



Title of Change:	Transfer of wafer manufacturing to ON Semiconductor facility in Gresham, OR, for the NCV7703BD2R2G product. Transfer will require changes to the product design, wafer process technology and assembly manufacturing process.	
Proposed Changed Material First Ship Date:	1 June 2018	
Current Material Last Order Date:	15 April 2018 Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability.	
Current Material Last Delivery Date:	15 April 2018 The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory.	
Product Category:	<i>Active components – Integrated circuits</i>	
Contact information	Contact your local ON Semiconductor Sales Office or <bill.fontes@onsemi.com>	
Samples	Contact your local ON Semiconductor Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification.	
Sample Availability Date:	10 March 2017	
PPAP Availability Date:	15 May 2017	
Additional Reliability Data	Contact your local ON Semiconductor Sales Office or <peter.turlo@onsemi.com>.	
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	
Design	Design Change in Active Elements	
Datasheet	New product will have it's own new datasheet. Differences are all described in the customer presentation.	
Process – Wafer Production	New wafer diameter Change in process technology Move of all or part of wafer fab to a different location/site/subcontractor	
Process – Assembly	Change of wire bonding Change of mold compound Change of product marking	
Description and Purpose:		
Design changes as necessary for new wafer fab technology.		
<ul style="list-style-type: none"> • Wafer Technology: Change from PS5B technology to I3T50. • Wafer Fab Site: Change from Oudenaarde, Belgium to Gresham, Oregon, US • Product Marking: Line 1 package marking changed from NCV7703B to NCV7703C. • Change of wire size from 1.5 mil to 1.3 mil. 		
	Before Change Description	After Change Description
Wafer Size	150mm	200mm
Wire Size	Au 1.5mil	Au 1.3mil
Mold Compound	G600	G700LS



Reason / Motivation for Change:	- Change benefits for customer: Synchronous digital flow, more robust design - Quality improvement: Improved package BOM, Improved Testability - Risk for late release for customer: Possible supply disruption			
Anticipated impact on fit, form, function, reliability, product safety or manufacturability	The device has successfully passed the qualification tests.			
Sites Affected: <input type="checkbox"/> All site(s) <input type="checkbox"/> not applicable <input checked="" type="checkbox"/> ON Semiconductor site(s) : <i>ON Gresham, Oregon</i> <input type="checkbox"/> External Foundry/Subcon site(s)				
Marking of Parts/ Traceability of Change:	OPN will change as shown below, also line 1 package marking will change from NCV7703B to NCV7703C.			
Reliability Data Summary: QV DEVICE NAME: NCV7703CD2R2G RMS: 37552/37553 PACKAGE: SOIC14				
Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Tj=150°C	500 hrs	0/80
HTSL	JESD22-A103	Ta= 175°C	1000 hrs	0/78
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/272
HAST	JESD22-A110	130°C, 85% RH, 18.8psi, bias	192 hrs	0/240
uHAST	JESD22-A118	130°C, 85% RH, 18.8psi, unbiased	96 hrs	0/236
PC	J-STD-020	MSL 3 @ 260 °C		pass
NOTE: AEC 1 Pager Attached: <i>To access file attachments on pdf copy of PCN, please be guided by the steps below:</i> <ol style="list-style-type: none"> 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 Standard Parts:				
Current Part Number	New Part Number	Qualification Vehicle		
NCV7703BD2R2G	NCV7703CD2R2G	NCV7703CD2R2G		