



PCN# : P59EAA
Issue Date : Oct. 01, 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.

Implementation of change:

Expected First Shipment Date for Changed Product : Dec. 30, 2015

Expected First Date Code of Changed Product :1550

Description of Change (From) :

Mold compound EME6600CS used in Fairchild Suzhou China Assembly/Test location.

Description of Change (To) :

New mold compound as noted in below table in Fairchild Suzhou China Assembly/Test location.

FSID	PCN Being Augmented	Original Mold Compound	New Mold Compound
FQB25N33TM_F085	P4ASAA	EME6600CS	Plasma + AP Coating + CEL8240HF10
FQB25N33TM_NB82122	P4ASAA	EME6600CS	Plasma + AP Coating + CEL8240HF10
FQD12N20LTM_F085	P4ASAA	EME6600CS	Plasma + AP Coating + CEL8240HF10
FQD6N40CTM_NBEA002	P4ASAA	EME6600CS	Plasma + AP Coating + CEL8240HF10
FQD9N25TM_SBEK002	P4ASAA	EME6600CS	Plasma + AP Coating + CEL8240HF10
FQB34P10TM_F085	P56NAA	EME6600CS	Plasma + AP Coating+ EME6600CS
FQB7P20TM_F085	P56NAA	EME6600CS	Plasma + AP Coating+ EME6600CS
FQB11P06TM_SP001	P56NAA	EME6600CS	Plasma + AP Coating+ EME6600CS
FQB12P20TM_SB82075	P56NAA	EME6600CS	Plasma + AP Coating+ EME6600CS

Reason for Change:

This PCN clarifies PCNs P4ASAA and P56NAA to call out the BOM changes in addition to the fab site changes already sited. The BOM changes improve delamination performance.

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 companys procurement history.

Qualification Plan	Device	Package	Process	No. of Lots
Q20150273	FQD6N40CTM_NBEA002	D-PAK	MOSFET	1

Test Description:	Condition:	Standard:	Duration:	Results:
Precon	MSL1, 260C	JESD22A-113	NA	0/338
Temperature Cycle (TMCL) With Precon	-55C, 150C	JESD22-A104	1000 cyc	0/77
Power Cycle (PRCL) With Precon	Delta 100C, 2 Min On/Off	JESD22-A122	15K cyc	0/77
High Accelerated Stress Test (HAST) With Precon	130C, 85%RH, Vds=42V	JESD22-A110	1000 hrs	0/77
Un-bias HAST (UHASt) With Precon	130C, 85%RH,	JESD22-A118	96 hrs	0/77
High Temperature Gate Bias (HTGB)	Tj=max, at 100% of Vgs	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias (HTRB)	Tj=max, at 100% of max. breakdown voltage	JESD22-A108	1000 hrs	0/77
RSDH with precon	270C	JESD22B106	15 sec	0/30

Qualification Plan	Device	Package	Process	No. of Lots
Q20150273	FQD12P10TF_NB82105	D-PAK	MOSFET	2

Test Description:	Condition:	Standard:	Duration:	Results:
Precon	MSL1, 260C	JESD22A-113	NA	0/676
Temperature Cycle (TMCL) With Precon	-55C, 150C	JESD22-A104	1000 cyc	0/154
Power Cycle (PRCL) With Precon	Delta 100C, 2 Min On/Off	JESD22-A122	15K cycl	0/154
High Accelerated Stress Test (HAST) With Precon	130C, 85%RH, Vds=-42V	JESD22-A110	1000 hrs	0/154
Un-bias HAST (UHASt) With Precon	130C, 85%RH,	JESD22-A118	96 hrs	0/154
High Temperature Gate Bias (HTGB)	Tj=max, at 100% of Vgs	JESD22-A108	1000 hrs	0/154
High Temperature Reverse Bias (HTRB)	Tj=max, at 100% of max. breakdown voltage	JESD22-A108	1000 hrs	0/154
RSDH with precon	270C	JESD22B106	15 sec	0/60

Qualification Plan	Device	Package	Process	No. of Lots
Q20150186	FQB12P20TM_SB82075	D2-PAK	MOSFET	1

Test Description:	Condition:	Standard:	Duration:	Results:
Precon	MSL1, 245C	JESD22A-113	NA	0/308
Temperature Cycle (TMCL) With Precon	-55C, 150C	JESD22-A104	1000 cyc	0/77
Power Cycle (PRCL) With Precon	Delta 100C, 3.5 Min On/Off	JESD22-A122	8572cyc	0/77
High temperature humidity reverse bias (H3TRB) With Precon	85C, 85%RH, Vds=100V	JESD22-A110	1000 hrs	0/77
Un-bias HAST (UHASt) With Precon	130C, 85%RH,	JESD22-A118	96 hrs	0/77
High Temperature Gate Bias (HTGB)	150C, Vgs=30V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias (HTRB)	150C, Vds=200V	JESD22-A108	1000 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140141	FQB34P10TM_F085	D2PAK	Q-FET P-ch	3

Test Description:	Condition:	Standard:	Duration:	Results:
Precon	MSL1, 245C	JESD22-A113	N/A	0/924
High Temperature Reverse Bias	175C, -100V	JESD22-A108	1000hrs	0/231
Highly Accelerated Stress Test	130C, 85%RH, -42V	JESD22-A110	96hrs	0/231
Autoclave	100%RH, 121C	JESD22-A102	96hrs	0/231
Power Cycle	Delta 100CC, 3.5 Min On/Off	JESD22-A122	8572cyc	0/231
Temperature Cycle	-55C ,150C	JESD22-A104	1000cyc	0/231

Qualification Plan	Device	Package	Process	No. of Lots
Q20140057	FQB34P10TM_F085	D2PAK	Q-FET P-ch	1

Test Description:	Condition:	Standard:	Duration:	Results:
Precon	MSL1, 245C	JESD22-A113	N/A	0/231
High Temperature Reverse Bias	175C, -100V	JESD22-A108	1000hrs	0/77
High Temperature Gate Bias	175C, -25V	JESD22-A108	1000hrs	0/77
High Humidity High Temp. Reverse Bias	85%RH, 85C, -80V	JESD22-A101B	1000hrs	0/77
Autoclave	100%RH, 121C	JESD22-A102	96hrs	0/77
Temperature Cycle	-55C ,150C	JESD22-A104	1000cyc	0/77
High Temperature Storage Life	175C	JESD22-A103	1000hrs	0/77