Final Product/Process Change Notification

Document #: FPCN26979ZA
Issue Date: 12 Nov 2026

Title of Change:	Wafer Fab and Test Site Change for Ignition IGBT Products from Mountain Top, USA to Bucheon, Korea and assembly BOM change (polyimide)
Proposed Changed Material First Ship Date:	19 May 2027 or earlier if approved by customer
Current Material Last Order Date:	31 May 2026 *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
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.
Sample Availability Date:	01 Jul 2026
PPAP Availability Date:	30 Dec 2026
Additional Reliability Data:	Contact your local onsemi Sales Office
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. The change will be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or ZVEI, or earlier upon customer approval, or per our signed agreements. onsemi 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

Category	**Type of Change**
Process - Wafer Production	SEM-PW-01: New / change of wafer substrate material, SEM-PW-02: New wafer diameter, SEM-PW-13: Move all or parts of production to a different wafer fab site.
Test Flow	SEM-TF-01: Move of all or part of electrical wafer test and/or final test to a different test site.
Equipment	SEM-EQ-02: Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.
Process - Assembly	SEM-PA-13: Change of product marking, SEM-PA-10: Die Overcoat / Underfill

Description and Purpose:

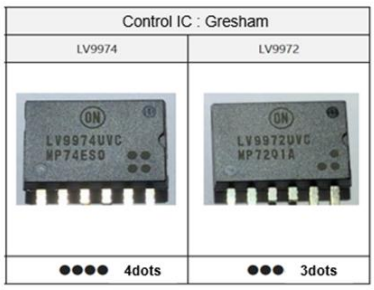
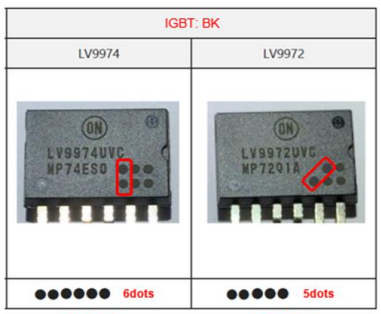
This Final Change Notification is to inform customers of the qualification of the onsemi Bucheon, Korea facility as a wafer fabrication site for Ignition IGBT technology.

This change enhances manufacturing flexibility, strengthens supply continuity, and supports long-term product availability for customers. Comprehensive qualification activities have demonstrated equivalent product quality, reliability, and electrical performance compared to the current manufacturing source. As a result of this change, no changes to fit, form, function, or datasheet specifications are expected. Qualification samples are available upon request to support customer validation activities. onsemi will work closely with customers who require qualification support or additional technical information.

All orders for the current material (Mountain Top die) should have already been placed, as communicated in previous IPCN notifications. If you have any questions or concerns regarding your orders, please contact your local sales representative immediately.

For customers requiring PCN approval, onsemi will consider the change approved as of the Customer Request Ship Date associated with the sales order for the new Orderable Part Number (OPN). If additional time is required to complete customer qualification activities, please contact your local sales representative to request an extension of the shipment date.

	Before Change Description	After Change Description
FAB Site	Mountain Top, PA, USA	Bucheon 6 inch
Backgrind Site	Mountain Top, PA, USA	Bucheon 6 inch
Probe Site	Mountain Top, PA, USA and Bucheon, Korea	Bucheon, Korea
Wafer size	8 inch	6 inch
Polyimide (Igniter only)	Kyocera, CT4112A1	Resonac / HL1200S
OPN naming	No change	-BK suffix added

	From	To
Product marking change	Current  LV9974VUC-XH LV9972UVC-XH	After PCN  LV9974VUC-XH-BK LV9972UVC-XH-BK

Reason / Motivation for Change:	Source/Supply/Capacity Changes Process/Materials Change
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 onsemi in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.

Sites Affected:	
onsemi Sites	**External Foundry/Subcon Sites**
onsemi Bucheon, Korea	None

Marking of Parts/ Traceability of Change:	The changed material can be identified by lot code and date code.

Reliability Data Summary:

QV DEVICE NAME : ISL9V5045S3ST-F085C-BK
RMS : 98295
PACAKAGE : D2PAK

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Tj = Max rate Tj, bias =80% of rated V	1,008 hrs	0/231
High Temperature Gate Bias	JESD22-A108	Tj = Max rate Tj, Max Vgs	1,008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta =Max rate storage temp	1,008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 245 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/924
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 3.5 min	8572 cyc	0/231
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231

QV DEVICE NAME : LV9975UVC-XH-BK
RMS : 98298
PACAKAGE : SIP-6

Test	Specification	Condition	Interval	Result
Temp Cycling	JESD22-A104	Temp = -55°C to +150°C	1,000 cyc	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96 hrs	0/231

Note: AEC-1pager

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.

Electrical Characteristics Summary:

DC test, ESD(HBM,CDM),UIS,Capacitance, Switching, Gate Charge, RgCg, Thermal characteristics are comparable.
No change to Data Sheet parameter.

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
LV9974UVC-XH	LV9974UVC-XH-BK	ISL9V5045S3ST-F085
LV9972UVC-XH	LV9972UVC-XH-BK	ISL9V5045S3ST-F085