

# Final Product/Process Change Notification Document #:FPCN25047Z

Issue Date:14 Nov 2023

Title of Change:	Conversion of 1.5 mil Gold (Au) wire to 1.5 mil Palladium coated copper (PCC) wire for select SOIC packages at onsemi, Carmona, Philippines (OSPI)	
Proposed Changed Material First Ship Date:	21 May 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 orders for new changed material as described in this PCN. Orders for current (unchange material after this date will be per mutual agreement and current material invento 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 Eugene.Rafols@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:	30 Nov 2023	
PPAP Availability Date:	29 Feb 2024	
Additional Reliability Data:	Contact your local onsemi Sales Office or Vladislav.Hrachovec@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	
Process - Assembly	Change of wire bonding	

### **Description and Purpose:**

Enable onsemi Carmona to convert NCV0372BDWR2G devices from Au to Cu PCC wires.

	From	То
Bond Wire	1.5 mils Au wire	1.5 mils Palladium Coated Copper Wire

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

TEM001794 Rev. G Page 1 of 2



## Final Product/Process Change Notification

Document #:FPCN25047Z Issue Date:14 Nov 2023

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:	es Affected:		
onsemi Sites onsemi Carmona, Philippines		External Foundry/Subcon Sites	
		None	
Marking of Parts/ Traceability of Change:	of Affected product will be identified with date code		

#### **Reliability Data Summary:**

**QV DEVICE NAME: NCV0372BDWR2G** 

RMS: 087983\_088132 PACKAGE: SOIC16W

Test	Specification	Condition	Interval	Results
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/240
Preconditioning	J-STD-020 JESD-A113	MSL 3 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only		0/720
Temperature Cycling	JESD22-A104	Ta= -65°C to + 150°C	1000 cyc	0/240
Highly Accelerated Stress Test	JESD22-A110	110°C, 85% RH, 18.8psig, bias	264 hrs	0/240
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240

#### NOTE: AEC 1 Pager is attached.

To view attachments:

- 1. Download pdf copy of the PCN to your computer
- ${\it 2. Open the downloaded pdf copy of the PCN}\\$
- 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
NCV0372BDWR2G	NA	NCV0372BDWR2G

TEM001794 Rev. G Page 2 of 2