

Final Product/Process Change Notification Document #:FPCN25344X Issue Date:20 Nov 2023

Title of Change:	Au to PCC wire conversion SOT23 package			
Proposed First Ship date:	22 Mar 2024 or earlier if approved by customer			
Contact Information:	Contact your local onsemi Sales Office or Ernesto.Villamor@onsemi.com or Joseph.Mendoza@onsemi.com			
PCN Samples Contact:	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. 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 <u>Aileen.Allado@onsemi.com</u>			
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <u>PCN.Support@onsemi.com</u>			
Marking of Parts/ Traceability of Change:	Identification through date code cut off.			
Change Category:	Assembly Change			
Change Sub-Category(s):	Material Change			
Sites Affected:				
onsemi Sites		External Foundry/Subcon Sites		
onsemi Cebu, Philippines		lone		
Description and Purpose:				
This final notification is to inform customers of the change in bonding wire from Gold to Palladium Coated Copper (PCC) wire interconnect.				

This change is to standardize the use of bonding wire across all packages.

	From	То	
Bond wire	0.8 mil Au wire	1.0 mil PCC wire	

The only material change is the bond wire.

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Reliability Data Summary:

QV DEVICE NAME: <u>2N7002</u> RMS: <u>F90395</u> PACKAGE: <u>SOT23</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		0/924
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 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
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**.

Part Number	Qualification Vehicle	
2N7002	2N7002	
FDV301N	2N7002	
FDV304P	2N7002	
MMBF170	2N7002	
9V49-NB9V004	2N7002	
FDV303N	2N7002	
NDS7002A	2N7002	