



Final Product/Process Change Notification

Document #:FPCN23141Y

Issue Date:29 Jan 2021

Title of Change:	Bumping process transfer from Amkor Taiwan to JCAP China on EA2M-SWC8A1G
Proposed First Ship date:	01 Jun 2021 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or Jimmy.Zhang@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 Paul.Syndergaard@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:	None
Change Category:	Assembly Change
Change Sub-Category(s):	Material Change, Manufacturing Process Change, Manufacturing Site Transfer

Sites Affected:

ON Semiconductor Sites	External Foundry/Subcon Sites
None	AMKOR, Taiwan T5
	JCAP, China

Description and Purpose:

Qualify JCAP as a new bumping site to replace Amkor T5 by end of 2020 for EA2M-SWC8A1G. The purpose of the change is to improve the capacity and material flow.

	Before Change Description	After Change Description
Bumping site	Amkor Taiwan	JCAP china –qualified bumping site for other ON Semiconductor products
RDL design	Linewidth > 60um	Linewidth 55um+/-6um
Bump design	PI2 opening (90um) UBM size (110um +/-3um)	Larger PI2 opening (103um+/-10um) and UBM size (123um) to match the bump height
BOM material	Seed layer material is Tiw/Cu	Use Ti/Cu seed layer
Case outline	Current	Match the existing case outline

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

**Reliability Data Summary:**

QV DEVICE NAME: EA2M-SWC8A1G

RMS: S71784

PACKAGE: WLCSP

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	504 hrs	0/90
TC	JESD22-A104	Ta= -40°C to +125°C	500 cyc	0/90
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	34 hrs	0/90
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/90
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/123

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
EA2M-SWC8A1G	EA2M-SWC8A1G