Initial Product/Process Change Notification

Document #:IPCN25528Z
Issue Date:16 Aug 2023

Title of Change:	SOIC16 EHDLF RPPF LF Consolidation and Migration Project
Proposed Changed Material First Ship Date:	07 Feb 2025 or earlier if approved by customer
Current Material Last Order Date:	N/A *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:	N/A *The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory*
Product Category:	Active components – Integrated circuits
Contact information:	Contact your local onsemi Sales Office or Kiyoung.Kim@onsemi.com Dianne.Calva@onsemi.com
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.
Additional Reliability Data:	Contact your local onsemi Sales Office or Nhel.Malonzo@onsemi.com
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 6 months prior to implementation of the change. In case of questions, contact <PCN.Support@onsemi.com>.

Change Category

Category	Type of Change
Process - Assembly	Change in leadframe dimensions

Description and Purpose:

Change leadframe from Std RPPF Etched (Flag Size: 92x130mil) to EHDLF RPPF Stamped (Flag Size: 90x130mil).

	Before Change Description	After Change Description
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/Matetials Change
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	The device will be qualified and validated based on the same Product Specification. No anticipated impacts.

Sites Affected:

onsemi Sites	External Foundry/Subcon Sites
onsemi Carmona, Philippines	None

Marking of Parts/ Traceability of Change:	Part marking shows assembly date. Assembly lot (marked on reel and shipping boxes) is traceable to Assembly BOM used.

Reliability Data Summary:

QV DEVICE NAME: NCV4390DR2G
RMS: O91714
PACKAGE: SOIC 16

Test	Specification	Condition	Interval
High Temperature Storage Life	JESD22-A103	Ta= 150°C	2016 hrs
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C	
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	1000 cyc
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
Solderability	JSTD002	Ta = 245°C, 5 sec	
Physical Dimensions	JESD22-B120		

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****.*

Current Part Number	New Part Number	Qualification Vehicle
NCV4390DR2G	NA	NCV4390DR2G