

**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 : Nov. 15, 2012

Expected First Date Code of Changed Product :4612

**Description of Change (From) :**

Current product with 2.5um aluminum topside metal thickness. Selected products with wire bond material using Au wires.

**Description of Change (To) :**

Product change to 5um aluminum topside metal thickness. Selected products with wire bond material using Cu wires.

**Reason for Change:**

Increasing the topside aluminum metal thickness to 5um will improve manufacturing efficiency and standardization. The 5um aluminum metal thickness is a fully qualified production process currently used on existing products. In addition, this change is to the bond wire material used for selected Fairchild products assembled in various packages. There are no changes to the currently approved assembly facilities or any other materials used to manufacture these products. Quality and reliability will remain at the highest standards already demonstrated with Fairchild's existing products. The reliability qualification results used to qualify this change are summarized below. Design, die size and layout of the affected product will remain unchanged. There are no changes in the datasheet or electrical performance between products manufactured using 2.5um or 5um topside metal thickness or the Au to Cu wire change.

**Affected Product(s):**

FDC2512	FDC2612	FDC3512
FDC3535	FDC3612	FDC5612
FDC5612_G	FDC5614P	FDC5614P_G
FDC6325L	FDC6326L	FDC6329L
FDC6329L_G	FDC6330L	FDC637AN
FDC637AN_NB5E023A	FDC6392S	FDC642P_F085
FDC642P_G	FDC642P_SB4N006	FDC658P
FDN337N	FDN337N_G	FDN339AN
FDN339AN_G	FDN342P	FDN357N
FDN359AN	FDN5618P	FDN5618P_G
FDN5618P_SB4N007	FDN5630	FDN5630_F095
FDN5630_G	FDP6030BL	FDT3612
FDT3612_SB82273	FDT3612_SN00151	FDT434P
FDT439N	FDT457N	NDT2955
SI3443DV		

Qualification Plan	Device	Package	Process	No. of Lots
#08-007	NDS332P	SSOT3	5m cells	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 pass	JESD22-A113		0/154
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Highly Accelerated Stress Test	130C, 85%RH, -16V	JESD22-A110	96 hrs	0/77
Power Cycle	Delta 100CC, 2 Min cycle	JESD22-A105	10000 cycles	0/77
High Temperature Reverse Bias	150C, -16V	JESD22-A108	1000 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
#08-007	FDN337N	SSOT3	10m cells	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 pass	JESD22-A113		0/154
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Highly Accelerated Stress Test	130C, 85%RH, 24V	JESD22-A110	96 hrs	0/77
Power Cycle	Delta 100CC, 2 Min cycle	JESD22-A105	10000 cycles	0/77
High Temperature Reverse Bias	150C, 24V	JESD22-A108	1000 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
#08-007	FDN302P	SSOT3	PT2	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 pass	JESD22-A113		0/154
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Highly Accelerated Stress Test	130C, 85%RH, -16V	JESD22-A110	96 hrs	0/77
Power Cycle	Delta 100CC, 2 Min cycle	JESD22-A105	10000 cycles	0/77
High Temperature Reverse Bias	150C, -16V	JESD22-A108	1000 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
#08-007	FDN359BN	SSOT3	PT4	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 pass	JESD22-A113		0/154
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Highly Accelerated Stress Test	130C, 85%RH, 24V	JESD22-A110	96 hrs	0/77
Power Cycle	Delta 100CC, 2 Min cycle	JESD22-A105	10000 cycles	0/77
High Temperature Reverse Bias	150C, 24V	JESD22-A108	1000 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
EQPP # 11-051	NDT3055L	SOT223	3.8M Cells	2

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 pass	JESD22-A113		0/308
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/154
Highly Accelerated Stress Test	130C, 85%RH, 42V	JESD22-A110	96 hrs	0/154
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/154

Qualification Plan	Device	Package	Process	No. of Lots
EQPP # 11-051	NDT456P	SOT223	5.0M Cells	2

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 pass	JESD22-A113		0/308
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/154
Highly Accelerated Stress Test	130C, 85%RH, -24V	JESD22-A110	96 hrs	0/154
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/154

Qualification Plan	Device	Package	Process	No. of Lots
EQPP # 11-051	FDT459N	SOT223	10.0M Cells	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 pass	JESD22-A113		0/154
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Highly Accelerated Stress Test	130C, 85%RH, 24V	JESD22-A110	96 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
EQPP # 03-106	FDC640P	SSOT6	PT2	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 pass	JESD22-A113		0/231
Autoclave	Ta=121C, RH=100%, 15psig	JESD22A-102	96 hrs	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Highly Accelerated Stress Test	130C, 85%RH, -16V	JESD22-A110	96 hrs	0/77
Power Cycle	Delta 100CC, 2 Min cycle	JESD22-A105	10000 cycles	0/77
High Temperature Reverse Bias	150C, -16V	JESD22-A108	1000 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
EQPP # 03-106	FDC655AN	SSOT6	PT1	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 pass	JESD22-A113		0/231
Autoclave	Ta=121C, RH=100%, 15psig	JESD22A-102	96 hrs	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Highly Accelerated Stress Test	130C, 85%RH, 24V	JESD22-A110	96 hrs	0/77
Power Cycle	Delta 100CC, 2 Min cycle	JESD22-A105	10000 cycles	0/77
High Temperature Reverse Bias	150C, 24V	JESD22-A108	1000 hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
EQPP # 03-106	FDC654P	SSOT6	PT2	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 pass	JESD22-A113		0/231
Autoclave	Ta=121C, RH=100%, 15psig	JESD22A-102	96 hrs	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Highly Accelerated Stress Test	130C, 85%RH, -24V	JESD22-A110	96 hrs	0/77
Power Cycle	Delta 100CC, 2 Min cycle	JESD22-A105	10000 cycles	0/77
High Temperature Reverse Bias	150C, -24V	JESD22-A108	1000 hrs	0/77