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**PCN# : P6C1AAB**  
**Issue Date : Apr. 28, 2017**

**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 :Jul. 27, 2017

Expected First Date Code of Changed Product :1731

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

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

**Reason for Change:**

ON Semiconductor is increasing 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.



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**Affected Product(s):**

FCD1300N80Z	FCD2250N80Z	FCD3400N80Z
FCD850N80Z	FCP850N80Z	FCPF1300N80Z
FCPF1300N80ZYD	FCPF2250N80Z	FCPF4300N80Z
FCPF650N80Z	FCPF850N80Z	FCU2250N80Z
FCU3400N80Z	FCU4300N80Z	FCU850N80Z

Qualification Plan	Device	Package	Process	No. of Lots
QP131201	FCPF400N80Z	TO-220F	Super-FET2	3

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Gate Bias	150°C, Vgs = 20V	JESD22-A108	1000 hrs	0/231
High Temperature Reverse Bias	150°C, Vr = 800V	JESD22-A108	1000 hrs	0/231
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/231
Highly Accelerated Stress Test	130°C, 85%RH, Vr = 42V	JESD22-A110	96 hrs	0/231
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/231

Qualification Plan	Device	Package	Process	No. of Lots
QP131202	FCD850N80Z	PAK	Super-FET2	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260°C, 3 cycles	JESD22-A113	n/a	0/308
High Temperature Gate Bias	150°C, Vgs = 20V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150°C, Vr = 800V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Highly Accelerated Stress Test	130°C, 85%RH, Vr = 42V	JESD22-A110	96 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	1000 cycles	0/77



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**Title : Qualification Report for PCN : P6C1AAB****Date : Apr. 28, 2017****Affected devices :**

<b>Product</b>	<b>Customer Part Number</b>	<b>BBB</b>	<b>Drawing</b>
FCD1300N80Z		Y	N
FCD2250N80Z		Y	N
FCD3400N80Z		Y	N
FCD850N80Z		Y	N
FCP850N80Z		Y	N
FCPF1300N80Z		Y	N
FCPF2250N80Z		Y	N
FCPF4300N80Z		Y	N
FCPF650N80Z		Y	N
FCPF850N80Z		Y	N
FCU2250N80Z		Y	N
FCU3400N80Z		Y	N
FCU4300N80Z		Y	N
FCU850N80Z		Y	N

**Qualification Test Summary :**



Qualification Plan	Device	Package	Process	No. of Lots
QP131201	FCPF400N80Z	TO-220F	Super-FET2	3

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Gate Bias	150°C, Vgs = 20V	JESD22-A108	1000 hrs	0/231
High Temperature Reverse Bias	150°C, V <sub>r</sub> = 800V	JESD22-A108	1000 hrs	0/231
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/231
Highly Accelerated Stress Test	130°C, 85%RH, V <sub>r</sub> = 42V	JESD22-A110	96 hrs	0/231
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/231

Qualification Plan	Device	Package	Process	No. of Lots
QP131202	FCD850N80Z	DPAK	Super-FET2	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260°C, 3 cycles	JESD22-A113	n/a	0/308
High Temperature Gate Bias	150°C, Vgs = 20V	JESD22-A108	1000 hrs	0/77
High Temperature Reverse Bias	150°C, V <sub>r</sub> = 800V	JESD22-A108	1000 hrs	0/77
High Temperature Storage Life	150°C	JESD22-A103	1000 hrs	0/77
Highly Accelerated Stress Test	130°C, 85%RH, V <sub>r</sub> = 42V	JESD22-A110	96 hrs	0/77
Temperature Cycle	-65°C, 150°C	JESD22-A104	1000 cycles	0/77

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.