



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 Aileen.Allado@onsemi.com	
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 PCN.Support@onsemi.com	
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		None

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	To
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: **2N7002**

RMS: **F90395**

PACKAGE: **SOT23**

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

Appendix A: Changed Products

PCN#: FPCN25344X
Issue Date: Nov 19, 2023

DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
2N7002	2N7002NTR-ND	2N7002	NA	
FDV304P		2N7002	NA	
MMBF170		2N7002	NA	
FDV303N		2N7002	NA	
NDS7002A	NDS7002ATR-ND	2N7002	NA	
FDV301N		2N7002	NA	