



Final Product/Process Change Notification

Document #:FPCN23564XA

Issue Date:21 Dec 2020

Title of Change:	Wafer diameter change from 5inch Bucheon to 6inch Bucheon			
Proposed First Ship date:	29 Mar 2021 or earlier if approved by customer			
Contact Information:	Contact your local ON Semiconductor Sales Office or Yuna.Im@onsemi.com			
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office or < PCN.samples@onsemi.com >. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.			
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or songyong.sim@onsemi.com			
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com			
Marking of Parts/ Traceability of Change:	Lot code after 2020			
Change Category:	Wafer Fab Change			
Change Sub-Category(s):	Wafer diameter changes from 5inch to 6inch and adding passivation			
Sites Affected:				
ON Semiconductor Sites		External Foundry/Subcon Sites		
ON Semiconductor Bucheon, Korea		None		
Description and Purpose:				
Supply enhancement due to Bucheon 5inch fab closure instead EOL products. Qfet is qualified tech in Bucheon 6inch.				
Item	Before Change Description	After Change Description		
Wafer diameter	ON Semiconductor Bucheon, Korea- 5inch	ON Semiconductor Bucheon, Korea- 6inch		
Passivation	No	Nitride passivation		
Reliability Data Summary:				
QV DEVICE NAME: FQP2N40-F080 RMS: K70179, K70446 PACKAGE: TO220				
Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=150°C, 80% max rated V	1008 hrs	0/240
HTGB	JESD22-A108	Tj=150°C, 100% max rated Vgss	1008 hrs	0/240
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/240
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 3.5 min	8572 cyc	0/120



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TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/120
H3TRB	JESD22-A110	130°C, 85% RH, 18.8psig, bias (100V)	1008 hrs	0/120
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/120

QV DEVICE NAME: IRFP150A

RMS: K64737, K69610

PACKAGE: TO3PN

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=175°C, 80% max rated V	1008 hrs	0/240
HTGB	JESD22-A108	Tj=175°C, 100% max rated Vgss	1008 hrs	0/240
HTSL	JESD22-A103	Ta=175°C	1008 hrs	0/240
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 5 min	6000 cyc	0/40
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/120
H3TRB	JESD22-A110	130°C, 85% RH, 18.8psig, bias (80V)	1008 hrs	0/120
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/120

Electrical Characteristics Summary:

Electrical characteristics are not impacted.

List of Affected Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the [**PCN Customized Portal**](#).

Part Number	Qualification Vehicle
FQP9N30	FQP2N40-F080
FQP3N30	FQP2N40-F080
IRFP150A	IRFP150A