



Title of Change:	2nd Manufacturing Site (ASEM) for iBGA (AR0132, AR0140, MT9V126, MT9V127, MT9V128) MP Capacity Allocation.							
Proposed Changed Material First Ship Date:	30 November 2019							
Product Category:	Active components – Integrated circuits							
Contact information:	Contact your local ON Semiconductor Sales Office or <Bharath.Nagabhushanam@onsemi.com>							
Samples:	Contact your local ON Semiconductor Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification.							
Sample Availability Date:	31 May 2018							
PPAP Availability Date:	31 May 2018							
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <Amy.Wu@onsemi.com>							
Type of Notification:	<p>This is an Initial Product/Process Change Notification (IPCN) sent to customers. IPCNs are issued at least 30 days prior to the issuance of the Final Change Notice (FPCN). An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.</p> <p>The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 12 months prior to implementation of the change. In case of questions, contact <PCN.Support@onsemi.com>.</p>							
Change Category	Type of Change							
Process – Assembly & Test	Move of all or part of assembly to a different location/site/subcontractor.							
Description and Purpose:								
<p>Assembly & Test sited addition/capacity expansion.</p> <p>Affected Parts: AR0132, AR0140, MT9V126, MT9V127, MT9V128 Package: iBGA</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #92d050;"> <th style="width: 30%;">Material to be changed</th> <th style="width: 35%;">Before Change Description</th> <th style="width: 35%;">After Change Description</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Manufacturing Site</td> <td style="text-align: center;">Kingpak Assy + KYEC FT</td> <td> 1. Kingpak Assy + KYEC FT 2. ASEM Assy + KYEC FT 3. ASEM Turnkey </td> </tr> </tbody> </table>			Material to be changed	Before Change Description	After Change Description	Manufacturing Site	Kingpak Assy + KYEC FT	1. Kingpak Assy + KYEC FT 2. ASEM Assy + KYEC FT 3. ASEM Turnkey
Material to be changed	Before Change Description	After Change Description						
Manufacturing Site	Kingpak Assy + KYEC FT	1. Kingpak Assy + KYEC FT 2. ASEM Assy + KYEC FT 3. ASEM Turnkey						
Reason / Motivation for Change:	Assembly & Test Capacity Expansion							
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	NO Impact to Form/Fit/Function							
Sites Affected:	ON Semiconductor Sites: None	External Foundry/Subcon Sites: ASE, Malaysia						
Marking of Parts/ Traceability of Change:	Affected products will be identified with date code and marking.							



Reliability Data Summary:

QV DEVICE NAME : AR0132AT6R00XPEA0-DPBR

PACKAGE : iBGA – AR0132

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta=105°C, 100 % max rated Vcc	504, 1008, 2016hr
HTSL	JESD22-A103	Ta= 150°C	504, 1008hr
TC	JESD22-A104	Ta= -55°C to +125_°C	500, 1000cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hr
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hr
PC	J-STD-020 JESD-A113	MSL 3 @ 260°C	192hr
WBS	AEC Q100-001 AEC Q003	-	-
WBP	MIL-STD883 Method 2011 AEC Q003	-	-
SBS	AEC Q100-010 AEC Q003	-	-

QV DEVICE NAME : AR0140AT2C00XUEA0-DPBR

PACKAGE : iBGA – AR0140

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta= __105_°C, 100 % max rated Vcc	504, 1008hr
HTSL	JESD22-A103	Ta= __150_°C	504, 1008hr
TC	JESD22-A104	Ta= -_55_°C to +_125_°C	500, 1000cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hr
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hr
PC	J-STD-020 JESD-A113	MSL __3__ @ __260__ °C	192hr
WBS	AEC Q100-001 AEC Q003	-	-
WBP	MIL-STD883 Method 2011 AEC Q003	-	-
SBS	AEC Q100-010 AEC Q003	-	-



QV DEVICE NAME : MT9V128IA3XTC-DP
PACKAGE : iBGA – MT9V126, MT9V127, MT9V128

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta= __105_°C, 100 % max rated Vcc	504, 1008hr
HTSL	JESD22-A103	Ta= __150_°C	504, 1008hr
TC	JESD22-A104	Ta= -_55_°C to +_125_°C	500, 1000cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hr
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hr
PC	J-STD-020 JESD-A113	MSL __3__ @ __260__ °C	192hr
WBS	AEC Q100-001 AEC Q003	-	-
WBP	MIL-STD883 Method 2011 AEC Q003	-	-
SBS	AEC Q100-010 AEC Q003	-	-

Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of Affected Parts:

Current Part Number	Qualification Vehicle
AR0132AT6B00XPEA0-DPBR	AR0132AT6R00XPEA0-DPBR
AR0132AT6B00XPEA0-DRBR	
AR0132AT6B00XPEA0-TPBR	
AR0132AT6C00XPEA0-CL-DPBR	
AR0132AT6C00XPEA0-CL-DRBR	
AR0132AT6C00XPEA0-CL-TPBR	
AR0132AT6C00XPEA0-CL-TRBR	
AR0132AT6C00XPEA0-DPBR	
AR0132AT6C00XPEA0-DRBR	
AR0132AT6C00XPEA0-DRBR1	
AR0132AT6C00XPEA0-TB-TPBR	
AR0132AT6C00XPEA0-TPBR	



AR0132AT6C00XPEA0-TRBR	
AR0132AT6G00XPEA0-AA-DPBR	
AR0132AT6G00XPEA0-AA-DRBR	
AR0132AT6G00XPEA0-DRBR	
AR0132AT6M00XPEA0-DPBR	
AR0132AT6M00XPEA0-DRBR	
AR0132AT6M00XPEA0-DRBR1	
AR0132AT6M00XPEA0-TPBR	
AR0132AT6R00XPEA0-DPBR	
AR0132AT6R00XPEA0-DPBR1	
AR0132AT6R00XPEA0-DRBR	
AR0132AT6R00XPEA0-DRBR1	
AR0132AT6R00XPEA0-TB-TPBR	
AR0132AT6R00XPEA0-TPBR	
AR0132AT6R00XPEA0-TRBR	
AR0140AT2C00XUEA0-DPBR	
AR0140AT2C00XUEA0-DRBR	
AR0140AT2C00XUEA0-MG-TRBR	
AR0140AT2C00XUEA0-TPBR	
AR0140AT2C00XUEA0-TRBR	
AR0140AT3C00XUEA0-DPBR	
AR0140AT3C00XUEA0-DPBR1	
AR0140AT3C00XUEA0-DRBR	
AR0140AT3C00XUEA0-DRBR1	
AR0140AT3C00XUEA0-TPBR	
MT9V126IA3XTC-DP	
MT9V126IA3XTC-DP1	
MT9V126IA3XTC-DR	
MT9V126IA3XTC-DR1	
MT9V126IA3XTC-TP	
MT9V126IA3XTC-TR	
MT9V127IA3XTC-DP	
MT9V127IA3XTC-DP1	
MT9V127IA3XTC-DR	
MT9V127IA3XTC-DR1	
MT9V128IA3XTC-DP	
MT9V128IA3XTC-DP1	
	AR0140AT2C00XUEA0-DPBR
	MT9V128IA3XTC-DP



MT9V128IA3XTC-DR	
MT9V128IA3XTC-DR1	
MT9V128IA3XTC-TP	
MT9V128IA3XTC-TR	

Appendix A: Changed Products

Product	Customer Part Number	New Part Number	Qualification Vehicle
AR0132AT6C00XPEA0-DPBR		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6C00XPEA0-DRBR		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6C00XPEA0-DRBR1		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6C00XPEA0-TPBR		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6C00XPEA0-TRBR		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6M00XPEA0-DPBR		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6M00XPEA0-DRBR		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6M00XPEA0-DRBR1		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6M00XPEA0-TPBR		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6R00XPEA0-DPBR		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6R00XPEA0-DPBR1		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6R00XPEA0-DRBR		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6R00XPEA0-DRBR1		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6R00XPEA0-TPBR		NA	AR0132AT6R00XPEA0-DPBR
AR0132AT6R00XPEA0-TRBR		NA	AR0132AT6R00XPEA0-DPBR
AR0140AT2C00XUEA0-TPBR		NA	AR0140AT2C00XUEA0-DPBR
AR0140AT2C00XUEA0-TRBR		NA	AR0140AT2C00XUEA0-DPBR
AR0140AT3C00XUEA0-DPBR		NA	AR0140AT2C00XUEA0-DPBR
AR0140AT3C00XUEA0-DPBR1		NA	AR0140AT2C00XUEA0-DPBR
AR0140AT3C00XUEA0-DRBR		NA	AR0140AT2C00XUEA0-DPBR
AR0140AT3C00XUEA0-DRBR1		NA	AR0140AT2C00XUEA0-DPBR
AR0140AT3C00XUEA0-TPBR		NA	AR0140AT2C00XUEA0-DPBR
MT9V126IA3XTC-DP		NA	MT9V128IA3XTC-DP
MT9V126IA3XTC-DP1		NA	MT9V128IA3XTC-DP
MT9V126IA3XTC-DR		NA	MT9V128IA3XTC-DP
MT9V126IA3XTC-DR1		NA	MT9V128IA3XTC-DP
MT9V126IA3XTC-TP		NA	MT9V128IA3XTC-DP
MT9V126IA3XTC-TR		NA	MT9V128IA3XTC-DP
MT9V127IA3XTC-DP		NA	MT9V128IA3XTC-DP
MT9V127IA3XTC-DP1		NA	MT9V128IA3XTC-DP
MT9V127IA3XTC-DR		NA	MT9V128IA3XTC-DP
MT9V127IA3XTC-DR1		NA	MT9V128IA3XTC-DP
MT9V128IA3XTC-DP		NA	MT9V128IA3XTC-DP
MT9V128IA3XTC-DP1		NA	MT9V128IA3XTC-DP
MT9V128IA3XTC-DR		NA	MT9V128IA3XTC-DP
MT9V128IA3XTC-DR1		NA	MT9V128IA3XTC-DP
MT9V128IA3XTC-TP		NA	MT9V128IA3XTC-DP
MT9V128IA3XTC-TR		NA	MT9V128IA3XTC-DP