

# Final Product/Process Change Notification Document #: FPCN22218Z

Issue Date: 02 April 2018

Title of Change:	Final PCN for changing wafer passivation material of NVC6S5A354PLZ.	
Proposed Changed Material First Ship Date:	02 April 2019	
Current Material Last Order Date:	18 March 2019 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 June 2019 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		
ontact information: Contact your local ON Semiconductor Sales Office or < Yasunari. Noguchi@onsemi.com >		
Samples:	Contact your local ON Semiconductor Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification.	
Sample Availability Date:	nple Availability Date: 23 March 2018	
PPAP Availability Date:	26 April 2018	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < <u>Yasuhiro.lgarashi@onsemi.com</u> >.	
Type of Notification:	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 approval.  ON Semiconductor will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact < PCN. Support@onsemi.com>.	
Change Category	Type of Change	
Process – Wafer Production	New / change of passivation or die coating (without bare die)	

# **Description and Purpose:**

This is a Final Process Change Notification announces the change passivation material of NVC6S5A354PLZ from Silicon Nitride to Polyimide.

This change for meet to criteria as AEC-Q006.

Material to be changed	Before Change Description	After Change Description
Die Passivation	Silicon Nitride	Polyimide

Reason / Motivation for Change:	Change benefits for customer: To meet AEC-Q006 as Cu wire product. Risk for late release for customer: Non satisfied AEC-Q006 as Cu wire product.	
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.	

TEM001794 Rev. O Page 1 of 2



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Sites Affected:	ON Semiconductor Sites: ON Niigata, Japan	External Foundry/Subcon Sites: None
Marking of Parts/ Traceability of Change:	By date code	

## Reliability Data Summary:

QV DEVICE NAME: NVC6S5A354PLZT1G

PACKAGE: CPH6

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=175°C, 100% max rated Vdss	1008 hrs	0/231
HTGB	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/231
HTSL	JESD22-A103	Ta= 175°C	2016 hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30000 cyc	0/231
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/231
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD- A113	MSL 1 @ 260 °C		
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90

#### NOTE: AEC-1 pager is attached.

To access file attachments on pdf copy of PCN, please be guided by the steps below:

- 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

#### **Electrical Characteristic Summary:**

Electrical characteristics are not impacted

### List of Affected Standard Part:

Current Part Number	Qualification Vehicle
NVC6S5A354PLZT1G	NVC6S5A354PLZT1G

TEM001794 Rev. O Page 2 of 2