



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 :Jun. 22, 2017

Expected First Date Code of Changed Product :1726

Description of Change (From) :
6-inch wafer fabrication at ON Bucheon, South Korea

Description of Change (To) :
6/8-inch wafer fabrication at ON Bucheon, South Korea

Reason for Change:

This is to increase wafer fabrication capacity by qualifying 8-inch wafer fabrication line at ON Semiconductor Bucheon Korea. Quality and reliability remain at the highest standards already demonstrated within ON'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):

FGH12040WD_F155	FGH15T120SMD_F155	FGH25T120SMD_F155
FGH40T120SMD	FGH40T120SMDL4	FGH40T120SMD_F155
FGH40T120SMD_SN00363	FGH40T120SMD_SN00388	FGL12040WD
FGY40T120SMD	FSB50250A	FSB50250AB
FSB50250AP	FSB50250AS	FSB50250AT
FSB50325A	FSB50325AP	FSB50325AS
FSB50325AT	FSB50350ASF	FSB50350ATF
FSB50450AS_SN00272	FSB50450AT	FSB50550A
FSB50550AB	FSB50550AD	FSB50550ADL
FSB50550AS	FSB50550ASE	FSB50550AT
FSB50825A	FSB50825AB	FSB50825AS
NBC9619	NBC9620	

Qualification Plan	Device	Package	Process	No. of Lots
Q20150346	FSB50550A	SPM5	Uni-FET	3

Test Description:	Condition:	Standard :	Duration:	Results:
Pre-condition	MSL3, 245°C	JESD22-A113	NA	0/462
High Temperature Reverse Bias	150°C, 400V	JESD22-A108	1000 hrs	0/72
Temperature Humidity Bias Test	85%RH, 85C	JESD22-A101	1000 hrs	0/72
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/231
Temperature Cycle	-40°C, 125°C	JESD22-A104	500 cycles	0/231

Qualification Plan	Device	Package	Process	No. of Lots
QP1410001	FGH40T120SMD	TO247	FS2-TIGBT	3

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Gate Bias	175°C, 25V	JESD22-A108	1000 hrs	0/231
High Temperature Reverse Bias	175°C, 960V	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, 42V	JESD22-A110	96 hrs	0/231
Power Cycle	Delta 100CC, 3.5 Min cycle	MIL-STD-750- 1036	6000 cycles	0/231
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/231



Title : Qualification Report for PCN : P6A3AAB

Date : Mar. 23, 2017

Affected devices :

Product	Customer Part Number	BBB	Drawing
FGH40T120SMD_F155		Y	N

Product	Customer Part Number	BBB	Drawing
FGH15T120SMD_F155		Y	N
FGH25T120SMD_F155		Y	N
FGH40T120SMD		Y	N
FGH40T120SMDL4		Y	N
FGY40T120SMD		Y	N
FSB50250A		Y	N
FSB50250AS		Y	N
FSB50250AT		Y	N
FSB50325A		Y	N
FSB50550A		Y	N
FSB50550AB		Y	N
FSB50550AS		Y	N
FSB50550ASE		Y	N
FSB50550AT		Y	N
FSB50825A		Y	N
FSB50825AB		Y	N
FSB50825AS		Y	N

Product	Customer Part Number	BBB	Drawing
FGH15T120SMD_F155		Y	N
FSB50250AS		Y	N

Product	Customer Part Number	BBB	Drawing
FGH40T120SMDL4		Y	N

Qualification Test Summary :



Qualification Plan	Device	Package	Process	No. of Lots
Q20150346	FSB50550A	SPM5	Uni-FET	3

Test Description:	Condition:	Standard :	Duration:	Results:
Pre-condition	MSL3, 245°C	JESD22-A113	NA	0/462
High Temperature Reverse Bias	150°C, 400V	JESD22-A108	1000 hrs	0/72
Temperature Humidity Bias Test	85%RH, 85C	JESD22-A101	1000 hrs	0/72
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/231
Temperature Cycle	-40°C, 125°C	JESD22-A104	500 cycles	0/231

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Power Cycle	Delta 100CC, 3.5 Min cycle	MIL-STD-750- 1036	6000 cycles	0/231
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 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.