## **ON Semiconductor®**



# Final Product/Process Change Notification Document # : FPCN22543Z

Issue Date: 27 February 2019

Title of Change:	Addition of ON Semiconductor Gresham, Oregon, as wafer fab location (I3T50 technology), currently manufactured in Fab2, Oudenaarde, Belgium and updated the leadframe for the NCV7718BDQR2G product.	
Proposed Changed Material First Ship Date:	27 February 2020 or earlier upon customer approval.	
Current Material Last Order Date:	NA	
Current Material Last Delivery Date:	NA	
Product Category:	Active components – Integrated circuits	
Contact information:	Contact your local ON Semiconductor Sales Office or < <u>Nixon.Mathew@onsemi.com</u> >	
Samples:	Contact your local ON Semiconductor Sales Office to place sample order or < <u>PCN.samples@onsemi.com</u> > Sample requests are to be submitted no later than 45 days after publication of this change notification.	
Sample Availability Date:	28 February 2019	
PPAP Availability Date:	28 February 2019	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < <u>Peter.Turlo@onsemi.com</u> >	
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 12 months prior to implementation of the change or earlier upon customer approval. ON Semiconductor will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com.	
Change Category	Type of Change	
Process – Wafer Production	Move of all or part of wafer fab to a different location/site/subcontractor subcontractor (qualification of an additional manufacturing site)	
Process – Assembly	Change of lead frame	
Process – Assembly	Change of product marking	
Process – Wafer Production	New wafer diameter	
Equipment	Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.	

#### **Description and Purpose:**

Addition of ON Semiconductor Gresham, Oregon as wafer fab location (I3T technology, 200 mm fab), currently manufactured in Fab2, Oudenaarde, Belgium (150 mm fab) to be dual sourced for the NCV7718BDQR2G product. This will increase ON Semiconductor's wafer fab capacity and flexibility for this device. In addition, the leadframe was updated

	Before Change Description	After Change Description
Qualification of an additional manufacturing site	Fab2, Oudenaarde, Belgium	Fab2, Oudenaarde, Belgium and Gresham, Oregon
Wafer Diameter	150mm	150mm and 200mm
Change of leadframe	Non-Roughened	Roughened
Change of OPN	NCV7718BDQR2G	NCV7718CDQR2G

	From	То
Product marking change	NCV7718B	NCV7718C



# Final Product/Process Change Notification

Document # : FPCN22543Z Issue Date: 27 February 2019

Reason / Motivation for Change:	Benefit of the change: Provide additional wafer fab capacity and flexibility for manufacturing.   Risk for Late Release: Possible supply disruptions.   Quality Improvement: Roughened leadframe will improve delamination performance.   The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by ON Semiconductor in relation to the PCN, associated risks are verified and excluded.   No anticipated impacts.	
Anticipated impact on fit, form, function, reliability, product safety or manufacturability		
Sites Affected:	ON Semiconductor Sites: ON Carmona, Philippines ON Gresham, Oregon	External Foundry/Subcon Sites: None
Marking of Parts/ Traceability of Change:	Line one package marking will change to NCV7718C	

**Reliability Data Summary:** 

#### DEVICE NAME: NCV7718CDQR2G PACKAGE: 24Ld EP SSOP

Test	Specification	Condition	Results
HTOL	JESD22-A108	High Temperature Operational Life: (Test @ R/H) Tj=150°C for 1008hrs.	0 / 240 Pass
HTSL	JESD22-A103	High Temperature Storage Life (Test @ R/H) Ta=175°C for 1000hrs.	0 / 80 Pass
тс	JESD22-A104	Temperature Cycle: (Test @ R/H) -65°C to+150°C; for 1000cyc	0 / 246 Pass
HAST	JESD22-A110	Highly Accelerated Stress Test: (Test @ R/H) 130°C/85% RH, bias, 192hrs	0 / 239 Pass
uHAST	JESD22-A118	Unbiased Highly Accelerated Stress Test: (Test @ R) 130°C/85% RH, 192hrs	0 / 240 Pass
PC	J-STD-020 JESD-A113	Preconditioning: (Test @ R/H) SMD only; Moisture Load and Reflow	0 / all For AC, TC, HAST (MSL= 2 @ 260°C)

# Note: AEC-1pager is attached.

To view attachments:

1.Download pdf copy of the PCN to your computer

2. Open the downloaded pdf copy of the PCN

3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field

4. Then click on the attached file/s

### **Electrical Characteristic 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 <u>PCN Customized Portal</u>.

Current Part Number	Dual Source Part Number	Qualification Vehicle
NCV7718BDQR2G	NCV7718CDQR2G	NCV7718CDQR2G