Final Product/Process Change Notification

Document #:FPCN25718Z
Issue Date:14 Dec 2023

Title of Change:	NCD57101 revised design for improved performance.
Proposed Changed Material First Ship Date:	20 Jun 2024 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 David.Craig@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.
Sample Availability Date:	29 Dec 2023
PPAP Availability Date:	29 Dec 2023
Additional Reliability Data:	Contact your local onsemi Sales Office or Nicky.Siu@onsemi.com
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
Design	Design Change in Routing

Description and Purpose:

This final notification wants to notify customers regarding the redesign of NCV57101 to improve product performance and extend the differential power supply limit to 36V.

	From	To
Data sheet	Datasheet Rev. P0 (dated May, 2022) with errata	Revised datasheet without errata
Other Changes	Die revision: G0B07DJ-Y0XT	Die revision: G0D07DJ-Y0XT

There is no product marking change as a result of this change.

Reason / Motivation for Change:	Specification 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**
None	None

Marking of Parts/ Traceability of Change:	Changed material can be identified by lot code

Reliability Data Summary:

QV DEVICE NAME: NCV57100DWR2G
RMS: O86181
PACKAGE: SOIC16WB

Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta= 125 °C, 100 % max rated Vcc	1008 hrs	0/294
High temperature Blocking Bias	MIL STD 750 Method 1048 para 3	Ta= 125 °C, VISO = 1200V	1008 hrs	0/239
High Voltage Temperature Humidity Bias	NA	Ta= 85 °C, RH = 60%, VISO = 1200V	168 hrs	0/240

Refer to the attached AEC1 Pager for more details.

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:

Elimination of errata, which limited minimum pulse width and power supply ranges.

Before change:
t_{MIN2}, Minimum = 500ns
V_{EE2} – GND2, Maximum = -2V
V_{DD2}–V_{EE2}, maximum = 26V

After change:
t_{MIN2}, Minimum = 40ns
V_{EE2} – GND2, Maximum = 0.3V
V_{DD2}–V_{EE2}, maximum = 36V

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
NCV57101DWR2G	N/A	NCV57101DWR2G