



PCN# : P691AAB
Issue Date : Nov. 24, 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 :Feb. 22, 2017

Expected First Date Code of Changed Product :1709

Description of Change (From) :
Wafer fabrication of 5.0/10.0 products at TowerJazz Israel

Description of Change (To) :
8-inch wafer fabrication of 5.0/10.0 products at ON Semiconductor at Bucheon, South Korea and TowerJazz Israel

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 Semiconductor'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):

FDC6301N_G	FDC6302P	FDC6320C
FDC6321C	FDC6323L	FDC6324L
FDC6325L	FDC6326L	FDG313N
FDG6303N_G	FDG6320C	FDG6324L
FDG6342L	FDG8842CZ	FDS9431A
FDT439N	FDT439N_F081	FDT457N
FDT459N	FDV301N	FDV302P
NDB6030PL	NDP6020P	NDS351N
NDS352AP	NDS355AN_G	NDS356AP
NDS356AP_NB8L005A	NDS8434	NDS9952A
NDS9952A_F011	NDT451AN	NDT454P
NDT456P		

A qualification plan for PCN

Qualification Plan	Device	Package	Process	No. of Lots
Q20160056, Q20160501 Q20160571	FDC6303N	SSOT6	5.0M N	2

Test Description:	Condition:	Standard:	Duration:	Results:
MSL1 Precondition	260°C, 3 cycles	JESD22-A113		0/640
Highly Accelerated Stress Test	130°C, 85%RH, Vr = +20V	JESD22-A110	96 hrs	0/160
High Temperature Gate Bias	150°C, Vgs = +8V	JESD22-A108	1,000 hrs	0/160
High Temperature Reverse Bias	150°C, Vr = +20V	JESD22-A108	1,000hrs	0/160
Power Cycle	Delta 100CC, 2.0 Min cyc	JESD22-A105	10,000 cycles	0/160
High Temperature Storage Life	150°C	JESD22-A103	1,000 hrs	0/160
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/160

Qualification Plan	Device	Package	Process	No. of Lots
Q20160056	FDS8433A	SO8-Single	10.0M P	3

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260°C, 3 cycles	JESD22-A113		0/720
Highly Accelerated Stress Test	130°C, 85%RH, Vr = -16V	JESD22-A110	96 hrs	0/240
High Temperature Gate Bias	150°C, Vgs = -8V	JESD22-A108	1,000 hrs	0/240
High Temperature Reverse Bias	150°C, Vr = -16V	JESD22-A108	1,000 hrs	0/240
Power Cycle	Delta 100CC, 2.0 Min cyc	JESD22-A105	10,000 cycles	0/240
Temperature Cycle	-65°C, 150°C	JESD22-A104	1,000 cycles	0/240

Qualification Plan	Device	Package	Process	No. of Lots
Q20160056	NDB6030PL	TO-263	05.0 P	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260°C, 3 cycles	JESD22-A113		0/240
Highly Accelerated Stress Test	130°C, 85%RH, Vr = +20V	JESD22-A110	96 hrs	0/80
High Temperature Gate Bias	150°C, Vgs = +8V	JESD22-A108	1,000 hrs	0/80
High Temperature Reverse Bias	150°C, Vr = +20V	JESD22-A108	1,000 hrs	0/80
Power Cycle	Delta 100CC, 2.0 Min cyc	JESD22-A105	8,572 cycles	0/80
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/80



Title : Qualification Report for PCN : P691AAB

Date : Nov. 24, 2016

Affected devices :

Product	Customer Part Number	BBB	Drawing
FDC6302P		Y	N
FDC6320C		Y	N
FDC6321C		Y	N
FDC6323L		Y	N
FDC6324L		Y	N
FDC6325L		Y	N
FDG6320C		Y	N
FDG6324L		Y	N
FDG6342L		Y	N
FDG8842CZ		Y	N
FDS9431A		Y	N
FDT439N		Y	N
FDT457N		Y	N
FDV301N		Y	N
FDV302P		Y	N
NDP6020P		Y	N
NDS352AP		Y	N
NDS356AP		Y	N
NDS8434	NDS8434TR-NDL	Y	N
NDS9952A	NDS9952ATR-ND	Y	N
NDT451AN	NDT451ANTR-ND	Y	N
NDT454P		Y	N
NDT456P		Y	N

Product	Customer Part Number	BBB	Drawing
NDS8434		Y	N
NDS9952A		Y	N

Product	Customer Part Number	BBB	Drawing
FDC6302P		Y	N
FDC6326L		Y	N
FDG313N		Y	N
FDT459N		Y	N

NDB6030PL		Y	N
NDS351N		Y	N
NDS8434		Y	N
NDS9952A		Y	N

Product	Customer Part Number	BBB	Drawing
NDB6030PL		Y	N

Qualification Test Summary :



A qualification plan for PCN

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Q20160056, Q20160501 Q20160571	FDC6303N	SSOT6	5.0M N	2

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Highly Accelerated Stress Test	130°C, 85%RH, $V_{r} = +20V$	JESD22-A110	96 hrs	0/160
High Temperature Gate Bias	150°C, $V_{gs} = +8V$	JESD22-A108	1,000 hrs	0/160
High Temperature Reverse Bias	150°C, $V_{r} = +20V$	JESD22-A108	1,000hrs	0/160
Power Cycle	Delta 100CC, 2.0 Min cyc	JESD22-A105	10,000 cycles	0/160
High Temperature Storage Life	150°C	JESD22-A103	1,000 hrs	0/160
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/160

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High Temperature Reverse Bias	150°C, $V_{r} = -16V$	JESD22-A108	1,000 hrs	0/240
Power Cycle	Delta 100CC, 2.0 Min cyc	JESD22-A105	10,000 cycles	0/240
Temperature Cycle	-65°C, 150°C	JESD22-A104	1,000 cycles	0/240



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High Temperature Reverse Bias	150°C, $V_{r} = +20V$	JESD22-A108	1,000 hrs	0/80
Power Cycle	Delta 100CC, 2.0 Min cyc	JESD22-A105	8,572 cycles	0/80
Temperature Cycle	-65°C, 150°C	JESD22-A104	500 cycles	0/80

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.