Initial Product/Process Change Notification

Document #:IPCN25300Z
Issue Date:11 Apr 2023

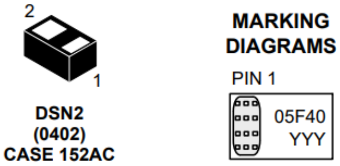
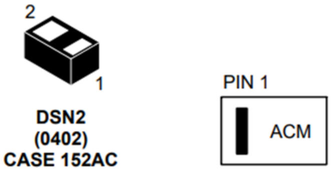
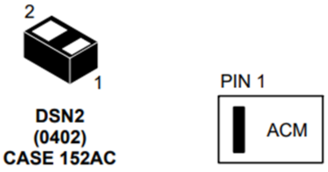
Title of Change:	Transfer of DSN2 Schottky plating site (from FCMS, China to HTKS, China) & Back End sites consolidation (from JCAP, MYD to JCAP, ONSC)
Proposed Changed Material First Ship Date:	01 Jan 2024 or earlier if approved by customer
Current Material Last Order Date:	N/A *Orders received after 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 – Discrete components
Contact information:	Contact your local onsemi Sales Office or NurulAliaFatin.Redzoan@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 NurulAkmar.MohdFauzi@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**
Test Flow	Move of all or part of electrical wafer test and/or final test to a different location/site/subcontractor
Process - Wafer Production	Move of all or part of wafer fab to a different location/site/subcontractor
Process - Assembly	Move of all or part of assembly to a different location/site/subcontractor.

Description and Purpose:

onsemi is notifying it customer of its intent to transfer the plating site and consolidate the backed sites of its DSN2 schottky portfolio. The change will include the transfer of plating site from external foundry facility, Flipchip Millenium (FCMS), China to external foundry facility, Huatian Technology (HTKS), China. Additionally, the back end sites will be consolidated to onsemi Shenzhen, China and JCET Jiangyn (AVM) (JCAP), China. Other changes include a standardization of die top metal and standardization of product marking. Refer to the below table for details of changes.

	Before Change Description	After Change Description
Backgrind Site	onsemi ISMF, Malaysia	Huatian Technology, China
Marking Design	 05F40 = Specific Device Code YYY = Year Code  AC = Specific Device Code M = Month Code	 AC = Specific Device Code M = Month Code
Plating Site	Flipchip Millenium (Shanghai)(FCMS), China JS Foundry, Japan	Huatian Technology, China
Probe, Tape & Reel Site	onsemi Seremban,Malaysia JCET Jiangyn BE(AVM)(JCAP), China	onsemi Shenzhen, China JCET Jiangyn BE(AVM)(JCAP), China

Reason / Motivation for Change:	Subcon/Supplier Product 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 Shenzhen, China	Huatian Technology, China
onsemi, ISMF Malaysia	JCAP, China

Marking of Parts/ Traceability of Change:	Affected products will be identified by date code

Reliability Data Summary:

QV DEVICE NAME: NSVR05F40NXT5G
RMS: S89608
PACKAGE: FC SCHOTTKY DIODE 0402

Test	Specification	Condition	Interval
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
Temperature Cycling	JESD22-A104	Ta= -40°C to +125°C	850 cyc
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	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
NSVR05F40NXT5G	NA	NSVR05F40NXT5G