



PCN# : P688AAB
Issue Date : Sep. 07, 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 :Dec. 06, 2016

Expected First Date Code of Changed Product :1650

Description of Change (From) :
5 inch wafer fabrication at Fairchild in Bucheon, South Korea

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

	CHANGE FROM	CHANGE TO
DIE TECH	OLD-FET	3.8M Cell
DIE CODE	EE7000A11XA_D5X	JMPT9GA60GA_D8X
WAFER SIZE	5"	8"
CHIP SIZE	770*740	646.6*617.6
Back metal	VNiGeSbAuAg	TiNiAgSn
Data sheet	Vgsth@1mA<2.2V	Vgsth@1mA <3.0V

Reason for Change:
5 inch wafer fabrication at Fairchild in Bucheon, South Korea is closed.
Change in Vgsth limit to align with industry and JEDEC standards.



Affected Product(s):

2N7000BU	2N7000TA	
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Qualification Plan	Device	Package	Process	No. of Lots
Q20150527	NDP7060	TO-220	BK8 - 03.8N	3

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Gate Bias	175°C, Vgs = 20V	JESD22-A108	1000 hrs	0/231
High Temperature Reverse Bias	175°C, Vr = 48V	JESD22-A108	1000 hrs	0/231
High Temperature Storage Life	175°C	JESD22-A103	1000 hrs	0/231
Highly Accelerated Stress Test	130°C, 85%RH, Vr = 48V	JESD22-A110	96 hrs	0/231
Power Cycle	Delta 100CC, 3.5 Min cycle	MIL-STD-750-1036	8572 cycles	0/231
Temperature Cycle	-65°C, 150°C	JESD22-A104	1000 cycles	0/231



Title : Qualification Report for PCN : P688AAB

Date : Sep. 06, 2016

Affected devices :

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Product	Customer Part Number	BBB	Drawing
2N7000BU		Y	N
2N7000TA		Y	N

Qualification Test Summary :

Qualification Plan	Device	Package	Process	No. of Lots
Q20150527	NDP7060	TO-220	BK8 - 03.8N	3

Test Description:	Condition:	Standard :	Duration:	Results:
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High Temperature Storage Life	175°C	JESD22-A103	1000 hrs	0/231
Highly Accelerated Stress Test	130°C, 85%RH, V _r = 48V	JESD22-A110	96 hrs	0/231
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Temperature Cycle	-65°C, 150°C	JESD22-A104	1000 cycles	0/231

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.