ON Semiconductor®

Final Product/Process Change Notification

Document # : FPCN22376X
Issue Date: 25 July 2018

Title of Change:	Qualification of Amkor Technology Malaysia (ATM) for the Assembly and Test of Trench MOSFET products packaged in SO8FL.
Proposed first ship date:	1 November 2018 or earlier after customer approval.
Contact information:	Contact your local ON Semiconductor Sales Office or Guo Kun Yeng <GuoKun.Yeng@onsemi.com>
Samples:	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.
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or Mohd Azizi Azman <MohdAzizi.Azman@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. ON Semiconductor 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>
Change Part Identification:	Product from Amkor Technology Malaysia will be marked with site code YE prior to date code.
Change Category:	☐ Wafer Fab Change ☑ Assembly Change ☑ Test Change ☐ Other _____

Change Sub-Category(s):

☑ Manufacturing Site Addition	☐ Material Change	☐ Datasheet/Product Doc change
☐ Manufacturing Site Transfer	☐ Product specific change	☐ Shipping/Packaging/Marking
☐ Manufacturing Process Change		☐ Other: _____

Sites Affected:	ON Semiconductor Sites: None	External Foundry/Subcon Sites: Amkor Malaysia

Description and Purpose:

This Product Change Notice is to announce that ON Semiconductor is expanding assembly and test operations of SO8FL discrete packaged products, currently built at ON Semiconductor Seremban, Malaysia facility to Amkor Technology Malaysia (ATM).

There are no product material changes and no product marking change as a result of this change.

Upon the expiration of this FPCN or earlier after customer approval, Trench Mosfet devices may be processed at either location. These products have been qualified to commodity/commercial requirements. These products will continue being Pb-free, Halide free and RoHS compliant.

Device quality and reliability will continue to meet ON Semiconductors high standards.

Reliability Data Summary:

Qual Vehicle: NTMFS4C302NT1G

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/252
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0/252
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/252
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/252
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/252
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/252
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/1008
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/90
SD	JSTD002	Ta = 245°C, 10 sec		0/45

Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of Affected Parts:

Part Number	Qualification Vehicle
NTMFS4C022NT1G	NTMFS4C302NT1G
NTMFS4C022NT3G	
NTMFS4C022NAT1G	
NTMFS4C302NT1G	
NTMFS4C03NT1G	
NTMFS4C03NT3G	