



Initial Product/Process Change Notification

Document #:IPCN22897X

Issue Date:11 Oct 2019

Title of Change:	Conversion from existing PQFN8x8 Sawn-type package to PQFN8x8 Punch-type package (w/ 2mils Bare Cu wire, Large DC clip and wettable flank feature).
Proposed First Ship date:	11 Apr 2020 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or < RamilAngelo.Nonato@onsemi.com >
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office or < PCN.samples@onsemi.com >. 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:	Customer may receive the new parts from ON Semiconductor Cebu, Philippines from month of December 2019 onwards once FPCN expire.
Change Category:	Assembly Change
Change Sub-Category(s):	Manufacturing Process Change

Sites Affected:

ON Semiconductor Sites	External Foundry/Subcon Sites
ON Semiconductor Cebu, Philippines	None

Description and Purpose:

This Project is to convert the impacted PQFN 8x8 parts from Sawn package to Punch Package.

Please see below change table for details.

	Before Change Description	After Change Description
Lead Frame	Etched Type	Stamped Clip
Bond Wire	1.5mils PCC/ Cu Clip 10mils with Cu Heatslug 20mils	2mils Cu wire/ 1pc Cu Clip 20mils
Mold Compound	Hitachi CEL9240HF10LS	Sumitomo G700LTD SF



3D Model Comparison

	Before Change Description	After Change Description
<p>Package Appearance</p>	<p>Package thickness : 0.85mm nominal</p>	<p>Package thickness : 0.92mm nominal</p>

Qualification Plan:

DEVICE : FDMT80040DC, FDMT80060DC, FDMT80080DC

PACKAGE : PQFN 8x8

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=175°C, 100% max rated BV	1008 hours
HTGB	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hours
HTSL	JESD22-A103	Ta= 175°C	1008 hours
PC	J-STD-020 / JESD-A113	MSL 1 @260°C	
TC + PC	JESD22-A104	Ta= -55°C to +150°C	1000 cycles
HAST + PC	JESD22-A110	Ta=130°C, 85% RH, 80% max rated BV	192 hours
uHAST + PC	JESD22-A118	Ta=130°C, 85% RH, 18.8psig, unbiased	96 hours
IOL + PC	AEC Q101	Ta=+25°C, deltaTj=100°C max, Ton=Toff is 2min	15,000 cycles
RSH	JESD22- B106	Ta = 265C, 10 sec	



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
FDMT80040DC	NA
FDMT80060DC	NA
FDMT80080DC	NA