PCN# : P473A
Issue Date : Aug. 15, 2014

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 : Nov. 13, 2014

Expected First Date Code of Changed Product :1432

Description of Change (From) :
APM19CAA (F010059022 and F010067079), DBC supplier KCC, normal reflow, 100% X-Ray

Description of Change (To) :
APM19CAA (F010059022 and F010067079), DBC supplier KCC, vacuum reflow, X-Ray by SPC monitoring

Reason for Change:
Quality improvement on solder void
While target is to convert 100% of manufactured parts to vacuum soldering, products incorporating this change may be shipped interchangeably with existing unchanged products in case of unavailability of vacuum oven (only one oven in production).

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
QP132801	F010067079, F010059022	APM19CAA	N/A	3

Test Description:	Condition:	Standard :	Duration:	Results:
HTGB	150C, 20V	JESD22-A108	168,500,1khrs	0/45
HTRB	150C, 24V	JESD22-A108	168,500,1Khrs	0/45
HTSL	150C	JESD22-A103	168,500,1khrs	0/45
HAST	110C, 85%RH, 24V	JESD22-A110	264hrs	0/44
LTS	40C	NA	120hr	0/45
PTC	40C/140hr, -30C/187hr, 80C/328hr,105C/65hr	V03 NT 08 00532	720hrs	0/16
Sequential TC	Ta=-40C (15min) / 125C (15min)	JESD22-A104C	840cycles	0/16
DPA after TC 840cycles	NA	NA	NA	0/6
TC	40C (15min)/ 125C (15min)	JESD22-A104C	500,1000,1300 cycles	0/50
DPA after TC 1300cycles	NA	NA	NA	0/6
Electrical Characterization with statistical analysis	-40C, 25C and 125C	NA	NA	0/60
ESD (HBM)	1.5Kohm/ 100pF	AEC-Q101-001A	NA	0/9
ESD (CDM)	CDM= 2000V	AEC-Q101-005	NA	0/9
TR (Thermal Resistance)	NA	MIL-STD-883E-1012	NA	0/6
Isolation test	3000Vdc, 1sec	Fairchild spec	NA	0/492
Reverse Battery Test	a) 100A/1min, battery VTG limited at -3.2V b) 480A/100ms, battery VTG limited at -14V c) 100A/1min (limited at -3.2V) x 4 times with delay time < 5min: 1 module	V03 NT 09 07095	NA	0/18
C-SAM inspection	NA	J-STD-035	NA	0/32
X-ray inspection	NA	Fairchild spec	NA	0/120
BPT (Bond Pull Test)	NA	MIL STD-883-2011	NA	0/348
BST (Bond Shear Test)	NA	JESD22-B116	NA	0/588
DS (Die Shear) Test	NA	MIL STD-883-2019	NA	0/90
PD (Physical Dimension)	NA	Fairchild spec	NA	0/90
Package Warpage	NA	Fairchild spec	NA	0/90
Bond Cratering Test	NA	Fairchild spec	NA	0/24