Initial Product/Process Change Notification

Document #:IPCN27003XA2
Issue Date:13 Oct 2026

Title of Change:	Update to **IPCN27003XA** - Wafer Fab and Test Site Change for PT2/3 Products from Mountain Top, USA to Bucheon, Korea.
Proposed First Ship date:	30 Jul 2027 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office
PCN Samples Contact:	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
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 90 days prior to implementation of the change. In case of questions, contact <PCN.Support@onsemi.com>
Marking of Parts/ Traceability of Change:	The changed material can be identified by lot code and date code.
Change Category:	Wafer Fab Change, Test Change
Change Sub-Category(s):	Manufacturing Site Transfer

Sites Affected:

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

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 **April 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 **April 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.

	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 onsemi Bucheon, Korea	onsemi Bucheon, Korea

Qualification Plan:

QV DEVICE NAME: FDB047N10
RMS: 111085
PACKAGE: D2PAK-3

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 Vg	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	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	96 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	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: FDS6690A
RMS: 111086
PACKAGE: SOIC-8

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 Vg	1,008 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	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: FDS9934C
RMS: 111087
PACKAGE: SOIC-8

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 Vg	1,008 hrs

QV DEVICE NAME: BSS123L
RMS: 110972
PACKAGE: SOT-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)	1,008 hrs
High Temperature Gate Bias	JESD22-A108	Tj = Max rate Tj for device, Max Vg	1,008 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	96 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	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
(PC+) RSH	JESD22-B106	Ta=260°C 10 sec dwell	X1

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
FDS6680A	FDS6680A-BK	FDB047N10
FDP047N08	FDP047N08-BK	FDB047N10
FDA032N08	FDA032N08-BK	FDB047N10
FDMS3662	FDMS3662-BK	FDB047N10
FDP150N10	FDP150N10-BK	FDB047N10
FDI150N10	FDI150N10-BK	FDB047N10
FDP120N10	FDP120N10-BK	FDB047N10
FDB047N10	FDB047N10-BK	FDB047N10
FDD5353	FDD5353-BK	FDB047N10
FDMS5352	FDMS5352-BK	FDB047N10
BSS123L	BSS123L-BK	FDB047N10
FDMB3800N	FDMB3800N-BK	FDB047N10
FDS6690A	FDS6690A-BK	FDB047N10
FDS9926A	FDS9926A-BK	FDB047N10
FDS9934C	FDS9934C-BK	FDB047N10