



PCN# : P5CAAA
Issue Date : Aug. 17, 2016

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.

Implementation of change:

Expected First Shipment Date for Changed Product :Nov. 15, 2016

Expected First Date Code of Changed Product :1647

Description of Change (From) :
Wafer fabrication at TowerJazz Israel

Description of Change (To) :
8-inch wafer fabrication at Fairchild in Bucheon, South Korea
and wafer fabrication at TowerJazz Israel

Reason for Change:
Fairchild Semiconductor is increasing wafer fabrication capacity by qualifying 8-inch wafer fabrication line at Fairchild Semiconductor Bucheon Korea. Quality and reliability remain at the highest standards already demonstrated within Fairchild's existing products. The reliability qualification results used to qualify the 8-inch wafer fabrication line are summarized below.

Design, die size and layout of the affected products will remain unchanged. There are no changes in the datasheet or electrical performance.

Affected Product(s):

BSS123	BSS123_G	BSS84
FDC2512_F154	FDC2612	FDC3601N
FDC3601N_SN00322	FDC3612	FDC3612_F154
FDC5612	FDC5612_F154	FDC5612_G
FDC5614P_G	FDC6305N	FDC6306P
FDC6327C	FDC6329L	FDC6330L
FDC637AN	FDC637AN_NB5E023A	FDC6506P
FDC6506P_NB4S006A	FDC6561AN	FDC6561AN_NB5S007A
FDC658P	FDG311N	FDG312P
FDG315N	FDG316P	FDMC3612
FDMQ8203	FDN335N	FDN339AN
FDN339AN_G	FDN359AN	FDN5618P
FDN5618P_G	FDP8030L	FDS2670
FDS3590	FDS3890	FDS4559
FDS5670	FDS5680	FDS6630A
FDS6875	FDS6890A	FDS6912
FDS6930A	FDS6975	FDS6975_SBAM003P
FDS9933A	FDS9945	FDS9958
FDT3612	FDT3612_SB82273	FDT434P
FDT434P_F081	NDC7003P	NDS0605
NDS0610	NDS0610_G	NDS8425
NDS9407	NDS9407_G	NDS9948

Qualification Plan	Device	Package	Process	No. of Lots
Q20150480	FDS4559_F085	SOIC-8 Dual	PT1 N/P	3

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260°C, 3 cycles	JESD22-A113		0/231
Highly Accelerated Stress Test	130°C, 85%RH, Vr = +/- 42V	JESD22-A110	96 hrs	0/231
Un-biased Highly Accelerated Stress Test	130°C, 85%RH	JESD22-A110	96 hrs	0/231
High Temperature Gate Bias	150°C, Vgs = 100%	JESD22-A108	168 hrs 500 hrs 1000hrs	0/231
High Temperature Reverse Bias	150°C, Vr = 100%	JESD22-A108	168 hrs 500 hrs 1000hrs	0/231
Power Cycle	Delta 100CC, 2.0 Min	JESD22-A105	5000 cycles 10000 cycles	0/231
Temperature Cycle	-65°C, 150°C	JESD22-A104	100 cycles 500 cycles	0/231

Qualification Plan	Device	Package	Process	No. of Lots
Q20150479	FDB8030L	TO263 3L	PT1 N	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260°C, 3 cycles	JESD22-A113		0/77
Highly Accelerated Stress Test	130°C, 85%RH, Vr = +24V	JESD22-A110	96 hrs	0/77
Un-biased Highly Accelerated Stress Test	130°C, 85%RH	JESD22-A110	96 hrs	0/77
High Temperature Gate Bias	175°C, Vgs = 100%	JESD22-A108	168 hrs 500 hrs 1000 hrs	0/77
High Temperature Reverse Bias	175°C, Vr = 80%	JESD22-A108	168 hrs 500 hrs 1000hrs	0/77
Power Cycle	Delta 100CC, 3.5 Min	JESD22-A105	5000 cycles 8572 cycles	0/77
Temperature Cycle	-55°C, 150°C	JESD22-A104	100 cycles 500 cycles 1000 cycles	0/77
High Temperature Storage Life	175°C	JESD22-A103	168 cycles 500 cycles 1000 cycles	0/77
Resistance to Solder Heat	260°C	JESD22-B016	10 sec	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20160443	FDC2512	SSOT6	PT1 N	3

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260°C, 3 cycles	JESD22-A113		01-Sep-2016
Highly Accelerated Stress Test	130°C, 85%RH, Vr = +42V	JESD22-A110	96 hrs	10-Sep-2016
Autoclave	121°C, 100%RH, 15PSIA	JESD22-A102	96 hrs	10-Sep-2016
High Temperature Gate Bias	175°C, Vgs = 100%	JESD22-A108	168 hrs 500 hrs 1000 hrs	15-Oct-2016
High Temperature Reverse Bias	175°C, Vr = 80%	JESD22-A108	168 hrs 500 hrs 1000hrs	15-Oct-2016
Power Cycle	Delta 100CC, 2 Min	JESD22-A105	5000 cycles 8572 cycles	15-Oct-2016
Temperature Cycle	-55°C, 150°C	JESD22-A104	100 cycles 500 cycles 1000 cycles	30-Sep-2016
Resistance to Solder Heat	260°C	JESD22-B016	10 sec	10-Sep-2016

Qualification Plan	Device	Package	Process	No. of Lots
Q20160479	FDC6306P	SSOT6	PT1 P	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260°C, 3 cycles	JESD22-A113		01-Sep-2016
Un-biased Highly Accelerated Stress Test	130°C, 85%RH	JESD22-A110	96 hrs	10-Sep-2016
Highly Accelerated Stress Test	130°C, 85%RH, Vr = -16V	JESD22-A110	96 hrs	10-Sep-2016
High Temperature Gate Bias	150°C, Vgs = 100%	JESD22-A108	168 hrs 500 hrs 1000 hrs	15-Oct-2016
High Temperature Reverse Bias	150°C, Vr = 80%	JESD22-A108	168 hrs 500 hrs 1000hrs	15-Oct-2016
Power Cycle	Delta 100CC, 2 Min	JESD22-A105	5000 cycles 8572 cycles	15-Oct-2016
Temperature Cycle	-55°C, 150°C	JESD22-A104	100 cycles 500 cycles 1000 cycles	30-Sep-2016
Resistance to Solder Heat	260°C	JESD22-B016	10 sec	10-Sep-2016
High Temperature Storage Life	150°C	JESD22-A103	168 cycles 500 cycles 1000 cycles	30-Sep-2016