Initial Product/Process Change Notification

Document #:IPCN23475X
Issue Date:18 Aug 2020

Title of Change:	Addition of Selective Ag Plated on LF (Spot Ag on Gate Leadpost of LSFET Die)
Proposed First Ship date:	31 Dec 2020 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or Marlyn.Gabales@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:	Through date code cut-off
Change Category:	Assembly Change
Change Sub-Category(s):	Material Change

Sites Affected:

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

Description and Purpose:

Qualification of Selective Ag Plated with treatment on LF (Spot Ag on Gate Lead post of LSFET Die) on PQFN 56 Multiphase Package to improve Gate Pad Solder Void performance. The qualification will entail the following changes:

	Before Change Description	**After Change Description**
LeadFrame Finishing (Gate Pad Lead & Other Solderable Area)	No Ag plating	Selective Ag plating

"There is no product marking change as a result of this change"

Qualification Plan:

QV DEVICE NAME:
QV1: NTMFD001N03P9
QV2: NTMFD0D9N02P1E

RMS:
QV1: F70141
QV2: F70139

PACKAGE: PQFN 56 Multiphase

Test	Specification	Condition	Interval
HTSL	JESD22-A103	Temp = 150°C	1,008 hrs
HAST	JESD22-A110	Temp = 130C, 85% RH, ~ 18.8 psig, bias = 80% of rated V or 100V max (for Q1 and Q2)	192 hrs
TC	JESD22-A104	Temp = -55°C to +150°C	1,000 cyc
UHAST	JESD22-A118	Temp = +130°C, RH = 85%, p = 18.8psig, Unbiased	96 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	-

Estimated date for qualification completion: 21 September 2020

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
FDPC8016S-B801	NTMFD001N03P9, NTMFD0D9N02P1E