Initial Product/Process Change Notification

Document #:IPCN25047Z
Issue Date:14 Dec 2022

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:	24 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 Chris.Diacajo@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 Vladislav.Hrachovec@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 of wire bonding

Description and Purpose:

onsemi would like to inform customers of the planned change from 1.5mil Au to 1.5mil PCC wire on select products assembled in onsemi, Carmona Philippines. There is no planned change to the orderable part numbers, or product marking, and there is no anticipated change to product parametric performance or datasheet parameters.

	From	To
Bond Wire	1.5 mils Au Wire	1.5 mils PCC Wire

Upon expiry of the final Product Change Notification, the products listed will convert their BOMs to the new wire type. There is no change in the wire size. Also, there is no product marking change as a result of this change.

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Reason / Motivation for Change:	Process/Materials 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:	Affected product will be identified with date code

Reliability Data Summary:

QV Device Name: NCV0372BDWR2G
Package: SOICW16W

Test	Specification	Condition	Interval
HTSL	JESD22-A103	Temp =150C	2016 hrs / 1008 hrs
PC	J-STD-020 JESD-A113	IR reflow at 260C	
TC + PC	JESD22-A104	Temp = -65°C to +150°C; for 1000 cycles (or equivalent)	1000 cycles
HAST + PC	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 100% of rated V or 100V max	96 hrs
UHAST + PC	JESD22-A118	Temp = 130C, RH=85%, ~18.8 psig	96 hrs

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
NCV0372BDWR2G	NA	NCV0372BDWR2G