

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 : Jul. 11, 2013

Expected First Date Code of Changed Product :1326

Description of Change (From) :

PT3MV devices are using wafers manufactured in Fairchild's Mountaintop, Pennsylvania fab and using various EMC during assembly process.

Description of Change (To) :

PT3MV devices will now be manufactured in Fairchild's Mountaintop, Pennsylvania fab and at Vanguard International Semiconductor Corporation in Hsinchu, Taiwan. The EMC to be used during assembly process for wafers from both facility will also be changed and standardized.

Reason for Change:

Fairchild Semiconductor is increasing wafer capacity by qualifying the process for the affected FSIDs at Vanguard International Semiconductor Corporation, Taiwan. The new EMC to be used will provide better molding ability at assembly process. Quality and reliability will remain at the highest standards already demonstrated with Fairchild's existing products. The reliability qualification results used to qualify the wafer fabrication line and EMC change are summarized. The specific groups of products/MOSFET technologies are listed in the affected FSIDs list. Design, die size, and layout of the affected products will remain unchanged. There are no changes in the datasheet or electrical performance between affected products . Products from the two fabrication lines may be shipped interchangeably.

Affected Product(s):

FDB024N06	FDB029N06	FDB031N08
FDB047N10	FDP025N06	FDP030N06
FDP032N08	FDP047N08	FDP047N08_F102
FDP047N10	FDP054N10	FDP090N10
FDP090N10_G	FDP150N10	FDP150N10_G

Qualification Plan	Device	Package	Process	No. of Lots
Q20130037	FDB024N06	TO-263 (D2PAK)	PT3 MV	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	245C, 3 cycles	JESD22-A113		0/154
High Temperature Gate Bias	175C, 100 % Rated VGS	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	175C, 80% Rated BV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Highly Accelerated Stress Test	130C, 85%RH, 80% rated BV, max Vds=42V	JESD22-A110	96 hrs	0/77
Power Cycle	Delta 100C, 3.5 min on, 3.5 min off	MIL-STD-750-1036	8572 Cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20130037	FDP047N08	TO-220	PT3 MV	1

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Gate Bias	175C, 100 % Rated VGS	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	175C, 80% Rated BV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Highly Accelerated Stress Test	130C, 85%RH, 80% rated BV, max Vds=42V	JESD22-A110	96 hrs	0/77
Power Cycle	Delta 100C, 3.5 min on, 3.5 min off	MIL-STD-750-1036	8572 Cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20130037	FDP047N10	TO-220	PT3 MV	1

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Gate Bias	175C, 100 % Rated VGS	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	175C, 80% Rated BV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Highly Accelerated Stress Test	130C, 85%RH, 80% rated BV, max Vds=42V	JESD22-A110	96 hrs	0/77
Power Cycle	Delta 100C, 3.5 min on, 3.5 min off	MIL-STD-750-1036	8572 Cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20130037	FDP090N10	TO-220	PT3 MV	1

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Gate Bias	175C, 100 % Rated VGS	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	175C, 80% Rated BV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Highly Accelerated Stress Test	130C, 85%RH, 80% rated BV, max Vds=42V	JESD22-A110	96 hrs	0/77
Power Cycle	Delta 100C, 3.5 min on, 3.5 min off	MIL-STD-750-1036	8572 Cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 Cycles	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20130037	FDPF3860TYDTU	TO-220F	PT3 MV	1

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Gate Bias	150C, 100 % Rated VGS	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150C, 80% Rated BV	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Highly Accelerated Stress Test	130C, 85%RH, 80% rated BV, max Vds=42V	JESD22-A110	96 hrs	0/77
Power Cycle	Delta 100C, 3.5 min on, 3.5 min off	MIL-STD-750-1036	8572 Cycles	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 Cycles	0/77