PCN# : P5C4AAB
Issue Date : Feb. 25, 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 :May. 25, 2016

Expected First Date Code of Changed Product :1622

Description of Change (From) :
MDIP 8L devices manufactured at Subcontractor in Philippines.

Assembly Site	Philippines sub-contractor
Package	MDIP 8L
Leadframe	Cu LF with A194
Die attach material	Ablebond 84-1 LMISR4
Wire	1.0 mil Au wire
Mold Compound	Nitto GE800

Description of Change (To) :
MDIP 8L devices manufactured at alternate Assembly & Test Subcontractor in Taiwan.

Assembly Site	Taiwan sub-contractor
Package	MDIP 8L
Leadframe	Cu LF with A194
Die attach material	Sumitomo CRM-1076DJ-G
Wire	1.0 mil Au wire
Mold Compound	Sumitomo G600F

Reason for Change:
Improve supply flexibility.

Affected Product(s):

FSL117MRIN	FSL137MRIN	FSL156MRISN

Qualification Plan	Device	Package	Process	No. of Lots
Q20140114	FSB147HNY	NMDIP 8L	0.5UM/700V C-FET	1

Test Description:	Condition:	Standard :	Duration:	Results:
Gate Leakage (positive)	155°C, 400V	AEC-Q100-006	-	0/3
Gate Leakage (negative)	155°C, -400V	AEC-Q100-006	-	0/3
Highly Accelerated Stress Test	85%RH, 130°C, 30V	JESD22-A118	96 hrs	0/45
High Temperature Operating Life	115°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/77
Unbias Highly Accelerated Stress Test	85%RH, 110°C	JESD22-A118	264 hrs	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/5
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

Qualification Plan	Device	Package	Process	No. of Lots
Q20140114	FSQ0370RNA	NMDIP 8L	SDG4 Q-FET	1

Test Description:	Condition:	Standard :	Duration:	Results:
Highly Accelerated Stress Test	85%RH, 110°C, 100V	JESD22-A118	264 hrs	0/77
High Temperature Reverse Bias	150°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/5
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

Qualification Plan	Device	Package	Process	No. of Lots
Q20140112	FSGM300N	NMDIP 8L	FS50D2D UNI-FET	1

Test Description:	Condition:	Standard :	Duration:	Results:
Highly Accelerated Stress Test	85%RH, 110°C, 100V	JESD22-A118	264 hrs	0/77
High Temperature Reverse Bias	150°C, 520V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/5
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

Qualification Plan	Device	Package	Process	No. of Lots
Q20140112	DNP015	NMDIP 8L	Q-FET	1

Test Description:	Condition:	Standard :	Duration:	Results:
Gate Leakage (positive)	155°C, 400V	AEC-Q100-006	-	0/3
Gate Leakage (negative)	155°C, -400V	AEC-Q100-006	-	0/3
Highly Accelerated Stress Test	85%RH, 130°C, 30V	JESD22-A118	96 hrs	0/45
High Temperature Operating Life	115°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/77
Unbias Highly Accelerated Stress Test	85%RH, 110°C	JESD22-A118	264 hrs	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/5
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

Qualification Plan	Device	Package	Process	No. of Lots
Q20140112	FSBH0270WNY	NMDIP 8L	0.5UM/700V OLD-FET	1

Test Description:	Condition:	Standard :	Duration:	Results:
Gate Leakage (positive)	155°C, 400V	AEC-Q100-006	-	0/3
Gate Leakage (negative)	155°C, -400V	AEC-Q100-006	-	0/3
High Temperature Operating Life	115°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/77
Unbias Highly Accelerated Stress Test	85%RH, 110°C	JESD22-A118	264 hrs	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/5
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

Title : Qualification Report for PCN : P5C4AAB

Date : Feb. 24, 2016

Affected devices :

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Product	Customer Part Number	BBB	Drawing
FSL137MRIN		Y	N

Qualification Test Summary :

Qualification Plan	Device	Package	Process	No. of Lots
Q20140114	FSB147HNY	NMDIP 8L	0.5UM/700V C-FET	1

Test Description:	Condition:	Standard :	Duration:	Results:
Gate Leakage (positive)	155°C, 400V	AEC-Q100-006	-	0/3
Gate Leakage (negative)	155°C, -400V	AEC-Q100-006	-	0/3
Highly Accelerated Stress Test	85%RH, 130°C, 30V	JESD22-A118	96 hrs	0/45
High Temperature Operating Life	115°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/77
Unbias Highly Accelerated Stress Test	85%RH, 110°C	JESD22-A118	264 hrs	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/5
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

Qualification Plan	Device	Package	Process	No. of Lots
Q20140114	FSQ0370RNA	NMDIP 8L	SDG4 Q-FET	1

Test Description:	Condition:	Standard :	Duration:	Results:
Highly Accelerated Stress Test	85%RH, 110°C, 100V	JESD22-A118	264 hrs	0/77
High Temperature Reverse Bias	150°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/5
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

Qualification Plan	Device	Package	Process	No. of Lots
Q20140112	FSGM300N	NMDIP 8L	FS50D2D UNI-FET	1

Test Description:	Condition:	Standard :	Duration:	Results:
Highly Accelerated Stress Test	85%RH, 110°C, 100V	JESD22-A118	264 hrs	0/77
High Temperature Reverse Bias	150°C, 520V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/5
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

Qualification Plan	Device	Package	Process	No. of Lots
Q20140112	DNP015	NMDIP 8L	Q-FET	1

Test Description:	Condition:	Standard :	Duration:	Results:
Gate Leakage (positive)	155°C, 400V	AEC-Q100-006	-	0/3
Gate Leakage (negative)	155°C, -400V	AEC-Q100-006	-	0/3
Highly Accelerated Stress Test	85%RH, 130°C, 30V	JESD22-A118	96 hrs	0/45
High Temperature Operating Life	115°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/77
Unbias Highly Accelerated Stress Test	85%RH, 110°C	JESD22-A118	264 hrs	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/5
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

Qualification Plan	Device	Package	Process	No. of Lots
Q20140112	FSBH0270WNY	NMDIP 8L	0.5UM/700V OLD-FET	1

Test Description:	Condition:	Standard :	Duration:	Results:
Gate Leakage (positive)	155°C, 400V	AEC-Q100-006	-	0/3
Gate Leakage (negative)	155°C, -400V	AEC-Q100-006	-	0/3
High Temperature Operating Life	115°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150°C, 560V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/77
Unbias Highly Accelerated Stress Test	85%RH, 110°C	JESD22-A118	264 hrs	0/77
Resistance to Solder Heat	260°C	JESD22-B106	3X @ 10s	0/5
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

The selection methodology of qualification vehicles is aligned with JESD47 and if automotive devices are impacted by the PCN the selection of qualification vehicles is also align with the requirements in AEC-Q100 or AEC-Q101

Please contact your local Customer Quality Engineer if you have any questions concerning this data.