



Initial Product/Process Change Notification

Document #: IPCN23681X

Issue Date: 21 Dec 2020

Title of Change:	Change wire size of Ultrafast DPAK package (620 device series) from 5 mils to 8 mils
Proposed First Ship date:	31 Dec 2021 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or Danh.Trinh@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:	Clean date code will be advised upon of request.
Change Category:	Assembly Change
Change Sub-Category(s):	Material Change

Sites Affected:

ON Semiconductor Sites	External Foundry/Subcon Sites
ON Semiconductor Seremban, Malaysia	NANTONG Tong Fu MICROELECTRONICS CO.,LTD.
ON Semiconductor Vietnam	

Description and Purpose:

This IPCN announces the plan to qualify 8 mils Aluminum wire on selected ultrafast devices in DPAK package. This change is to improve quality robustness, with proven superior product performance.

Once completing of qualification and at the expiration of the FPCN, all products listed here will be changed with new Bill of Material.

	Before Change Description	After Change Description
Aluminum Wire	5 mils	8 mils

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

**Qualification Plan:**

QV DEVICE NAME: MURD620CTT4G (Mesa Ultrafast)

PACKAGE: DPAK

Test	Specification	Condition	Interval
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc
UHAST	JESD22-A102	130°C, 100% RH, 18.8psig, unbiased	96 hrs
H3TRB	JESD22-A101	85°C, 85% RH, bias = 100V max	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
RSH	JESD22- B106	Ta = 265°C, 10 sec	
SD	JSTD002	Ta = 245°C, 10 sec	

Estimated date for qualification completion: 30 November 2021

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
MSRD620CTT4G	MURD620CTT4G
MSRD620CTG	MURD620CTT4G
MURD620CTT4G	MURD620CTT4G
MURD620CTG	MURD620CTT4G