

PCN#:P224A

Issue Date : Feb. 29, 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 :May. 29, 2012

Expected First Date Code of Changed Product :2312

Last Date for Shipment of Unchanged Product :May. 29, 2012

Description of Change (From):

Wirebond material using 1.5 mil Gold (Au) wire.

Description of Change (To):

Wirebond material using 1.5 mil Copper (Cu) wire.

Reason for Change:

This change is to the bond wire material used for selected Fairchild products assembled in the MLP 3x3 package. There are no changes to the currently approved assembly facilities or any other materials used to manufacture these products. Package outline drawings of the affected products remain unchanged. Affected products will be fully compliant to all published data sheet specifications. Quality and reliability will remain at the highest standards already demonstrated with Fairchild's existing products. In addition, note that we have additional tie bars to the lead frame as part of our continuous quality improvements. These extend to the side of the package with exposed copper with no expected effect on the product performance or reliability.



## Affected Product(s):

FDFM2N111	FDFM2P110	FDMC6890NZ
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Qualification Plan	Device	Package	Process	No. of Lots
Q20110583	FDFM2N111	MLP 3x3-6L	SCHOTTKY	1
		Single DAP	& PT2 N	

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113		0/154
MSL1	260C, 3 cycles	J-STD_020		0/22
Highly Accelerated Stress Test	130C, 85%RH, 5.0V	JESD22-A110	96 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Bond Pull	9.0g	JESD22-C100		0/5
Bond Shear	90g	AEC-Q100-001		0/5
Die Shear	0.4g/mil sq	MIL-STD-883-2019		0/5

Qualification Plan	Device	Package	Process	No. of Lots
Q20110583	FDMC6890NZ	MLP 3x3-6L	PT2 N &	1
		Dual DAP	PT4 N Z	

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113		0/154
MSL1	260C, 3 cycles	J-STD_020		0/22
Highly Accelerated Stress Test	130C, 85%RH, 5.0V	JESD22-A110	96 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Bond Pull	9.0g	JESD22-C100		0/5
Bond Shear	90g	AEC-Q100-001		0/5
Die Shear	0.4g/mil sq	MIL-STD-883-2019		0/5

Qualification Plan	Device	Package	Process	No. of Lots
Q20110583	FDFM2P110	MLP 3x3-6L	PT2 P &	1
		Single DAP	SCHOTTKY	

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113		0/154
MSL1	260C, 3 cycles	J-STD_020		0/22
Highly Accelerated Stress Test	130C, 85%RH, 5.0V	JESD22-A110	96 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Bond Pull	9.0g	JESD22-C100		0/5
Bond Shear	90g	AEC-Q100-001		0/5
Die Shear	0.4g/mil sq	MIL-STD-883-2019		0/5

## Comment:

All tests mentioned in Q20110583 completed without ATE failure.