ON Semiconductor®

Initial Product/Process Change Notification

Document # : IPCN22093X
Issue Date: 18 December 2017

Title of Change:	Qualify Stars Microelectronics as alternative site for assembly & test and changes to leadframe & die attach of SOT23-3 devices.
Proposed first ship date:	18 June 2018
Contact information:	Contact your local ON Semiconductor Sales Office or <marquita.jones@onsemi.com>
Samples:	Contact your local ON Semiconductor Sales Office.
Type of notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. IPCNs are issued at least 30 days prior to the issuance of the Final Change Notice (FPCN). 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>.
Change Part Identification:	As material from different assembly sites cannot be combined into (1) reel, product from Stars will show ASSY LOC: S (ASSY LOC = Assembly Location Code) on the label of the reel and box. Please see sample MPN on page 2 at the following link http://www.onsemi.com/pub_link/Collateral/LABELRM-D.PDF to see the location of the ASSY LOC identifier.
Change category:	☐ Wafer Fab Change ☒ Assembly Change ☒ Test Change ☐ Other ________________

Change Sub-Category(s):

☒ Manufacturing Site Change/Addition
☐ Manufacturing Process Change
☐ Material Change
☐ Product specific change
☐ Datasheet/Product Doc change
☐ Shipping/Packaging/Marking
☐ Other: ________________________

Sites Affected:	ON Semiconductor Sites: None	External Foundry/Subcon Sites: Stars Microelectronics

Description and Purpose:

This FPCN announces the Qualification of Stars Microelectronics as an alternative site for assembly and test to increase capacity of SOT23-3 devices with changes on the following:

	Before Change Description	After Change Description
Leadframe	AG SPOT 35x60 mils	PPF+ME2 38x64 mils
Die Attach	EN4370K3	ABLESTIK 8900NC

Qualification Plan:

QV DEVICE NAME TLV431BSN1T1G
RMS 43362
PACKAGE SOT23-3

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
RSH	JESD22- B106	Ta = 265C, 10 sec	
SD	JSTD002	Ta = 245C, 10 sec	

QV DEVICE NAME NCP431BVSNT1G
RMS 43363
PACKAGE SOT23-3

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc
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RSH	JESD22- B106	Ta = 265C, 10 sec	
SD	JSTD002	Ta = 245C, 10 sec	

Estimated date for qualification completion: 03 March 2018

List of Affected Standard Parts:

Part Number	Qualification Vehicle
TLV431ASN1T1G	TLV431BSN1T1G
TLV431BSN1T1G	TLV431BSN1T1G
NCP431ACSNT1G	NCP431BVSNT1G
NCP431AISNT1G	NCP431BVSNT1G
NCP431AVSNT1G	NCP431BVSNT1G
NCP431BCSNT1G	NCP431BVSNT1G
NCP431BISNT1G	NCP431BVSNT1G
NCP431BVSNT1G	NCP431BVSNT1G