



Initial Product/Process Change Notification

Document #: IPCN27003ZA1

Issue Date: 03 Aug 2026

Title of Change:	Update to IPCN27003ZA - Wafer Fab and Test Site Change for PT2/3 Products from Mountain Top, USA to Bucheon, Korea.
Proposed Changed Material First Ship Date:	06 Sep 2027 or earlier if approved by customer
Current Material Last Order Date:	31 May 2026 <i>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.</i>
Current Material Last Delivery Date:	31 Dec 2027 <i>The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory.</i>
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-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.
Description and Purpose:	
This Update Notification is to inform customers of the qualification of onsemi Bucheon, Korea facility as NEW wafer fab site for PT2/3 Technology. FPCNs to be issued in June of 2027 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 upon request, prior to the final PCN notices in June of 2027 to reduce customers' need for additional unchanged material. Early samples are processed according to final process and condition as released in the FPCN. No changes will occur between early samples and after FPCN issuance.	



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	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 onsemi Bucheon, Korea	onsemi Bucheon, Korea
OPN naming	No change	-BK suffix added

There is no product marking change because of this change.

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

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

Qualification Plan:

QV DEVICE NAME: FDC5661N-F085

PACKAGE : TSOT-23

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)	2,016 hrs
High Temperature Gate Bias	JESD22-A108	Tj = Max rate Tj for device, Max Vg	2,016 hrs
High Temperature Storage Life	JESD22-A103	Ta =Max rate storage temp for device	2,016 hrs
Low Temperature Storage Life	JESD22-A108	Ta =Min rate storage temp for device	168 hrs
Early Life Failure Rate - RB	JESD22-A108	Tj = Max rate Tj for device, bias =100% of rated V (Not to exceed max rated)	48 hrs
Early Life Failure Rate - GB	JESD22-A108	Tj = Max rate Tj for device, Max Vg	48 hrs
Precondition (PC)	J-STD-020, JESD22-A113	IR reflow at 245C or 260C (pkg dependant)	-
(PC+) Highly Accelerated Stress Test	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 80% of rated V or 100V max	192 hrs
(PC+) Unbiased Highly Accelerated Stress Test	JESD22-A118	Temp = 130C, RH=85%, ~ 18.8 psig	96 hrs
(PC+) Temp Cycling	JESD22-A104	Temp = -55°C to +150°C	2,000 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
(PC+) RSH	JESD22-B106	Ta=260°C 10 sec dwell	X1



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Electrical Characteristics Summary:

Electrical characteristics of products from Bucheon Korea will match sending fab Mountain 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
FDN5632N-F085	FDN5632N-F085-BK	FDC5661N-F085
FDC5661N-F085	FDC5661N-F085-BK	FDC5661N-F085