



PCN# : P69EAAB
Issue Date : Oct. 05, 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 ON 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 :Jan. 03, 2017

Expected First Date Code of Changed Product :1702

Description of Change (From) :

- 1) MDIP packages manufactured at subcontractors in China.
- 2) Finish type Comp pb (e3) which is Lead-free compound with Tin plated terminal.

Assembly Site	China Subcontractors
Package	MDIP 8, 14L
Lead frame	Cu LF with A194
Die attach material	Ablebond 2200D
Wire	1.0/ 1.2mil Au wire
Mold Compound	KCC KTMC1030NFE

Description of Change (To) :

- 1) Assembly and test subcontractor in Taiwan
- 2) Finish type to Green comp (G3) which is Green compound with Tin plated terminal.

Assembly Site	Taiwan Subcontractor
Package	MDIP 8L, 14L
Lead frame	Cu LF with A194
Die attach material	Sumitomo CRM-1076DJ-G
Wire	1.0/ 1.2 mil Au wire
Mold Compound	Sumitomo G600F

Reason for Change:
 Consolidate MDIP package into subcon in Taiwan.



Affected Product(s):

FAN7527BN	FAN7554	FAN7602BN
FAN7711N	KA2803B	KA2902
KA331	KA34063A	KA3843B
KA3844B	KA393A	KA7552A
KA7553A	L272AM	L272M
LF353N	LM258N	

Qualification Plan	Device	Package	Process	No. of Lots
Q20140114	FSB147HNY	NMDIP 8L	Bucheon 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	Bucheon SDG4	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
Q20140114	FSQ321	NMDIP 8L	Bucheon SDG4D	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
Q20140114	L272AM	NMDIP 8L	Bucheon BCH4B	1

Test Description:	Condition:	Standard :	Duration:	Results:
Autoclave	121°C, 15psi, 100%RH	JESD22-A102	96 hrs	0/77
Highly Accelerated Stress Test	85%RH, 130°C, ±12V	JESD22-A118	96 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Static Operating Life	150°C, ±12V	JESD22-A108	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	Maine FS50D2D	1

Test Description:	Condition:	Standard :	Duration:	Results:
Highly Accelerated Stress Test	85%RH, 110°C, 100V	JESD22-A118	264 hrs	0/45
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	Bucheon 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	Bucheon 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
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
Q20140113A	FAN7392N	NMDIP 14L	Bucheon HDG4D	1

Test Description:	Condition:	Standard :	Duration:	Results:
Highly Accelerated Stress Test	85%RH, 130°C, 10V	JESD22-A118	96 hrs	0/77
High Temperature Reverse Bias	150°C, 500V	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
Q20140113A	KA324	NMDIP 14L	Bucheon BSP1	1

Test Description:	Condition:	Standard :	Duration:	Results:
Autoclave	121°C, 15psi, 100%RH	JESD22-A102	96 hrs	0/77
Highly Accelerated Stress Test	85%RH, 130°C, 15V	JESD22-A118	96 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Static Operating Life	150°C, 30V	JESD22-A108	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
Q20140113A	KA7500C	NMDIP 16L	Bucheon BCH4B	1

Test Description:	Condition:	Standard :	Duration:	Results:
Highly Accelerated Stress Test	85%RH, 130°C, 10V	JESD22-A118	96 hrs	0/45
High Temperature Operating Life	115°C, 20V	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



Title : Qualification Report for PCN : P69EAAB**Date : Oct. 04, 2016****Affected devices :**

C

Product	Customer Part Number	BBB	Drawing
FAN7711N		Y	N
KA2803B		Y	N
KA331		Y	N
KA34063A		Y	N
L272M		Y	N
LF353N		Y	N
LM258N		Y	N

C

Product	Customer Part Number	BBB	Drawing
KA2902		Y	N
KA393A		Y	N
L272AM		Y	N

Qualification Test Summary :

Qualification Plan	Device	Package	Process	No. of Lots
Q20140114	FSB147HNY	NMDIP 8L	BuCheon 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	BuCheon SDG4	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
Q20140114	FSQ321	NMDIP 8L	BuCheon SDG4D	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
Q20140114	L272AM	NMDIP 8L	BuCheon BCH4B	1

Test Description:	Condition:	Standard :	Duration:	Results:
Autoclave	121°C, 15psi, 100%RH	JESD22-A102	96 hrs	0/77
Highly Accelerated Stress Test	85%RH, 130°C, ±12V	JESD22-A118	96 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Static Operating Life	150°C, ±12V	JESD22-A108	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
Q20140113A	FAN7392N	NMDIP 14L	Bucheon HDG4D	1

Test Description:	Condition:	Standard :	Duration:	Results:
Highly Accelerated Stress Test	85%RH, 130°C, 10V	JESD22-A118	96 hrs	0/77
High Temperature Reverse Bias	150°C, 500V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-55°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
Q20140113A	KA324	NMDIP 14L	Bucheon BSP1	1

Test Description:	Condition:	Standard :	Duration:	Results:
Autoclave	121°C, 15psi, 100%RH	JESD22-A102	96 hrs	0/77
Highly Accelerated Stress Test	85%RH, 130°C, 15V	JESD22-A118	96 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Static Operating Life	150°C, 30V	JESD22-A108	1000 hrs	0/77
Temperature Cycle	-55°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
Q20140113A	KA7500C	NMDIP 16L	Bucheon BCH#B	1

Test Description:	Condition:	Standard :	Duration:	Results:
Highly Accelerated Stress Test	85%RH, 130°C, 10V	JESD22-A118	96 hrs	0/45
High Temperature Operating Life	115°C, 20V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Temperature Cycle	-55°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	Maine FS50D2D	1

Test Description:	Condition:	Standard :	Duration:	Results:
Highly Accelerated Stress Test	85%RH, 110°C, 100V	JESD22-A118	264 hrs	0/45
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	Bucheon 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	Bucheon 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
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

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.