

Final Product/Process Change Notification Document #: FPCN24425X Issue Date: 18 May 2023

Title of Change:	Assembly and Final Test Capacity Expansion for MOSFET S08FL packages at Amkor Technology in Kuala Langat, Malaysia			
Proposed First Ship date:	25 Aug 2023 or earlier if approved by customer			
Contact Information:	Contact your local onse	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 <u>PCN.Support@onsemi.com</u>			
Marking of Parts/ Traceability of Change:	Material will be traceable with onsemi's lot trace code & tracking			
Change Category:	Test Change, Assembly Change			
Change Sub-Category(s):	Manufacturing Site Addition			
Sites Affected:				
onsemi Sites		External Foundry/Subcon Sites		
one		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. And while the process remains unchanged at both assembly site, the leadframe base material will be using C194 at AMKOR instead of TAMAC4 used at onsemi Seremban.

There is no change to the orderable part number.

	Before Change	After Change	
Assembly Site	onsemi Seremban, Malaysia	onsemi Seremban, Malaysia <u>AMKOR, Malaysia</u>	
Final Test Site	onsemi Seremban, Malaysia <u>AMKOR, Malaysia</u>		
Leadframe Base Material	onsemi Seremban - TAMAC4 onsemi Seremban - TAMAC4 <u>AMKOR – C194</u>		
Product Marking Change	onsemi Seremban Site Code - R	onsemi Seremban Site Code - R <u>AMKOR Site Code - YE</u>	

onsemi

Final Product/Process Change Notification Document #: FPCN24425X Issue Date: 18 May 2023

Reliability Data Summary:

QV DEVICE NAME: NVMFS5C646NLAFT1G RMS: S84302 PACKAGE: SO8FL

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=175°C, 100% max rated V	1008 hrs	0/231
HTGB	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/231
HTSL	JESD22-A103	Ta= 175°C	2016 hrs	0/231
LTSL	JESD22-A119	Ta= -40°C	168 hrs	0/75
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30000 cyc	0/231
тс	JESD22-A104	Ta= -55°C to +150°C, mount on board	1000 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/924
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90
SD	JSTD002	Ta = 245C, 5 sec		0/45

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	
NTMFS5C450NLT1G	NVMFS5C646NLAFT1G	