



PCN# : P57NAA
Issue Date : Aug. 19, 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 : Nov. 17, 2015

Expected First Date Code of Changed Product :1547

Description of Change (From) :

Front-end Wafer Fabrication site Fairchild Salt Lake Utah, 6-inch wafers

Description of Change (To) :

Front-end Wafer Fabrication site Fairchild Mt. Top PA, 8-inch wafers

Reason for Change:

Improve supply flexibility.

Better quality and yields through equipment and facility upgrades.

- Increased automation in handling and inspection in assembly.

Fairchild partners with foundries and assembly subcontractors.

- Best manufacturing practices, access to many customers methods and practices.

- Advanced technology for fast ramp of future new products and 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 company's procurement history.

Qualification Plan	Device	Package	Process	No. of Lots
Q20140001	FDMC6676BZ	MLDEUC08	ST3 PZ	3

Test Description:	Condition:	Standard:	Duration:	Results:
Preconditioning	Per spec	JESD22A-113		0/474
High Temperature Gate Bias	150C, Vgs=20V	JESD22-A108	1000 hrs	0/237
High Temperature Reverse Bias	150C, Vr=80V	JESD22-A108	1000 hrs	0/237
High Temperature Storage Life	175C	JESD22-A103	500 hrs	0/237
Highly Accelerated Stress Test	130C, 85%RH, Vr=42V	JESD22-A110	96 hrs	0/237
MSL		J-STD_020		0/66
Power Cycle	T On/Off=2.0min, Delta Tj=100C	MIL-STD-750-1036	10000 cyc	0/237
Temperature Cycle	-65C,150C	JESD22-A104	500 cyc	0/237

Qualification Plan	Device	Package	Process	No. of Lots
Q20140002	FDS6681Z_G	NMSONC08	ST3 PZ	3

Test Description:	Condition:	Standard:	Duration:	Results:
Preconditioning	Per spec	JESD22A-113		0/474
High Temperature Gate Bias	150C, Vgs=20V	JESD22-A108	1000 hrs	0/237
High Temperature Reverse Bias	150C, Vr=80V	JESD22-A108	1000 hrs	0/237
High Temperature Storage Life	175C	JESD22-A103	500 hrs	0/237
Highly Accelerated Stress Test	130C, 85%RH, Vr=42V	JESD22-A110	96 hrs	0/237
MSL		J-STD_020		0/66
Power Cycle	T On/Off=2.0min, Delta Tj=100C	MIL-STD-750-1036	10000 cyc	0/237
Temperature Cycle	-65C,150C	JESD22-A104	500 cyc	0/237

Qualification Plan	Device	Package	Process	No. of Lots
CP20140019	FDB8132_F085	TO-263		3

Test Description:	Condition:	Standard:	Duration:	Results:
Preconditioning	MSL1, 260°C, 3 cycles	JESD22-A113		0/924
Autoclave	121C, 15 psi, 100%RH	JESD22-A102	96 hrs	0/231
High Temperature High Humidity Reverse Bias Test	85C, 85%RH, 24V	JESD22-A101	1000 hrs	0/231
High Temperature Reverse Bias	175C, 24V	JESD22-A108	1000 hrs	0/231
High Temperature Gate Bias	175C, Vgs 20V	JESD22-A108	1000 hrs	0/231
Power Cycle	T on/off 3 min, 100C Delta	MIL-STD-750-1036	8572 cyc	0/231
Temperature Cycle	-55C, 150C	JESD22-A104	1000 cyc	0/231
Resistance to Solder Heat	260C	JESD22-B106	10 sec	0/90

Qualification Plan	Device	Package	Process	No. of Lots
CPRMP00072	FDP8441, FDP8443	TO220		2

Test Description:	Condition:	Standard:	Duration:	Results:
Preconditioning	MSL1, 260°C, 3 cycles	JESD22-A113		0/330
High Temperature Reverse Bias	175C Vr=80% rated	JESD22-A108	1000	0/55
Highly Accelerated Stress Test	110°C, 85%RH, Vr = 80% rated Bv	JESD22-A110	264 hrs	0/110
Power Cycle		MIL-STD-750-1036	8572 hrs	0/55
Temperature Cycle	-55C, 150C 15min duel	JESD22-A104	1000 cyc	0/55
Resistance to Solder Heat	260C	JESD22-B106	10 sec	0/60
ACLV	121C 15 psi 100% RH	JESD22-A102	96 hrs	0/110

Qualification Plan	Device	Package	Process	No. of Lots
CPRMP00072	FDB8441, FDB8444, FDI8441	TO263		1

Test Description:	Condition:	Standard:	Duration:	Results:
Preconditioning	MSL1, 260°C, 3 cycles	JESD22-A113		0/770
High Temperature Reverse Bias	175C Vr= 80% rated	JESD22-A108	1000	0/55
High Temperature Gate Bias	175C, Vgs 20V	JESD22-A108	1000 hrs	0/55
Highly Accelerated Stress Test	130°C, 85%RH, Vr = 80% rated Bv	JESD22-A110	96 hrs	0/220
Highly Accelerated Stress Test	110°C, 85%RH, Vr = 80% rated Bv	JESD22-A110	264 hrs	0/55
Power Cycle	DTj 100C 3.5min on / 3.5min / off	MIL-STD-750-1036	8572 cyc	0/55
Temperature Cycle	55C, 150C 15min duel	JESD22-A104	1000 cyc	0/165
Resistance to Solder Heat	260C	JESD22-B106	10 sec	0/150
Autoclave	121C, 15 psi, 100%RH	JESD22-A102	96 hrs	0/275

Qualification Plan	Device	Package	Process	No. of Lots
CPRMP00072	FDD8444L	TO252		1

Test Description:	Condition:	Standard:	Duration:	Results:
Preconditioning	MSL1, 260°C, 3 cycles	JESD22-A113		0/165
Unbiased Highly Accelerated Stress Test	130°C, 85%RH,	JESD22-A118	96 hrs	0/55
Power Cycle	T on/off 3.5 min, 100C Delta	MIL-STD-750-1036	8572 cyc	0/55
Temperature Cycle	-55C, 150C	JESD22-A104	500 cyc	0/55
Resistance to Solder Heat	260C	JESD22-B106	10 sec	0/30

Qualification Plan	Device	Package	Process	No. of Lots
250079, 250080, 250089	FDD8870, FDD8896	TO252		3

Test Description:	Condition:	Standard:	Duration:	Results:
Preconditioning	MSL1, 260°C, 3 cycles	JESD22-A113		0/924
Autoclave	121C, 15 psi, 100%RH	JESD22 A-102	96 hrs	0/231
High Temperature High Humidity Reverse Bias Test	85°C, 85% RH, VR=80% of rated voltage	JESD22-A101	1000 hrs	0/231
High Temperature Gate Bias	150 C, gate bias 100% of specified Vgs rating	JESD22-A108	1000 hrs	0/231
High Temperature Reverse Bias	150°C , VR=80% rated BVDSS	JESD22-A108	1000 hrs	0/231
Power Cycle	2min ON / 2min OFF, Delta Tj=100°C	MIL-STD-750-1036	15000 cyc	0/231
Temperature Cycle	-55 to +150°C, 15min DWELL	JESD22-A104	1000 cyc	0/231

Qualification Plan	Device	Package	Process	No. of Lots
260644, 260645	FDD8444L	TO252		2

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Gate Bias	150 C, gate bias 100% of specified Vgs rating	JESD22-A108	1000 hrs	0/158
High Temperature Reverse Bias	150°C , VR=80% rated BVDSS	JESD22-A108	1000 hrs	0/158