

PCN# : P27BA Issue Date : Dec. 03, 2012

## **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 : Mar. 03, 2013

Expected First Date Code of Changed Product :1013

Description of Change (From) :

Devices listed in the affected products list are manufactured on the 6 inch wafer fabrication line located in Fairchild Semiconductor Salt Lake Fab and/or manufactured on the 8 inch wafer fabrication line at the TSMC foundry.

#### Description of Change (To) :

Devices listed in the affected products list are manufactured on the 6 inch wafer fabrication line located in Fairchild Semiconductor Salt Lake Fab and/or manufactured on the 8 inch wafer fabrication line at the TSMC foundry. In addition, devices listed in the affected products list will also be manufactured at the alternative 8 inch wafer fabrication line at the Vanguard International Semiconductor Corporation foundry in Taiwan.

#### Reason for Change:

Fairchild Semiconductor is increasing wafer capacity by qualifying the process for the affected FSIDs at Vanguard International Semiconductor Corporation, Taiwan. 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 is summarized below. 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 products manufactured at the current or the alternative wafer fabrication lines. Products from the two fabrication lines may be shipped interchangeably.



# Affected Product(s):

FDMC7200	FDMC7664	FDMC7672
FDMC7672_F125	FDMC7692	FDMC7696
FDMC8200	FDMS7670	FDMS7680
FDMS7681	FDMS7682	FDMS7692
FDMS7694	FDMS7694_SN00176	FDMS7698

Qualification Plan	Device	Package	Process	No. of Lots
Q20120361	FDMC7672	MLP 3.3x3.3	PT7	3

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113		0/474
MSL1	260C, 3 cycles	J-STD_020		0/66
Highly Accelerated Stress Test	130C, 85%RH	JESD22-A110	96 hrs	0/237
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/237
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/237
High Temperature Gate Bias	150C	JESD22-A108	1000 hrs	0/237
High Temperature Reverse Bias	150C	JESD22-A108	1000 hrs	0/237
Power Cycle	2 minutes on, 2 minutes off	JESD22-A122	1000 cycles	0/237
Bond Pull	9.0g	JESD22-C100		0/15
Bond Shear	90g	AEC-Q100-001		0/15
Die Shear	0.4g/mil sq	MIL-STD-883- 2019		0/15