=150°C,80% BV rating	JESD22-A108	1000 hrs	0/77
Bias Test				
Power Cycle	Delta Tj = 100C, 5 min on, 5	Mil Std 750	6000 cycles	0/77
	min off	Method 1037		
		JESD22-A105		
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C to 150 C, 30 min/cycle	JESD22-A104	500 cycles	0/77
Highly Accelerated Stress Test	130°C 85%, 80% rated	JESD22-A110-B	96 hrs	0/77
Highly Accelerated Stress Test	BV,MAX=42V			
Autoclave	121 °C, 15psi, 100% RH	JESD22-A102	96 hrs	0/77
Resistance to solder heat	270°C	JESD22-B106	15sec	0/30

Qualification Plan	Device	Package	Process	No. of Lots
Q20140410	FGH40T100SMD	TO247	Assembly+Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse	Ta=175°C,80% BV rating	JESD22-A108	1000 hrs	0/77
Bias Test				
High Temperature Gate Bias	Ta=175°C,100% VGS rating	JESD22-A108-B	1000 hrs	0/77
Power Cycle	Delta Tj = 100C, 5 min on, 5	Mil Std 750	6000 cycles	0/77
•	min off	Method 1037		
		JESD22-A105		
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C to 150 C, 30 min/cycle	JESD22-A104	500 cycles	0/77
Highly Assoluted Stress Test	130°C 85%, 80% rated	JESD22-A110-B	96 hrs	0/77
Highly Accelerated Stress Test	BV,MAX=42V			
Resistance to solder heat	270°C	JESD22-B106	15sec	0/30

Qualification Plan	Device	Package	Process	No. of Lots
Q20140410	FCH76N60NF	TO247	Assembly+Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse	Ta=150°C,80% BV rating	JESD22-A108	1000 hrs	0/77
Bias Test				
High Temperature Gate Bias	Ta=150°C,100% VGS rating	JESD22-A108-B	1000 hrs	0/77
Power Cycle	Delta Tj = 100C, 5 min on, 5	Mil Std 750	6000 cycles	0/77
	min off	Method 1037		
		JESD22-A105		
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C to 150 C, 30 min/cycle	JESD22-A104	500 cycles	0/77
Highly Accelerated Stress Test	130°C 85%, 80% rated	JESD22-A110-B	96 hrs	0/77
nighty Accelerated Stress Test	BV,MAX=42V			
Resistance to solder heat	270°C	JESD22-B106	15sec	0/30

Qualification Plan	Device	Package	Process	No. of Lots
Q20140410	FGH30S130P	TO247	Assembly+Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse	Ta=175°C,80% BV rating	JESD22-A108	1000 hrs	0/77
Bias Test				
High Temperature Gate Bias	Ta=175°C,100% VGS rating	JESD22-A108-B	1000 hrs	0/77
Power Cycle	Delta Tj = 100C, 5 min on, 5	Mil Std 750	6000 cycles	0/77
	min off	Method 1037		
		JESD22-A105		
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C to 150 C, 30 min/cycle	JESD22-A104	500 cycles	0/77
Highly Appolarated Strong Toot	130°C 85%, 80% rated	JESD22-A110-B	96 hrs	0/77
Highly Accelerated Stress Test	BV,MAX=42V			
Resistance to solder heat	270°C	JESD22-B106	15sec	0/30

Qualification Plan	Device	Package	Process	No. of Lots
Q20150030	FGA20S140P	TO3P	Assembly+Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse	Ta=175°C,80% BV rating	JESD22-A108	1000 hrs	0/77
Bias Test				
High Temperature Gate Bias	Ta=175°C,100% VGS rating	JESD22-A108-B	1000 hrs	0/77
Power Cycle	Delta Tj = 100C, 5 min on, 5	Mil Std 750	6000 cycles	0/77
	min off	Method 1037	-	
		JESD22-A105		
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C to 150 C, 30 min/cycle	JESD22-A104	500 cycles	0/77
Highly Assoluted Stress Test	130°C 85%, 80% rated	JESD22-A110-B	96 hrs	0/77
Highly Accelerated Stress Test	BV,MAX=42V			
Resistance to solder heat	270°C	JESD22-B106	15sec	0/30

Qualification Plan	Device	Package	Process	No. of Lots
Q20150030	FGA25N120ANTDTU_F109	TO3P	Assembly+Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Gate Bias	Ta=175°C,100% VGS rating	JESD22-A108-B	1000 hrs	0/77
Power Cycle	Delta Tj = 100C, 5 min on, 5 min	Mil Std 750	6000 cycles	0/77
	off	Method 1037		
		JESD22-A105		
High Temperature Storage	150°C	JESD22-A103	1000 hrs	0/77
Life				
Temperature Cycle	-65C to 150 C, 30 min/cycle	JESD22-A104	500 cycles	0/77
Highly Accelerated Stress	130°C 85%, 80% rated	JESD22-A110-B	96 hrs	0/77
Test	BV,MAX=42V			
Resistance to solder heat	270°C	JESD22-B106	15sec	0/30

Qualification Plan	Device	Package	Process	No. of Lots
Q20150030	FCA76N60N	TO3P	Assembly+Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse	Ta=175°C,80% BV rating	JESD22-A108	1000 hrs	0/77
Bias Test				
High Temperature Gate Bias	Ta=175°C,100% VGS rating	JESD22-A108-B	1000 hrs	0/77
Power Cycle	Delta Tj = 100C, 5 min on, 5	Mil Std 750	6000 cycles	0/77
	min off	Method 1037		
		JESD22-A105		
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C to 150 C, 30 min/cycle	JESD22-A104	500 cycles	0/77
Highly Appolarated Stress Tost	130°C 85%, 80% rated	JESD22-A110-B	96 hrs	0/77
Highly Accelerated Stress Test	BV,MAX=42V			
Resistance to solder heat	270°C	JESD22-B106	15sec	0/30

Qualification Plan	Device	Package	Process	No. of Lots
Q20150030	KSE13009LTU	TO3P	Assembly+Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse Bias	Ta=175°C,80% BV rating	JESD22-A108	1000 hrs	0/77
Test				
Power Cycle	Delta Tj = 100C, 5 min on,	Mil Std 750	6000 cycles	0/77
	5 min off	Method 1037		
		JESD22-A105		
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C to 150 C, 30 min/cycle	JESD22-A104	500 cycles	0/77
Highly Appalarated Street Toot	130°C 85%, 80% rated	JESD22-A110-B	96 hrs	0/77
Highly Accelerated Stress Test	BV,MAX=42V			
Autoclave	121 °C, 15psi, 100% RH	JESD22-A102	96 hrs	0/77
Resistance to solder heat	270°C	JESD22-B106	15sec	0/30