



Final Product/Process Change Notification

Document #:FPCN22852XA

Issue Date:24 Nov 2020

Title of Change:	Qualification of ASE foundry for WLCSP and ON Semiconductor Cebu site for probe and assembly.	
Proposed First Ship date:	03 Mar 2021 or earlier if approved by customer	
Contact Information:	Contact your local ON Semiconductor Sales Office or Thomas.Chen@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.	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or Pete.Moberg@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	
Marking of Parts/ Traceability of Change:	Changed Parts will be identified by a new plant code	
Change Category:	Bump Site Change, Test Change, Assembly Change	
Change Sub-Category(s):	Manufacturing Site Transfer	
Sites Affected:		
ON Semiconductor Sites	External Foundry/Subcon Sites	
ON Semiconductor Cebu, Philippines	AMKOR TAIWAN T3	
	AMKOR, Taiwan T5	
	ASEKH, Taiwan (Kaohsiung)	
Description and Purpose:		
	Before Change Description	After Change Description
Bump Location Change	Amkor T5, Taiwan	ASE Subcontractor, Taiwan
BG/BSL Location Change	Amkor T3, Taiwan	ASE Subcontractor, Taiwan
Probe Location Change	Amkor T3, Taiwan	ON Semiconductor Cebu
DPS location Change	Amkor T3, Taiwan	ON Semiconductor Cebu
The Assembly site code will change on the product top mark as a result of this change.		
	From	To
Facility location code	AMKOR T3: "J"	ONSEMI OSPI-Cebu: "D"

**Qualification Plan:**

QV1 DEVICE NAME : FSA646UCX

RMS: F20160820

PACKAGE : WLCSP36

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1000 hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1000 hrs	0/231
TC	JESD22-A104	Ta= -40°C to +125°C	850 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 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, 3x Reflow		

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
FAN48623UC50X	FSA646UCX
FAN48623UC50GX	FSA646UCX