Final Product/Process Change Notification

Document #:FPCN24425XA
Issue Date:07 Feb 2024

Title of Change:	Assembly and Final Test Capacity Expansion for MOSFET S08FL packages at Amkor Technology in Kuala Langat, Malaysia
Proposed First Ship date:	15 May 2024 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or guokun.yeng@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 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. 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:	Changed material can be identified by assembly plant code
Change Category:	Test Change, Assembly Change
Change Sub-Category(s):	Manufacturing Site Addition

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
None	AMKOR, Malaysia

Description and Purpose:

This Product Change Notification is to announce that onsemi is expending its manufacturing operation of its MOSFET S08FL packaged products to AMKOR Technology located in Kuala Langat, Malaysia. The changes include AMKOR Technology as an additional site for assembly and final test, as compared to our existing site.

	Before Change Description	**After Change Description**
Assembly Site	onsemi Seremban, Malaysia	onsemi Seremban, Malaysia AMKOR, Malaysia
Final Test Site	onsemi Seremban, Malaysia	onsemi Seremban, Malaysia AMKOR, Malaysia
Leadframe Base Material	onsemi Seremban - TAMAC4	onsemi Seremban - TAMAC4 AMKOR - C194
Bond Wire	onsemi Seremban – 1.3mil Ag wire	onsemi Seremban – 1.3mil Ag wire AMKOR - 1.2mil AuPCC wire
Clip	onsemi Seremban - Emboss Clip	onsemi Seremban - Emboss Clip AMKOR - Flat Clip
Mold Compound	onsemi Seremban – G700LA	onsemi Seremban - G700LA AMKOR – G700LS

There is no change to the orderable part number.

Reliability Data Summary:

QV DEVICE NAME: NTMFS0D7N04XLT1G
RMS: 87241
PACKAGE: SO8FL

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=175°C, 100% max rated V	1008 hrs	0/231
High Temperature Gate Bias	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta= 175°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/231
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231

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
NTMFS0D7N04XMT1G	NTMFS0D7N04XLT1G
NTMFS0D9N04XMT1G	NTMFS0D7N04XLT1G
NTMFS1D1N04XMT1G	NTMFS0D7N04XLT1G
NTMFS3D1N04XMT1G	NTMFS0D7N04XLT1G
NTMFS2D3N04XMT1G	NTMFS0D7N04XLT1G
NTMFS1D3N04XMT1G	NTMFS0D7N04XLT1G