PCN# : P56FAAB
Issue Date : Aug. 03, 2015

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. 01, 2015

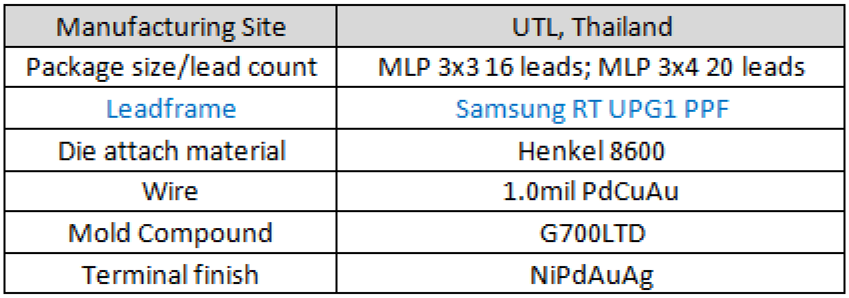
Expected First Date Code of Changed Product :1545

Description of Change (From) :
Fairchild Semiconductor MLP 3 x 3 16L, MLP 3 x 4 20L leads package currently assembled at HANA Semiconductor, Ayutthaya. See below table for current site/ package details.

Manufacturing Site	Hana Ayutthaya
Package size/lead count	MLP 3x3 16 leads; MLP 3x4 20 leads
Leadframe	HaeSung DS RT+UPG1 uPPF
Die attach material	Henkel QMI 519
Wire	1.0mil PdCu
Mold Compound	Hitachi CEL9220HF13H
Terminal finish	NiPdAuAg

Description of Change (To) :

UTAC Bangkok, Thailand is being added as assembly and test site. Refer to below table for package details. No changes to current Package specifications and dimension drawings.



Manufacturing Site	UTL, Thailand
Package size/lead count	MLP 3x3 16 leads; MLP 3x4 20 leads
Leadframe	Samsung RT UPG1 PPF
Die attach material	Henkel 8600
Wire	1.0mil PdCuAu
Mold Compound	G700LTD
Terminal finish	NiPdAuAg

Reason for Change:

- Improved supply flexibility
- Fairchild partnerships with assembly subcontractors
  - Best manufacturing pratices- access to many customer methods and practices
  - Advanced technology for fast ramp of future new products and technologies
- UTL has successfully manufactured Fairchild products for many years, including the MLP and uMLP packages. The affected products will remain fully compliant to all published specifications and may be shipped interchangeably with existing products.

Affected Product(s): Please refer to the list of affected products in the addendum attached in the PCN email you received. This list is based on an analysis of your company's procurement history.

Qualification Plan	Device	Package	Process	No. of Lots
Q20140208A	FAN2106MPX	MLP 6X5 25L	Maine CBIH30VD Salt Lake PT3 N/PT3 N S	1

Test Description:	Condition:	Standard:	Duration:	Results:
Auto Clave	100%RH, 121C	JESD22-A102	96 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cyc	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/10
Solderability, Condition A	215°C, 5 sec	JESD22-B102	8 hrs	0/11
Solderability, Condition B	245°C, 5 sec	JESD22-B102	8 hrs	0/11
MSLNL1A	PeakTemp(260°C), Cycles 3X	J-STD_020		0/22

Qualification Plan	Device	Package	Process	No. of Lots
Q20140208A	FDMF6704	MLP 5X5 32L	Jazz US JAZZBC05D Salt Lake RP5 N/RP5 N S	1

Test Description:	Condition:	Standard:	Duration:	Results:
Auto Clave	100%RH, 121C	JESD22-A102	96 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cyc	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/10
Solderability, Condition A	215°C, 5 sec	JESD22-B102	8 hrs	0/11
Solderability, Condition B	245°C, 5 sec	JESD22-B102	8 hrs	0/11
MSLNL1A	PeakTemp(260°C), Cycles 3X	J-STD_020		0/22

Qualification Plan	Device	Package	Process	No. of Lots
Q20140208A	FDMS2734	MLP 5X6 8L	Mountain Top UFET Trench	1

Test Description:	Condition:	Standard:	Duration:	Results:
Auto Clave	100%RH, 121C	JESD22-A102	96 hrs	0/77
Highly Accelerated Stress Test	85%RH, 130C, 42V	JESD22-A110	96 hrs	0/77
High Temperature Gate Bias	150C, 20V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150C, 200V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 cyc	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cyc	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/10
Solderability, Condition A	215°C, 5 sec	JESD22-B102	8 hrs	0/11
Solderability, Condition B	245°C, 5 sec	JESD22-B102	8 hrs	0/11
MSLNL1A	PeakTemp(260°C), Cycles 3X	J-STD_020		0/22

Qualification Plan	Device	Package	Process	No. of Lots
Q20140208A	FDMS7620S	MLP 5X6 8L	TSMC Taiwan PT7 N/PT7 N S	1

Test Description:	Condition:	Standard:	Duration:	Results:
Auto Clave	100%RH, 121C	JESD22-A102	96 hrs	0/77
Highly Accelerated Stress Test	85%RH, 130C, 24V	JESD22-A110	96 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 cyc	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cyc	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/10
Solderability, Condition A	215°C, 5 sec	JESD22-B102	8 hrs	0/11
Solderability, Condition B	245°C, 5 sec	JESD22-B102	8 hrs	0/11
MSLNL1A	PeakTemp(260°C), Cycles 3X	J-STD_020		0/22

Qualification Plan	Device	Package	Process	No. of Lots
Q20140208A	FIN210ACMLX	MLP 5X5 32L	Maine FS35C3LMD	1

Test Description:	Condition:	Standard:	Duration:	Results:
Auto Clave	100%RH, 121C	JESD22-A102	96 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cyc	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/10
Solderability, Condition A	215°C, 5 sec	JESD22-B102	8 hrs	0/11
Solderability, Condition B	245°C, 5 sec	JESD22-B102	8 hrs	0/11
MSLNL1A	PeakTemp(260°C), Cycles 3X	J-STD_020		0/22

Qualification Plan	Device	Package	Process	No. of Lots
Q20140208A	FXLA108BQX	MLP 2.5X4.5 20L	Maine 35CTINYBD	1

Test Description:	Condition:	Standard:	Duration:	Results:
Auto Clave	100%RH, 121C	JESD22-A102	96 hrs	0/77
Highly Accelerated Stress Test	85%RH, 130C, 3.6V	JESD22-A110	96 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Static Operating Life	150C, 3.6V	JESD22-A108	1000 hrs	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cyc	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/10
Solderability, Condition A	215°C, 5 sec	JESD22-B102	8 hrs	0/11
Solderability, Condition B	245°C, 5 sec	JESD22-B102	8 hrs	0/11
MSLNL1A	PeakTemp(260°C), Cycles 3X	J-STD_020		0/22

Qualification Plan	Device	Package	Process	No. of Lots
Q20140208A	FDML7610S	MLP 3X4.5 8L	Salt Lake PT7 N/PT7 N S	1

Test Description:	Condition:	Standard:	Duration:	Results:
Auto Clave	100%RH, 121C	JESD22-A102	96 hrs	0/77
Highly Accelerated Stress Test	85%RH, 130C, 24V	JESD22-A110	96 hrs	0/77
High Temperature Gate Bias	150C, 20V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	125C, 24V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 cyc	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cyc	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/10
Solderability, Condition A	215°C, 5 sec	JESD22-B102	8 hrs	0/11
Solderability, Condition B	245°C, 5 sec	JESD22-B102	8 hrs	0/11
MSLNL1A	PeakTemp(260°C), Cycles 3X	J-STD_020		0/22

Qualification Plan	Device	Package	Process	No. of Lots
Q20140208A	FDMA7628	MLP 2X2 6L	Salt Lake PT4 N	1

Test Description:	Condition:	Standard:	Duration:	Results:
Auto Clave	100%RH, 121C	JESD22-A102	96 hrs	0/77
Highly Accelerated Stress Test	85%RH, 130C, 16V	JESD22-A110	96 hrs	0/77
High Temperature Gate Bias	150C, 8V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150C, 16V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 cyc	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cyc	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/10
Solderability, Condition A	215°C, 5 sec	JESD22-B102	8 hrs	0/11
Solderability, Condition B	245°C, 5 sec	JESD22-B102	8 hrs	0/11
MSLNL1A	PeakTemp(260°C), Cycles 3X	J-STD_020		0/22

Qualification Plan	Device	Package	Process	No. of Lots
Q20140208A	FDMC6683	MLP 3.3X3.3 8L	Salt Lake ST3 P	1

Test Description:	Condition:	Standard:	Duration:	Results:
Auto Clave	100%RH, 121C	JESD22-A102	96 hrs	0/77
Highly Accelerated Stress Test	85%RH, 130C, -16V	JESD22-A110	96 hrs	0/77
High Temperature Gate Bias	150C, -8V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150C, -16V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Power Cycle	Delta 100C, 2 Min cycle	MIL-STD-750-1036	10000 cyc	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cyc	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/10
Solderability, Condition A	215°C, 5 sec	JESD22-B102	8 hrs	0/11
Solderability, Condition B	245°C, 5 sec	JESD22-B102	8 hrs	0/11
MSLNL1A	PeakTemp(260°C), Cycles 3X	J-STD_020		0/22

Qualification Plan	Device	Package	Process	No. of Lots
Q20140208A	FDMC86261P	MLP 3.3X3.3 8L	Salt Lake MV5 P	1

Test Description:	Condition:	Standard:	Duration:	Results:
High Temperature Reverse Bias	150C, -120V	JESD22-A108	1000 hrs	0/77
MSLNL1A	PeakTemp(260°C), Cycles 3X	J-STD_020		0/22

Qualification Plan	Device	Package	Process	No. of Lots
Q20140158	SMC6100P	MLP34_20L	MXIC Process CT	3

Test Description:	Condition:	Standard:	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113		0/1230
Gate Leakage Negative	155°C, -400V	AEC-Q100-006		0/9
Gate Leakage Positive	155°C, +400V	AEC-Q100-006		0/9
Physical Dimensions		JESD22-B100		0/15
High Temperature Operating Life Test	125°C, VIN=20V	JESD22-A108	1000 hrs	0/231
Highly Accelerated Stress Test	130°C,85%RH, VIN=20V	JESD22-A101	96 hrs	0/135
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/231
Unbiased Highly Accelerated Stress Test	110°C, 85%RH	JESD22-A102	264 hrs	0/135
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cyc	0/231
Solderability	245°C	JESD22-B102	5 sec	0/33
Resistance to Solder Heat	260°C	JESD22-B106	10 sec	0/15