



PCN# : P5A1AA
Issue Date : Nov. 24, 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. 22, 2016

Expected First Date Code of Changed Product :1609

Description of Change (From) :

5-inch wafer fabrication at Fairchild in Bucheon, South Korea

Description of Change (To) :

6-inch wafer fabrication at Fairchild in Bucheon, South Korea

Reason for Change:

Fairchild Semiconductor is increasing wafer fabrication capacity by qualifying 6-inch wafer fabrication line at Fairchild Semiconductor Bucheon Korea. Quality and reliability remain at the highest standards already demonstrated within Fairchild's existing products. The reliability qualification results used to qualify the 6-inch wafer fabrication line are summarized below. Design, die size and layout of the affected products will remain unchanged. There are no changes in the datasheet or electrical 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
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	1000 hrs	0/231
Highly Accelerated Stress Test	130C, 85%RH, -42V	JESD22-A110	96 hrs	0/231
Autoclave	100%RH, 121C	JESD22-A102	96 hrs	0/231
Power Cycle	Delta 100CC, 3.5 Min On/Off	JESD22-A122	8572 cyc	0/231
Temperature Cycle	-55C ,150C	JESD22-A104	1000 cyc	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	1000 hrs	0/77
High Temperature Gate Bias	175C, -25V	JESD22-A108	1000 hrs	0/77
High Humidity High Temp. Reverse Bias	85%RH, 85C, -80V	JESD22-A101B	1000 hrs	0/77
Autoclave	100%RH, 121C	JESD22-A102	96 hrs	0/77
Temperature Cycle	-55C ,150C	JESD22-A104	1000 cyc	0/77
High Temperature Storage Life	175C	JESD22-A103	1000 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140057	FQD3P50TM_F085	DPAK	Q-FET P-ch	1

Test Description:	Condition:	Standard:	Duration:	Results:
Precon	MSL1, 260C	JESD22-A113	N/A	0/308
High Temperature Reverse Bias	150C, -500V	JESD22-A108	1000 hrs	0/77
High Temperature Gate Bias	150C, -30V	JESD22-A108	1000 hrs	0/77
Autoclave	100%RH, 121C	JESD22-A102	96 hrs	0/77
High Humidity High Temp. Reverse Bias	85%RH, 85C, -100V	JESD22-A101B	1000 hrs	0/77
Power Cycle	Delta 100CC,2 Min On/Off	JESD22-A122	15000 cyc	0/77
Temperature Cycle	-55C ,150C	JESD22-A104	1000 cyc	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
QP1331005	FQB12P20TM_SB82075	D2PAK	Q-FET P-ch	1

Test Description:	Condition:	Standard:	Duration:	Results:
Precon	MSL1, 245C	JESD22-A113	N/A	0/308
High Temperature Reverse Bias	150C, -200V	JESD22-A108	1000 hrs	0/77
High Temperature Gate Bias	150C, -30V	JESD22-A108	1000 hrs	0/77
Unbiased Highly Accelerated Stress Test	85%RH, 130C	JESD22-A118	96 hrs	0/77
High Humidity High Temp. Reverse Bias	85%RH, 85C, -100V	JESD22-A101B	1000 hrs	0/77
Power Cycle	Delta 100CC,3.5 Min On/Off	JESD22-A122	8572 cyc	0/77
Temperature Cycle	-55C ,150C	JESD22-A104	1000 cyc	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140052	FGH60N60SMD_F085	TO247	Hyperfast	3

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse Bias	600V,175C	JESD22-A108	1000 hrs	0/231
High Humidity High Temp. Reverse Bias(H3TRB)	85%RH, 85C,100V	JESD22-A101B	1000 hrs	0/231
Autoclave	100%RH, 121C	JESD22-A102	96 hrs	0/231
Temperature Cycle	-55C,150C	JESD22-A104	1000 cyc	0/231
Power Cycle	, On/Off=5.0min, Delta Tj=100C	MIL-STD-750 M1037	6000 cyc	0/77
High Temperature Storage Life	175C	JESD22-A103	1000 hrs	0/231

Qualification Plan	Device	Package	Process	No. of Lots
Q20140047	FGH75T65UPD_F085	TO247	Stealth	3

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Reverse Bias	520V,175C	JESD22-A108	1000 hrs	0/231
High Humidity High Temp. Reverse Bias(H3TRB)	85%RH, 85C,100V	JESD22-A101B	1000 hrs	0/231
Autoclave	100%RH, 121C	JESD22-A102	96 hrs	0/231
Temperature Cycle	-55C,150C	JESD22-A104	1000 cyc	0/231
Power Cycle	, On/Off=5.0min, Delta Tj=100C	MIL-STD-750 M1037	6000 cyc	0/77
High Temperature Storage Life	175C	JESD22-A103	1000 hrs	0/231

Qualification Plan	Device	Package	Process	No. of Lots
Q20140051	RURG8060_F085	TO247	Ultrafast	3

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Reverse Bias	600V,175C	JESD22-A108	1000 hrs	0/231
High Humidity High Temp. Reverse Bias(H3TRB)	85%RH, 85C,100V	JESD22-A101B	1000 hrs	0/231
Autoclave	100%RH, 121C	JESD22-A102	96 hrs	0/231
Temperature Cycle	-55C,150C	JESD22-A104	1000 cyc	0/231
Power Cycle	On/Off=5.0min, Delta Tj=100C	MIL-STD-750 M1037	6000 cyc	0/77
High Temperature Storage Life	175C	JESD22-A103	1000 hrs	0/231

Qualification Plan	Device	Package	Process	No. of Lots
Q20140055	FGD3N60LSDTM_SB82154	DPAK	PT-PIGBT	3

Test Description:	Condition:	Standard:	Duration:	Results:
Precon	MSL1, 260C	JESD22-A113	N/A	0/924
High Temperature Reverse Bias	150C, 600V	JESD22-A108	1000 hrs	0/231
High Temperature Gate Bias	150C, 25V	JESD22-A108	1000 hrs	0/231
High Humidity High Temp. Reverse Bias(H3TRB)	85%RH, 85C,100V	JESD22-A101B	1000 hrs	0/231
Autoclave	100%RH, 121C	JESD22-A102	96 hrs	0/231
Temperature Cycle	-55C ,150C	JESD22-A104	1000 cyc	0/230
Power Cycle	Delta 100CC, 2 Min On/Off	JESD22-A122	15000 cyc	0/77
High Temperature Storage Life	150C	JESD22-A103	1000hrs	0/231

Qualification Plan	Device	Package	Process	No. of Lots
Q20140298	FGD3N60LSDTM_SB82154	DPAK	EI Diode	3

Test Description:	Condition:	Standard:	Duration:	Results:
Precon	MSL1, 260C	JESD22-A113	N/A	0/924
High Temperature Reverse Bias	150C, 600V	JESD22-A108	1000 hrs	0/231
High Temperature Gate Bias	150C, 25V	JESD22-A108	1000 hrs	0/231
High Humidity High Temp. Reverse Bias(H3TRB)	85%RH, 85C,100V	JESD22-A101B	1000 hrs	0/231
Autoclave	100%RH, 121C	JESD22-A102	96 hrs	0/231
Temperature Cycle	-55C ,150C	JESD22-A104	1000 cyc	0/231
Power Cycle	Delta 100CC, 2 Min On/Off	JESD22-A122	15000 cyc	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/231

Qualification Plan	Device	Package	Process	No. of Lots
Q20140049	KA1M0565RTU	TO220F	BHB2A	3

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Operating Life	Ta=125C, Vdd=50V, Vcc=22V	JESD22-A108	1000 hrs	0/231
Temperature Humidity Bias Test	85%RH, 85C, Vdd=100V/Vcc=30V,Vfb=0V	JESD22-A101	1000 hrs	0/231
Temperature Cycle	-65C ,150C	JESD22-A104	500 cyc	0/231
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/231