



Final Product/Process Change Notification

Document #:FPCN25528Z

Issue Date:13 Jan 2025

Title of Change:	Assembly Material Change from SOIC 16L RPPF Lead frame (Flag Size: 92x130mil) to SOIC 16L RPPF Lead frame (Flag Size: 90x130mil)	
Proposed Changed Material First Ship Date:	20 Jul 2025 or earlier if approved by customer	
Current Material Last Order Date:	N/A <i>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.</i>	
Current Material Last Delivery Date:	N/A <i>The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory</i>	
Product Category:	Active components – Integrated circuits	
Contact information:	Contact your local onsemi Sales Office	
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.	
Sample Availability Date:	15 Dec 2024	
PPAP Availability Date:	30 Nov 2024	
Additional Reliability Data:	Contact your local onsemi Sales Office	
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. The change will be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or ZVEI, or earlier upon customer approval, or per our signed agreements. onsemi 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		
Category	Type of Change	
Process - Assembly	Change in leadframe dimensions	
Description and Purpose:		
This final notification announces that onsemi has qualified a change in assembly material from SOIC 16L RPPF Lead frame (Flag Size: 92x130mil) to SOIC 16L RPPF Lead frame (Flag Size: 90x130mil).		
	From	To
LeadFrame	Std RPPF Etched (Flag Size: 92x130mil)	EHDLF RPPF Stamped (Flag Size: 90x130mil)
There is no product marking change as a result of this change.		

Reason / Motivation for Change:	Process/Materials Change			
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	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 onsemi in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.			
Sites Affected:				
onsemi Sites		External Foundry/Subcon Sites		
onsemi Carmona, Philippines		None		
Marking of Parts/ Traceability of Change:	Changed material can be identified by lot code or date code.			
Reliability Data Summary:				
QV DEVICE NAME: <u>NCV4390DR2G</u> RMS: <u>O91714</u> PACKAGE: <u>SOIC 16</u>				
Test	Specification	Condition	Interval	Results
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/693
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
Solderability	JSTD002	Ta = 245°C, 5 sec		0/45
Physical Dimensions	JESD22-B120			0/30
NOTE: AEC-1 pager 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.				
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 <u>PCN Customized Portal</u>.				
Current Part Number	New Part Number		Qualification Vehicle	
NCV4390DR2G	#NONE		NCV4390DR2G	