

## Final Product/Process Change Notification

Document # : FPCN22523ZA Issue Date: 30 May 2019

Title of Change:	Qualification of non conductive die attach epoxy ABLESTIK 8900NC in TSOP5, TSOP6, US8, SC82 and SOT23A devices as an alternative to the current non-conductive epoxy Hitachi EN4370K3 due to end of life.	
Proposed Changed Material First Ship Date:	30 May 2020	
Current Material Last Order Date:	1 May 2020 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:	18 May 2020 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 – Integrated circuits	
Contact information:	Contact your local ON Semiconductor Sales Office or < PCN.Support@onsemi.com>	
Samples:	Contact your local ON Semiconductor Sales Office to place sample order or < <a href="mailto:PCN.samples@onsemi.com">PCN.samples@onsemi.com</a> > Sample requests are to be submitted no later than 45 days after publication of this change notification.	
Sample Availability Date:	1 May 2019 Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.	
PPAP Availability Date:	1 May 2019	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < MohdHairwan.MdNor@onsemi.com>.	
This is a Final Product/Process Change Notification (FPCN) sent to customers.  FPCNs are issued 12 months prior to implementation of the change or earlier upon customer at ON Semiconductor will consider this proposed change and it's conditions acceptable, unless an made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onse		
Change Category	Type of Change	
Process – Assembly	Die attach material	

#### **Description and Purpose:**

ON Semiconductor would like to inform its customers of the qualification of non-conductive die attach epoxy Ablestik 8900NC, for products listed in this Final Product Change Notification (FPCN). This epoxy will replace the current non-conductive die attach epoxy, Hitachi EN4370K3, due to end of life by the manufacturer. At the end of the FPCN approval cycle, these products will be using epoxy Ablestik 8900NC as the die attach epoxy Hitachi EN4370K3 will no longer be available.

No change for test.

For assembly, BOM change associated with this FPCN is shown here.

	Before Change Description	After Change Description	
Die Attach	Non-conductive epoxy Hitachi EN4370K3	Non-conductive epoxy Ablestik 8900NC	

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

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Reason / Motivation for Change:	<ul> <li>New epoxy ABLESTIK 8900NC is Antimony (Sb) free. Current epoxy Hitachi EN4370K3 has 12,000 mm/kg.</li> <li>Current epoxy Hitachi EN4370K3 is being end of lifed by the supplier.</li> </ul>		
Anticipated impact on fit, form, function, reliability, product safety or manufacturability	The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by ON Semiconductor in relation to the PCN, associated risks are verified and excluded.  No anticipated impacts.		
Sites Affected:	ON Semiconductor Sites: ON Seremban, Malaysia	External Foundry/Subcon Sites: None	
Marking of Parts/ Traceability of Change:	Materials assembly with new material will be identified with date code 2013 or newer		

#### **Reliability Data Summary:**

**QV DEVICE NAME: NCV551SN30T1G** 

RMS: S48691 TSOP5 PACKAGE:

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/231
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/231
PTC	JESD22-A105	Ta=-40°C to +125°C	1000 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/924
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90

**QV DEVICE NAME: NLV7SB3257DTT1G** 

RMS: S48908 PACKAGE: SC82

Test	Specification	Condition	Interval	Results
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/231

#### Note: AEC 1-pager attached

To view attachments:

- 1. Download pdf copy of the PCN to your computer
- 2. Open the downloaded pdf copy of the PCN
- 3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field 4. Then click on the attached file/s

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Electrical Characteristic 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	Qualification Vehicle
NLVVHC1G00DTT1G	NCV551SN30T1G NLV7SB3257DTT1G
NLVVHC1G14DTT1G	NCV551SN30T1G NLV7SB3257DTT1G

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### **Appendix A: Changed Products**

Product	Customer Part Number	New Part Number	Qualification Vehicle
NLVVHC1G14DTT1G		NA	NCV551SN30T1G & NLV7SB3257DTT1G