PCN# : P5A8AA
Issue Date : Nov. 25, 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 :Feb. 23, 2016

Expected First Date Code of Changed Product :1609

Description of Change (From) :
5-inch wafer fabrication at Fairchild in Bucheon, South Korea
Existing manufacturing source located at Weihai China, Shantou China, Suzhou China

Description of Change (To) :
8 inch wafer fabrication at TowerJazz Japan with Panasonic Semiconductor
Adding a manufacturing site located at Shanwei China for increased flexibility

Reason for Change:
Improved supply flexibility
. Better quality and yields through equipment and facility upgrades
  - Lower defect density of fabrication line(e.g., 5-inch --> 8-inch lines)
  - Increased automation in handling and inspection in wafer fabrication and assembly
. Fairchild partnerships with foundries and assembly subcontractors
  - Best manufacturing practices - access to many customers methods & practices
  - Advanced technology for fast ramp of future new products & technologies

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
Q20140077	FQA24N60	TO3P	Q-FET	3

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse Bias	480V,150C	JESD22-A108	1000 hrs	0/231
High Temperature Gate Bias	30V, 150C	JESD22-A108	1000 hrs	0/231
Highly Accelerated Stress Test	130C, 85%RH, 42V	JESD22-A110	96 hrs	0/231
Temperature Cycle	-65C,150C	JESD22-A104	500 cyc	0/231
Power Cycle	On/Off=2.0min, Delta Tj=100C	MIL-STD-750 M1037	6000 cyc	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/231

Qualification Plan	Device	Package	Process	No. of Lots
Q20140076	FQP8N60C	TO220	C-FET	3

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse Bias	480V,150C	JESD22-A108	1000 hrs	0/231
High Temperature Gate Bias	30V, 150C	JESD22-A108	1000 hrs	0/231
Highly Accelerated Stress Test	85%RH, 130C,42V	JESD22-A110	96 hrs	0/231
Temperature Cycle	-65C,150C	JESD22-A104	500 cyc	0/231
Power Cycle	On/Off=2.0min, Delta Tj=100C	MIL-STD-750 M1037	6000 cyc	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/231
Early Life Failure Rate with HTRB	600V, 150C	JESD22-A108	48 hrs	0/1040

Qualification Plan	Device	Package	Process	No. of Lots
Q20140076	FSB50550T	SPM5F	C-FET	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse Bias	400V,150C	JESD22-A108	1000 hrs	0/26

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	KA7805AETU	TO220	BHB2A	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=20V	JESD22-A101B	1000 hrs	0/77
High Temperature Op Life	125C,Vin=30V	NA	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 cyc	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	KSA940TU	TO220	HP BJT	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Medium Size Pkg's (TO-220, D2) (Power Cycle)	Delta 100C, 3.5 Min On/Off	MIL-STD-750 M1037	8572 cyc	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 cyc	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	FCP36N60N	TO220	SUPREMOS	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Gate Bias	150C, 100% Rated VGSV	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Medium Size Pkg's (TO-220, D2) (Power Cycle)	Delta 100C, 3.5 Min On/Off	MIL-STD-750 M1037	8572 cyc	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 cyc	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	TIP42CTU	TO220	HP BJT	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Medium Size Pkg's (TO-220, D2) (Power Cycle)	Delta 100C, 3.5 Min On/Off	MIL-STD-750 M1037	8572 cyc	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 cyc	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140407	FQP4N90C	TO220	C-FET	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Gate Bias	150C, 100% Rated VGSV	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Medium Size Pkg's (TO-220, D2) (Power Cycle)	Delta 100C, 3.5 Min On/Off	MIL-STD-750 M1037	8572 cyc	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 cyc	0/77

Qualification Plan	**Device**	**Package**	**Process**	**No. of Lots**
Q20140409A	FQD17N08LTM	DIPAK	Q-FET	1

Test Description:	**Condition:**	**Standard:**	**Duration:**	**Results:**
MSL(1), PKG(Small), (Precondition), Before TMCL/H3TRB test	PeakTemp(260c), Cycles(3)	JESD22-A113	24 hrs 168hrs	0/154
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 cyc	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 cyc	0/77

Qualification Plan	**Device**	**Package**	**Process**	**No. of Lots**
Q20140409A	MJD47TF	DIPAK	HP BJT	1

Test Description:	**Condition:**	**Standard:**	**Duration:**	**Results:**
MSL(1), PKG(Small), (Precondition), Before TMCL/H3TRB test	PeakTemp(260c), Cycles(3)	JESD22-A113	24 hrs 168hrs	0/154
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 cyc	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 cyc	0/77

Qualification Plan	**Device**	**Package**	**Process**	**No. of Lots**
Q20140409A	LM317MDTX	DIPAK	BSP1	1

Test Description:	**Condition:**	**Standard:**	**Duration:**	**Results:**
MSL(1), PKG(Small), (Precondition), Before TMCL/THBT test	PeakTemp(260c), Cycles(3)	JESD22-A113	24 hrs 168hrs	0/154
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=13V	JESD22-A101B	1000 hrs	0/77
High Temperature Op Life	Vin=19V Ta=125C	NA	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 cyc	0/77

Qualification Plan	**Device**	**Package**	**Process**	**No. of Lots**
Q20140409A	FQU13N10LTU	DIPAK	Q-FET	1

Test Description:	**Condition:**	**Standard:**	**Duration:**	**Results:**
High Humidity, High Temp, Rev. Bias	85C, 85%RH, Vin=80% of rated BV, max 100V	JESD22-A101B	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% ratedBV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 cyc	0/77
Solder Dip (Resistance to Solder Heat)	270C	JESD22-B106	15 sec	0/30
-65C, 150C (Temperature Cycle)	-65C, 150C	JESD22-A104	500 cyc	0/77