PCN# : P5A4AA
Issue Date : Dec. 16, 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 :Mar. 15, 2016

Expected First Date Code of Changed Product :1612

Description of Change (From) :
6-inch wafer fabrication at Fairchild in West Jordan, Utah, USA

Description of Change (To) :
8-inch wafer fabrication at Fairchild in Bucheon, South Korea

Reason for Change:
. Improved supply flexibility
. Better quality and yields through equipment and facility upgrades
  - Lower defect density fabrication line(e.g., 5-inch --> 8-inch lines).
  - Increased automation in handling and inspection
. 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
Q20140277	FDMC86012	PQFN33	RP5 N	3

Test Description:	Condition:	Standard:	Duration:	Results:
MSL1 Precondition	260°C, 3 cycles	JESD22-A113	NA	0/462
Highly Accelerated Stress Test	130°C, 85%RH, Vr = 24V	JESD22-A110	96 hrs	0/231
High Temperature Gate Bias	150°C, Vgs = 12V	JESD22-A108	1000 hrs	0/231
High Temperature Reverse Bias	150°C, Vr = 24V	JESD22-A108	1000 hrs	0/231
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cyc	0/231

Qualification Plan	Device	Package	Process	No. of Lots
Q20140277	FDMS0348	PQFN56	PT5 N	3

Test Description:	Condition:	Standard:	Duration:	Results:
MSL1 Precondition	260°C, 3 cycles	JESD22-A113	NA	0/462
Highly Accelerated Stress Test	130°C, 85%RH, Vr = 24V	JESD22-A110	96 hrs	0/231
High Temperature Gate Bias	150°C, Vgs = 20V	JESD22-A108	1000 hrs	0/231
High Temperature Reverse Bias	150°C, Vr = 24V	JESD22-A108	1000 hrs	0/231
Power Cycle	Delta 125CC, 2 Min cycle	JESD22-A105	7500 cyc	0/231

Qualification Plan	Device	Package	Process	No. of Lots
Q20140277	FDMC3020DC	PQFN33	RP5 N	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL1 Precondition	260°C, 3 cycles	JESD22-A113	NA	0/154
Highly Accelerated Stress Test	130°C, 85%RH, Vr = 24V	JESD22-A110	96 hrs	0/77
High Temperature Gate Bias	150°C, Vgs = 20V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150°C, Vr = 24V	JESD22-A108	1000 hrs	0/77
Power Cycle	Delta 125CC, 2 Min cycle	JESD22-A105	7500 cyc	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140277	FDB016N04AL7	D2PAK	RP5 N	3

Test Description:	Condition:	Standard:	Duration:	Results:
MSL1 Precondition	MSL1, 245C	JESD22A-113	NA	0/924
Temperature Cycle	-65C, 150C	JESD22-A104	500 cyc	0/231
High Temperature Storage Life	175C	JESD22-A103	1000 hrs	0/231
Power Cycle	Delta 100C, 3.5 Min On/Off	JESD22-A122	8572 cyc	0/231
Highly Accelerated Stress Test	130C, 85%RH, 32V	JESD22-A110	96 hrs	0/231
High Temperature Gate Bias	175C, 20V	JESD22-A108	1000 hrs	0/231
High Temperature Reverse Bias	175C, 32V	JESD22-A108	1000 hrs	0/231

Qualification Plan	Device	Package	Process	No. of Lots
QP13031026C	FDP027N08B_F102	TO220-3L	MV7	3

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse Bias	80% of rated BV Tj Max	JESD22-A108	1000 hrs	0/231
High Temperature Gate Bias	100% rated VGS Tj Max	JESD22-A108	1000 hrs	0/231
Highly Accelerated Stress Test	130C, 85%RH, Vdd=42V	JESD22-A110	96 hrs	0/231
Temperature Cycle	-65C,150C	JESD22-A104	500 cyc	0/231
Power Cycle	On/Off=3.5min, Delta Tj=125C	MIL-STD-750 M1037	8572 cyc	0/231
High Temperature Storage Life	175C	JESD22-A103	1000 hrs	0/231

Qualification Plan	Device	Package	Process	No. of Lots
QP13031026C	FDP020N06B_F102	TO-220	MV7	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse Bias	80% of rated BV Tj Max	JESD22-A108	1000 hrs	0/77
High Temperature Gate Bias	100% rated VGS Tj Max	JESD22-A108	1000 hrs	0/77
Highly Accelerated Stress Test	130C, 85%RH, Vdd=42V	JESD22-A110	96 hrs	0/77
Temperature Cycle	-65C,150C	JESD22-A104	500 cyc	0/77
Power Cycle	On/Off=3.5min, Delta Tj=125C	MIL-STD-750 M1037	8572 cyc	0/77
High Temperature Storage Life	175C	JESD22-A103	1000 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
QP13031025	FDMC86102LZ	MLP	MV5N/MV5NZ	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL1 Precondition	MSL1, 260C	JESD22-A113	NA	0/474
Highly Accelerated Stress Test	130C, 85%RH, Vdd=42V	JESD22-A110	96 hrs	0/231
High Temperature Gate Bias	150°C, Vgs = 20V	JESD22-A108	1000 hrs	0/231
High Temperature Reverse Bias	150°C, Vr = 80V	JESD22-A108	1000 hrs	0/231
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cyc	0/231
High Temperature Storage Life	175C	JESD22-A103	500 hrs	0/231
Power Cycle	On/Off=2.0min, Delta Tj=100C	MIL-STD-750 M1036	10000 cyc	0/77

Qualification Plan	Device	Package	Process	No. of Lots
QP13031025	FDMS86200DC	PQFN	MV5N/MV5NZ	3

Test Description:	Condition:	Standard:	Duration:	Results:
MSL1 Precondition	MSL1, 260C	JESD22-A113	NA	0/462
Highly Accelerated Stress Test	130C, 85%RH, Vdd=42V	JESD22-A110	96 hrs	0/231
High Temperature Gate Bias	150°C, Vgs = 20V	JESD22-A108	1000 hrs	0/231
High Temperature Reverse Bias	150°C, Vr = 120V	JESD22-A108	1000 hrs	0/231
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cyc	0/231
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/231
Power Cycle	On/Off=2.0min, Delta Tj=100C	MIL-STD-750 M1036	10000 cyc	0/231

Qualification Plan	Device	Package	Process	No. of Lots
QP13031025	FDMS86201	PQFN	MV5N/MV5NZ	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL1 Precondition	MSL1, 260C	JESD22-A113	NA	0/154
Highly Accelerated Stress Test	130C, 85%RH, Vdd=42V	JESD22-A110	96 hrs	0/77
High Temperature Gate Bias	150°C, Vgs = 20V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150°C, Vr = 96V	JESD22-A108	1000 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cyc	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	On/Off=2.0min, Delta Tj=100C	MIL-STD-750 M1037	10000 cyc	0/77

Qualification Plan	Device	Package	Process	No. of Lots
QP13031025	FDB86135	D2PAK	MV5N/MV5NZ	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL1 Precondition	MSL1, 245C	JESD22-A113	NA	0/154
Highly Accelerated Stress Test	130C, 85%RH, Vdd=42V	JESD22-A110	96 hrs	0/77
High Temperature Gate Bias	175°C, Vgs = 20V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	175°C, Vr = 80V	JESD22-A108	1000 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cyc	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	On/Off=3.5min, Delta Tj=100C	MIL-STD-750 M1037	8572 cyc	0/77