

PCN# : P525AAB

Issue Date : Apr. 14, 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. 13, 2015

Expected First Date Code of Changed Product :1528

Description of Change (From):

Current assembly and test of TO92-3L package at Lamphun, Thailand

	From
Site/ Location	Lamphun, Thailand
Leadframe	Bare Cu Leadframe
	Non-green: KTMC 1020NK Green: KTMC 1050GMT
Plating	Solder Dip, SnAgCu

Description of Change (To):

Assembly/ Test location at Dalian, China

	То	
Site/ Location	Dalian, China	

Leadframe	Bare Cu and Ag Plated Leadframe
	Non-green: EME-2500D3 Green: SG8100GS
Plating	Solder Dip, 100%Sn

### Reason for Change:

To provide supply flexibility for the TO92-3L package. This change has no impact on product quality, reliability, electrical, visual or mechanical performance and affected products will remain fully compliant to all published specifications.

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.

<b>Qualification Plan</b>	Device	Package	Process	No. of Lots
Q20150075	MPS751	TO92-3L	BIPOLAR, PRPA	1

Test Description:	Condition:	Standard:	Duration:	Results:
Temperature Cycle	-65°C to 150°C,15 min per extremes	JESD22-A104	500 cycles	0/77
High Temperature Reverse Bias	150°C, Bias 80% of BV rating	JESD22-A108	1000 hrs	0/77
Highly Accelerated Stress Test	110°C, RH 85%, Bias 80% of BV rating or 42V max	JESD22-A101	264 hrs	0/45
Autoclave	121°C, RH 100%, 15psi	JESD22-A102	96hrs	0/77
Power Cycle	T on/off = 2min, Delta Tj of 100°C	JESD22-A105	10000 cycles	0/77

<b>Qualification Plan</b>	Device	<b>Package</b>	Process		No. of Lots
Q20150075	PN100_G	TO92-3L	BIPOLAR,	PR10	1

Test Description: Condition:		Standard:	Duration:	Results:
Temperature Cycle	-65°C to 150°C,15 min per extremes	JESD22-A104	500 cycles	0/77
High Temperature Reverse Bias	150°C, Bias 80% of BV rating	JESD22-A108	1000 hrs	0/77
Highly Accelerated Stress Test	110°C, RH 85%, Bias 80% of BV rating or 42V max	JESD22-A101	264 hrs	0/45
Autoclave	121°C, RH 100%, 15psi	JESD22-A102	96hrs	0/77
Power Cycle	T on/off = 2min, Delta Tj of 100°C	JESD22-A105	10000 cycles	0/77

<b>Qualification Plan</b>	Device	Package	Process	No. of Lots
Q20150075	BS170	TO92-3L	DMOS, 9GA	1

Test Description:	Condition:	Standard:	Duration:	Results:
Temperature Cycle	-65°C to 150°C,15 min per extremes	JESD22-A104	500 cycles	0/77
High Temperature Reverse Bias	150°C, Bias 80% of BV rating	JESD22-A108	1000 hrs	0/77
High Temperature Gate Bias	150°C, Vr=100% of Vgss	JESD22-A108	1000 hrs	0/77
Highly Accelerated Stress Test	110°C, RH 85%, Bias 80% of BV rating or 42V max	JESD22-A101	264 hrs	0/45
Autoclave	121°C, RH 100%, 15psi	JESD22-A102	96hrs	0/77
Power Cycle	T on/off = 2min, Delta Tj of 100°C	JESD22-A105	10000 cycles	0/77

<b>Qualification Plan</b>	Device	Package	Process	No. of Lots
Q20150075	J175_D26Z	TO92-3L	JFET, PR88	1

Test Description:	Condition:	Standard:	Duration:	Results:
Temperature Cycle	-65°C to 150°C,15 min per extremes	JESD22-A104	500 cycles	0/77
High Temperature Reverse Bias	150°C, Bias 80% of BV rating	JESD22-A108	1000 hrs	0/77
Highly Accelerated Stress Test	110°C, RH 85%, Bias 80% of BV rating or 42V max	JESD22-A101	264 hrs	0/45
Autoclave	121°C, RH 100%, 15psi	JESD22-A102	96hrs	0/77
Power Cycle	T on/off = 2min, Delta Tj of 100°C	JESD22-A105	10000 cycles	0/77

<b>Qualification Plan</b>	Device	Package	Process	No. of Lots
Q20150075	J211_D74Z	TO92-3L	JFET, PR90	1

Test Description:	Condition:	Standard:	Duration:	Results:
Temperature Cycle	-65°C to 150°C,15 min per extremes	JESD22-A104	500 cycles	0/77
High Temperature Reverse Bias	150°C, Bias 80% of BV rating	JESD22-A108	1000 hrs	0/77
Highly Accelerated Stress Test	110°C, RH 85%, Bias 80% of BV rating or 42V max	JESD22-A101	264 hrs	0/45
Autoclave	121°C, RH 100%, 15psi	JESD22-A102	96hrs	0/77
Power Cycle	T on/off = 2min, Delta Tj of 100°C	JESD22-A105	10000 cycles	0/77



# **Appendix A: Changed Products**

DIGI-KEY: DIGI-KEY

PCN Number: P525AAB

Customer Name: DIGI-KEY CORPORATION

Product	Customer Part Number	BBB	Drawing
2N7000	2N7000-ND	Υ	N
BC516_D27Z		Υ	N
BC547B		Υ	N
BC63916_D27Z		Υ	N
BF256B		Υ	N
BS170	BS170-ND; BS170TR-ND	Υ	N
BS170_D26Z		Υ	N
BS170_D27Z		Υ	N
BS170_D75Z		Υ	N
BS270		Υ	N
BS270_D74Z		Υ	N
J105		Υ	N
J109		Υ	N
J111		Υ	N
J111_D26Z		Υ	N
J112		Υ	N
J112_D26Z		Υ	N
J113		Υ	N
J113_D74Z		Υ	N
J175_D26Z		Υ	N
J176_D74Z		Υ	N
J211_D74Z		Υ	N
MPS751_D26Z		Υ	N
MPSA05RA		Υ	N
MPSA06		Υ	N
MPSA42	MPSA42-ND	Υ	N
PF5102		Υ	N
PN100A		Υ	N



# **Appendix A: Changed Products**

DIGI-KEY: DIGI-KEY

PCN Number: P525AAB

Customer Name: DIGI-KEY

Product	Customer Part Number	BBB	Drawing
J113_D74Z		Υ	N



# **Appendix A: Changed Products**

DIGI-KEY: DIGI-KEY

PCN Number: P525AAB

Customer Name : DIGI-KEY

Product	<b>Customer Part Number</b>	BBB	Drawing
BC517_D74Z		Υ	N
BC63916_D74Z		Υ	N
BS170_D74Z		Υ	N
BS270_D74Z		Υ	N
J106		Υ	N
J107		Υ	N
J109_D26Z		Υ	N
J111_D74Z		Υ	N
J112_D27Z		Υ	N
J112_D74Z		Υ	N
J113_D74Z		Υ	N
J211_D74Z		Υ	N
MPS751		Υ	N
MPS751_D26Z		Υ	N
MPSA29		Υ	N
PN200A		Υ	N