Initial Product/Process Change Notification

Document #:IPCN26979ZB1
Issue Date:03 Aug 2026

Title of Change:	Update to **IPCN26979ZB -** Wafer Fab and Test Site Change for Ignition IGBT Products from Mountain Top, USA to Bucheon, Korea and assembly BOM changes (assembly site addition and mold compound change)
Proposed Changed Material First Ship Date:	01 Feb 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:	31 Dec 2027 *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.
Additional Reliability Data:	Contact your local onsemi Sales Office
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**
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-18: Move all or parts of production to a different assembly site., SEM-PA-11: Change of mold compound / encapsulation material

Description and Purpose:

This Update Notification is to inform customers of the qualification of onsemi Bucheon, Korea facility as NEW wafer fab site for Ignition IGBT Technology.

FPCNs to be issued in **October of 2026** with first ship date as referenced above from Bucheon fab. If your FPCN approval will extend beyond the proposed first ship date, provide unit requirements for the unchanged material to your onsemi sales representative no later than **May 31, 2026** by NCNR PO (Last order date for unchanged material). These bridge quantities will be limited and will be considered on a first come, first serve basis.

onsemi will work with customers to facilitate the approval of the FPCNs by providing early samples and matching electrical data in **March of 2026**, prior to the final PCN notices in **October of 2026** to reduce customers need for additional unchanged material. Early samples are processed according to final process and condition as release in the FPCN. No changes will occur between early samples and after FPCN issuance.

	Before Change Description	After Change Description
FAB Site	Mountain Top, PA, USA	onsemi Bucheon, Korea
Backgrind Site	Mountain Top, PA, USA	onsemi Bucheon, Korea
Probe Site	Mountain Top, PA, USA and Bucheon, Korea	onsemi Bucheon, Korea
Wafer size	8 inch	6 inch
Assembly and Test Site Change	onsemi Cebu, Philippines	onsemi Cebu, Philippines onsemi Suzhou, China
Mold Compound change	KCC KTMC5900GM	TO263_Sumitomo G700HF (Cebu) TO263_KCC KTMC5900GM (Suzhou)
OPN naming	No change	-BK suffix added

Reason / Motivation for Change:	Source/Supply/Capacity Changes Process/Materials 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 Bucheon, Korea	None
onsemi Cebu, Philippines	
onsemi Suzhou, China	

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

Qualification Plan:

QV DEVICE NAME : ISL9V5045S3ST-F085
RMS : 98295/111235
PACAKAGE : D2PAK

Test	Specification	Condition	Interval
High Temperature Reverse Bias	JESD22-A108	Tj = Max rate Tj for device, bias =100% of rated V (Not to exceed max rated)	1,008 hrs
High Temperature Gate Bias	JESD22-A108	Tj = Max rate Tj for device, Max Vgs	1,008 hrs
High Temperature Storage Life	JESD22-A103	Ta =Max rate storage temp for device	1,008 hrs
Precondition (PC)	J-STD-020, JESD22-A113	MSL1, IR reflow at 245C	-
(PC+) Highly Accelerated Stress Test	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 80% of rated V or 100V max	96 hrs
(PC+) Unbiased Highly Accelerated Stress Test	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig, unbiased	96 hrs
(PC+) Temp Cycling	JESD22-A104	Temp = -55°C to +150°C	1,000 cyc
(PC+) Intermittent Operating Life	MIL STD750, M 1037, AEC Q101	Ta=+25°C, deltaTj=100°C max, 3.5 min Ton=Toff	8,572 cyc
Solderability (RRF 110181 only)	JSTD002	Ta = 245°C, 5 sec	
Physical Dimensions (RRF 110181 only)	JESD22-B120		

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

Test	Specification	Condition	Interval
High Temperature Reverse Bias	JESD22-A108	Tj = Max rate Tj for device, bias =100% of rated V (Not to exceed max rated)	1,008 hrs
Highly Accelerated Stress Test	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 80% of rated V or 100V max	96 hrs

QV DEVICE NAME : FGD3245G2-F085
RMS : 98297
PACAKAGE : DPAK

Test	Specification	Condition	Interval
High Temperature Storage Life	JESD22-A103	Ta =Max rate storage temp for device	1,008 hrs
Precondition (PC)	J-STD-020, JESD22-A113	MSL1, IR reflow at 260C	-
(PC+) Highly Accelerated Stress Test	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 80% of rated V or 100V max	96 hrs
(PC+) Unbiased Highly Accelerated Stress Test	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig, unbiased	96 hrs
(PC+) Temp Cycling	JESD22-A104	Temp = -55°C to +150°C	1,000 cyc
(PC+) Intermittent Operating Life	MIL STD750, M 1037, AEC Q101	Ta=+25°C, deltaTj=100°C max, 2 min Ton=Toff	15,000 cyc

QV DEVICE NAME : FGB5065G2-F085
RMS : 105743
PACAKAGE : D2PAK

Test	Specification	Condition	Interval
High Temperature Reverse Bias	JESD22-A108	Tj = Max rate Tj for device, bias =100% of rated V (Not to exceed max rated)	1,008 hrs
Precondition (PC)	J-STD-020, JESD22-A113	MSL1, IR reflow at 245C	-
(PC+) Highly Accelerated Stress Test	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 80% of rated V or 100V max	96 hrs

QV DEVICE NAME : FGD3050G2
RMS : 110184
PACAKAGE : DPAK

Test	Specification	Condition	Interval
High Temperature Reverse Bias	JESD22-A108	Tj = Max rate Tj for device, bias =100% of rated V (Not to exceed max rated)	1,008 hrs
High Temperature Gate Bias	JESD22-A108	Tj = Max rate Tj for device, Max Vgs	1,008 hrs
High Temperature Storage Life	JESD22-A103	Ta =Max rate storage temp for device	1,008 hrs
Precondition (PC)	J-STD-020, JESD22-A113	MSL1, IR reflow at 260C	-
(PC+) Highly Accelerated Stress Test	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 80% of rated V or 100V max	96 hrs
(PC+) Unbiased Highly Accelerated Stress Test	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig, unbiased	96 hrs
(PC+) Temp Cycling	JESD22-A104	Temp = -55°C to +150°C	1,000 cyc

(PC+) Intermittent Operating Life	MIL STD750, M 1037, AEC Q101	Ta=+25°C, deltaTj=100°C max, 2 min Ton=Toff	15000 cyc
Solderability	JSTD002	Ta = 245°C, 5 sec	
Physical Dimensions	JESD22-B120		

QV DEVICE NAME : FGP3440G2-F085
RMS : 110182
PACAKAGE : TO220

Test	Specification	Condition	Interval
High Temperature Reverse Bias	JESD22-A108	Tj = Max rate Tj for device, bias =100% of rated V (Not to exceed max rated)	1,008 hrs
High Temperature Gate Bias	JESD22-A108	Tj = Max rate Tj for device, Max Vgs	1,008 hrs
High Temperature Storage Life	JESD22-A103	Ta =Max rate storage temp for device	1,008 hrs
Highly Accelerated Stress Test	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 80% of rated V or 100V max	96 hrs
Unbiased Highly Accelerated Stress Test	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig, unbiased	96 hrs
Temp Cycling	JESD22-A104	Temp = -55°C to +150°C	1,000 cyc
Intermittent Operating Life	MIL STD750, M 1037, AEC Q101	Ta=+25°C, deltaTj=100°C max, 3.5 min Ton=Toff	8,527 cyc
Resistance to Solder Heat	JESD22- B106	Ta = 268°C, 10 sec Required for through hole devices only	
Solderability	JSTD002	Ta = 245°C, 5 sec	
Physical Dimensions	JESD22-B120		

Estimated date for qualification completion: **30 October 2026**

Electrical Characteristics Summary:

Electrical characteristics of products from Bucheon Korea will match sending fab Moutain Top .

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
ISL9V3040S3ST	ISL9V3040S3ST-BK	ISL9V5045S3ST-F085
ISL9V5036S3ST	ISL9V5036S3ST-BK	ISL9V5045S3ST-F085
ISL9V5045S3ST-F085	ISL9V5045S3ST-F085-BK	ISL9V5045S3ST-F085
FGB3245G2-F085	FGB3245G2-F085-BK	ISL9V5045S3ST-F085
FGB3040G2-F085	FGB3040G2-F085-BK	ISL9V5045S3ST-F085
FGD3440G2-F085	FGD3440G2-F085-BK	ISL9V5045S3ST-F085
FGD3245G2-F085	FGD3245G2-F085-BK	ISL9V5045S3ST-F085

FGD3040G2-SN00353	FGD3040G2-SN00353-BK	ISL9V5045S3ST-F085
FGD3040G2-F085	FGD3040G2-F085-BK	ISL9V5045S3ST-F085
FGD3050G2	FGD3050G2-BK	ISL9V5045S3ST-F085
ISL9V3040D3ST	ISL9V3040D3ST-BK	ISL9V5045S3ST-F085
FGP3440G2-F085	FGP3440G2-F085-BK	ISL9V5045S3ST-F085
ISL9V5036P3-F085	ISL9V5036P3-F085-BK	ISL9V5045S3ST-F085