



Title of Change:	2nd MFG Site (ASEM, Additional from Kingpak) for iBGA (AR0140CS2, AR0141CS2, AR0141IR) MP Capacity Allocation	
Proposed first ship date:	6 February 2019	
Contact information:	Contact your local ON Semiconductor Sales Office or <Bharath.Nagabhushanam@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 <Amy.Wu@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:	Affected products will be identified with date code by different subcons.	
Change Category:	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input checked="" type="checkbox"/> Test Change <input type="checkbox"/> Other _____	
Change Sub-Category(s):	<input checked="" type="checkbox"/> Manufacturing Site Addition <input type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Site Transfer <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Other: _____	
Sites Affected:	ON Semiconductor Sites: None	External Foundry/Subcon Sites: ASE Malaysia
Description and Purpose:		
	Before Change Description	After Change Description
Glass Lid	Kingpak (Hermosa)	Site1: Kingpak (Hermosa) Site2: ASEM (Crystal Optech)
Package Substrate	Kingpak (Eastern)	Site1: Kingpak (Eastern) Site2: ASEM (SCC)
Assembly Site	Kingpak (Hsinchu, Taiwan)	Site1: Kingpak (Hsinchu, Taiwan) Site2: ASEM (Penang, Malaysia)
Test Site	Assy @ Kingpak (Hsinchu, Taiwan) + Test @ KYEC (Miao-Li, Taiwan)	Site1: Assy @ Kingpak (Hsinchu, Taiwan) + Test @ KYEC (Miao-Li, Taiwan) Site2: Turnkey solution @ ASEM (Penang, Malaysia)
	From	To
Product marking change	Kingpak: Line1 – Encoded mark ID from ON Semi Line2 – Tracecode (4 Digits Running Numbers)	Kingpak: No Change ASEM: Line1 – Encoded mark ID from ON Semi Line2 – Tracecode (1 st Digit – Last digit of MFG year + 3 digits of Running Numbers)

**Reliability Data Summary:**

QV DEVICE NAME: AR0140CS2, AR0141CS2, AR0141IR

PACKAGE IBGA

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=105°C, 100 % max rated Vcc	1008 hrs	261/PASS (SCC SBT + CO Glass)
HTSL	JESD22-A103	Ta= 150 °C	504 hrs	270/PASS
TC	JESD22-A104	Ta= -55°C to +125°C	1000 cyc	270/PASS
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	256/PASS (SCC SBT + CO Glass)
PC	J-STD-020 JESD-A113	MSL 3 @ 30 °C		

Electrical Characteristic Summary:

Electrical characteristics are not impacted

List of Affected Parts:

Part Number	Qualification Vehicle
AR0140CS2C00SUEA0-DRBR	AR0141CS2C00SUEA0-DR-E
AR0140CS2C00SUEA0-DRBR1	AR0141CS2C00SUEA0-DR-E
AR0141CS2C00SUEA0-DP	AR0141CS2C00SUEA0-DR-E
AR0141CS2C00SUEA0-DR	AR0141CS2C00SUEA0-DR-E
AR0141CS2M00SUEA0-DPBR	AR0141CS2C00SUEA0-DR-E
AR0141CS2M00SUEA0-TPBR	AR0141CS2C00SUEA0-DR-E
AR0141CSSM21SUEA0-DPBR	AR0141CS2C00SUEA0-DR-E
AR0141CSSM21SUEA0-TPBR	AR0141CS2C00SUEA0-DR-E
AR0141IRSH00SUEA0-DR	AR0141CS2C00SUEA0-DR-E

Appendix A: Changed Products

Product	Customer Part Number	Qualification Vehicle
AR0140CS2C00SUEA0-DRBR		AR0141CS2C00SUEA0-DR-E
AR0140CS2C00SUEA0-DRBR1		AR0141CS2C00SUEA0-DR-E
AR0141CS2C00SUEA0-DP		AR0141CS2C00SUEA0-DR-E
AR0141CS2C00SUEA0-DR		AR0141CS2C00SUEA0-DR-E
AR0141CS2M00SUEA0-DPBR		AR0141CS2C00SUEA0-DR-E
AR0141CS2M00SUEA0-TPBR		AR0141CS2C00SUEA0-DR-E
AR0141CSSM21SUEA0-DPBR		AR0141CS2C00SUEA0-DR-E
AR0141CSSM21SUEA0-TPBR		AR0141CS2C00SUEA0-DR-E
AR0141IRSH00SUEA0-DR		AR0141CS2C00SUEA0-DR-E