ON Semiconductor®

Initial Product/Process Change Notification

Document #:IPCN23890X
Issue Date:23 Feb 2021

Title of Change:	WDFN10 Wire conversion from Gold wire to Palladium coated copper wire.
Proposed First Ship date:	30 Jun 2021 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or BernardRajVellangani.Pelevindran@onsemi.com
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office or <PCN.samples@onsemi.com>. 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.
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 90 days prior to implementation of the change. In case of questions, contact <PCN.Support@onsemi.com>
Marking of Parts/ Traceability of Change:	Will carry date code marking "PZ" W21'2021 and above.
Change Category:	Assembly Change
Change Sub-Category(s):	Material Change

Sites Affected:

ON Semiconductor Sites	**External Foundry/Subcon Sites**
ON Semiconductor Seremban, Malaysia	None

Description and Purpose:

	Before Change Description	**After Change Description**
Bond Wire	2.0mil Gold wire	2.0mil Palladium Coated Copper Wire

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

Qualification Plan:

QV1 DEVICE NAME: NIS5021MT2TXG
PACKAGE: WDFN10 4.0*4.0*.75MM

Test	Specification	Condition	Interval
HTOL	TA=125C JA108	TA=125C, bias at 1.2X Nominal (not to exceed Max rate	1008 hrs
HTRB	JESD22-A108	Tj = Max rate Tj for device, bias = 100% of rated V for Q 101 Rev D	1008 hrs
HTSL	JESD22-A103	Ta =Max rate storage temp for device	2016 hrs
PC	J STD 020 , JESD22-A113	IR reflow at 260C	
HAST+PC	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 100% of rated V or 100V max	192 hours
TC+PC	JESD22-A104	Temp = -65°C to +150°C; for 1000 cycles (or equivalent)	1000 cyc
UHAST+ PC	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96 hrs
RSH	JESD22-B106	Ta=265C 10 sec dwell B106	

Estimated date for qualification completion: 31 May 2021

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
NIS5021MT1TXG	NIS5021MT2TXG
NIS5020MT1TXG	NIS5021MT2TXG
NIS5020MT2TXG	NIS5021MT2TXG
NIS5820MT1TXG	NIS5021MT2TXG
NIS5820MT2TXG	NIS5021MT2TXG
NIS5021MT2TXG	NA