



PCN# : P465AA
Issue Date : Sep. 29, 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 : Dec. 28, 2014

Expected First Date Code of Changed Product :1452

Description of Change (From) :

6-inch wafer fabrication at Fairchild in West Jordan, Utah, USA

Description of Change (To) :

8-inch wafer fabrication in 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 company's procurement history.

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	1000hrs	0/231
High Temperature Gate Bias	100% rated VGS Tj Max	JESD22-A108	1000hrs	0/231
Highly Accelerated Stress Test	130C, 85%RH, Vdd=42V	JESD22-A110	96hrs	0/231
Temperature Cycle	-65C,150C	JESD22-A104	500cycles	0/231
Power Cycle	On/Off=3.5min, Delta Tj=125C	MIL-STD-750 M1037	8572cycles	0/231
High Temperature Storage Life	175C	JESD22-A103	1000hrs	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	1000hrs	0/77
High Temperature Gate Bias	100% rated VGS Tj Max	JESD22-A108	1000hrs	0/77
Highly Accelerated Stress Test	130C, 85%RH, Vdd=42V	JESD22-A110	96hrs	0/77
Temperature Cycle	-65C,150C	JESD22-A104	500cycles	0/77
Power Cycle	On/Off=3.5min, Delta Tj=125C	MIL-STD-750 M1037	8572cycles	0/77
High Temperature Storage Life	175C	JESD22-A103	1000hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
QP13031026C	FDMS86350	PQFN56	MV7	1

Test Description:	Condition:	Standard:	Duration:	Results:
Precondition	per spec	JESD22-A113	n/a	0/154
High Temperature Reverse Bias	80% of rated BV Tj Max	JESD22-A108	1000hrs	0/77
High Temperature Gate Bias	100% rated VGS Tj Max	JESD22-A108-B	1000hrs	0/77
Highly Accelerated Stress Test	130C, 85%RH, Vdd=42V	JESD22-A110	96hrs	0/77
Temperature Cycle	-65C,150C	JESD22-A104	500cycles	0/77
Power Cycle	On/Off=2.0min, Delta Tj=100C	MIL-STD-750 M1037	10000cycles	0/77
High Temperature Storage Life	150C	JESD22-A103	1000hrs	0/77
Resistance to Solder Heat (RSDH)	per spec	JESD22-B106	n/a	0/30

Qualification Plan	Device	Package	Process	No. of Lots
Q20149104	FDMC86520L	MLP	MV7	3

Test Description:	Condition:	Standard:	Duration:	Results:
Precondition	per spec	JESD22-A113	n/a	0/1221
Autoclave	100%RH, 121C	JESD22-A102	96hrs	0/231
High Temperature Reverse Bias	80% of rated BV Tj Max	JESD22-A108	1000hrs	0/231
High Temperature Gate Bias	100% rated VGS Tj Max	JESD22-A108	1000hrs	0/231
Highly Accelerated Stress Test	130C, 85%RH, Vdd=42V	JESD22-A110	96hrs	0/231
Temperature Cycle	-65C, 150C	JESD22-A104	1000cycles	0/231
Resistance to Solder Heat (RSDH)	per spec	JESD22-B106	n/a	0/90
Power Cycle	Delta 100CC, 2 Min cycle	MIL-STD-750 M1036	10000cycles	0/231
Solderability	per spec	JESD22-B102	n/a	0/15
High Temperature Storage Life	150C	JESD22-A103	1000hrs	0/231
Moisture Sensitivity	per spec	J-STD_020	n/a	0/66

Appendix A: Changed Products

DIGI-KEY : DIGI-KEY

PCN Number : P465AA

Customer Name : DIGI-KEY CORPORATION

Customer Code

Product	Customer Part Number	BBB	Drawing
FDD86540		Y	N
FDMC86320		Y	N
FDMC86340		Y	N
FDMC86520DC		Y	N
FDMC86520L		Y	N
FDMC86570L		Y	N
FDMC89521L		Y	N
FDMQ86530L		Y	N
FDMS030N06B		Y	N
FDMS039N08B		Y	N
FDMS86300		Y	N
FDMS86300DC		Y	N
FDMS86310		Y	N
FDMS86320		Y	N
FDMS86350		Y	N
FDMS86500DC		Y	N
FDMS86500L		Y	N
FDMS86520		Y	N
FDMS86520L		Y	N
FDMS86540		Y	N
FDPO20N06B_F102		Y	N
FDPF035N06B_F152		Y	N
FDS86540		Y	N