



PCN# : P59FAA
Issue Date : Sep. 29, 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. 28, 2015

Expected First Date Code of Changed Product :1550

Description of Change (From) :

Mold compound KTMC5900GM & MP195 used in Fairchild Cebu Philippines Assembly/Test location

Description of Change (To) :

Plasma + AP Coat + CEL8240HF10 mold compound used in Fairchild Cebu Philippines Assembly/Test location.

FSID	PCN being Augmented	Previous Mold Compound	New Mold Compound
FQD9N25TM_F085	P4ASAA	KTMC5900GM	Plasma + AP Coat + CEL8240HF10
FQB27N25TM_F085	P4ASAA	KTMC5900GM	Plasma + AP Coat + CEL8240HF10
FQI27N25TU_F085	P4ASAA	KTMC5900GM	Plasma + AP Coat + CEL8240HF10
FQI27N25TU_SB82240	P4ASAA	KTMC5900GM	Plasma + AP Coat + CEL8240HF10
SFW9640TM_SBEA021	P56NAA	MP195	Plasma + AP Coat + CEL8240HF10

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 company's procurement history.

Qualification Plan	Device	Package	Process	No. of Lots
QP1331003-BK8-QAFET-CB-D2PAK-Rev2	FQB27N25TM_F085	TO263	Q-FET	2

Test Description	Condition	Standard	Duration	Results
Preconditioning, MSL 1	Peak Temp (245°C), 3 Cycles	JESD22-A113		0/616
Preconditioning, MSL 1 (Solder Dip)	Peak Temp (245°C), 1 Cycle	NA		0/30
High Temperature Reverse Bias	175C, 250V	JESD22-A108	1000 hrs	0/154
High Temperature Gate Bias	175C, 30V	JESD22-A108	1000 hrs, (-)3 hrs	0/154
High Temperature Gate Bias	150C, -30V	JESD22-A108	1000 hrs	0/154
Temperature Cycle	Preconditioning, -55C, 150C	JESD22-A104	1000 cyc	0/154
Unbiased Highly Accelerated Stress Test	Preconditioning, 130C, 85%RH	JESD22- A103	96 hrs	0/154
High Humidity High Temperature Reverse Bias	Preconditioning, 85C, 85%RH, 100V	JESD22-A101B	1000 hrs	0/154
Power Cycle	Preconditioning, Delta100CC,3.5min cycle	MILSTD-750-1036	8572 cyc	0/154
Enhanced Destructive Physical Analysis	NA	AEC-Q101-004 Section 4	After TMCL After H3TRB	0/26

Qualification Plan	Device	Package	Process	No. of Lots
QP1331003-BK8-QAFET-CB-D2PAK-Rev2	SFW9640TM_SBEA021	TO263	A-FET	1

Test Description	Condition	Standard	Duration	Results
Preconditioning, MSL 1	Peak Temp (245°C), 3 Cycles	JESD22-A113		0/308
Preconditioning, MSL 1 (Solder Dip)	Peak Temp (245°C), 1 Cycle	NA		0/30
High Temperature Reverse Bias	150C, -200V	JESD22-A108	1000 hrs	0/77
High Temperature Gate Bias	150C, -30V	JESD22-A108	1000 hrs	0/77
Temperature Cycle	Preconditioning, -55C, 150C	JESD22-A104	1000 cyc	0/77
Unbiased Highly Accelerated Stress Test	Preconditioning, 130C, 85%RH	JESD22- A103	96 hrs	0/77
High Humidity High Temperature Reverse Bias	Preconditioning, 85C, 85%RH, 100V	JESD22-A101B	1000 hrs	0/77
Power Cycle	Preconditioning, Delta100CC,3.5min cycle	MILSTD-750-1036	8572 cyc	0/77
Enhanced Destructive Physical Analysis	NA	AEC-Q101-004 Section 4	After TMCL After H3TRB	0/13