Final Product/Process Change Notification

Document #:FPCN23139XA
Issue Date:17 Oct 2023

Title of Change:	Qualification of ON Semiconductor Mountain Top, USA facility as an additional wafer fab location for PTNG Technology
Proposed First Ship date:	26 Jan 2024 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Yuna.Im@onsemi.com
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.
Additional Reliability Data:	Contact your local onsemi Sales Office or Francis.Lualhati@onsemi.com
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com
Marking of Parts/ Traceability of Change:	Affected parts will be identified with a date code.
Change Category:	Assembly Change, Wafer Fab Change
Change Sub-Category(s):	Material Change, Manufacturing Site Addition

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
onsemi Cebu, Philippines	None
onsemi Mountain Top, United States	

Description and Purpose:

This is a Final Change Notification to inform customers of the qualification of onsemi Mountain Top, USA facility as an additional wafer fab location for PTNG Technology.

Upon the expiration of this notification, all products listed here will be dual sourced from its current location, onsemi wafer fab in Bucheon, Korea.

	From	**To**
Fab Site	onsemi Bucheon, Korea	onsemi Bucheon, Korea onsemi Mountain Top, Unites States
Clip attach	Paste 92.5Pb5Sn2.5Ag	92.5Pb5Sn2.5Ag - Low Alpha

Reliability Data Summary:

QV DEVICE NAME: FDMS86180
RMS: F67885, F87115, F87467, F88624
PACKAGE: PQFN 5*6

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/240
High Temperature Gate Bias	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0/240
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/240
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/240
Intermittent Operating Life	MIL-STD-750	Ta=+25°C, delta Tj=100°C	15000 cyc	0/240
	(M1037)	On/off = 2 min		
	AEC-Q101			
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/240
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	1008 hrs	0/240
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240

Electrical Characteristics Summary:

Electrical characteristics are not impacted.

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.***

Part Number	Qualification Vehicle
FDMC86184	FDMS86180
FDMS10C4D2N	FDMS86180
NTMFS10N3D2C	FDMS86180
FDMS86181	FDMS86180
FDMS86180	FDMS86180