

Initial Product/Process Change Notification

Document #:IPCN24723Z Issue Date: 29 Jun 2022

Title of Change:	Qualify additional die attach epoxy for dual source.	
Proposed Changed Material First Ship Date:	29 Jan 2023 or earlier if approved by customer	
Current Material Last Order Date:	N/A Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability.	
Current Material Last Delivery Date:	N/A The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory	
Product Category:	Active components – Integrated circuits	
Contact information:	Contact your local onsemi Sales Office or Mike.Webster@onsemi.com	
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification. 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 Amy.Wu@onsemi.com	
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. 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. 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 6 months prior to implementation of the change. In case of questions, contact < PCN.Support@onsemi.com .	
Change Category	•	
Category	Type of Change	
Process - Assembly	Die attach material	

Description and Purpose:

onsemi is advising customers of an alternate die attach epoxy. In today's uncertain supply climate, onsemi considers this to be a proactive step to ensure continuity of supply.

The increase in COVID related issues and other supply disruptions has the potential to affect supply stability.

	Before	After
Assembly, Die attach paste	Henkel 2053S	Henkel 2053S & Henkel 2025

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

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Reason / Motivation for Change:	Process/Materials Change
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by onsemi in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.

Sites Affected:

onsemi Sites External Foundry/Subcon Sites	
None	ASEM, Malaysia
	Kingpak, Taiwan

Marking of Parts/ Traceability of	Da
Change:	Do

Date Code

Reliability Data Summary:

Qual Vehicle: AR0136AT3B00XUEA0-TL-TPBR

Qual Package: 9mmx9mm iBGA

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta = <u>105</u> °C, 100 % max rated Vcc, 1008hrs	1008hr
PC	J-STD-020 JESD-A113	MSL 3 @ 260 °C	
HTSL	JESD22-A103	Ta= <u>150</u> °C, 504hr	504hr
TC	JESD22-A104	Ta= <u>-55</u> °C to <u>+125</u> °C, 1000cyc	1000cyc
HAST	JESD22-A110	110°C, 85% RH, with bias, 264hrs Or 130°C, 85% RH, with bias, 96hrs	264hr
uHAST	JESD22-A118	110°C, 85% RH, unbiased, 264hrs Or 130°C, 85% RH, unbiased, 96hrs	264hr
WBS	AEC Q100-001 AEC Q003	CPK >1.67	
WBP	MIL-STD883 Method 2011 AEC Q003	CPK >1.67 or 0 Fails after TC (test #A4)	
ED	AEC Q100-009 AEC Q003	Elect. Distribution: (Test @ C/ R/ H)	

Electrical Characteristics Summary:

Full results will be provided upon qualification.

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 <u>PCN Customized Portal</u>.

Current Part Number	New Part Number	Qualification Vehicle
AR0143ATSC00XUEA1-VL-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0143ATSC00XUEA1-TRBR	NA	AR0132AT6C00XPEA0-DPBR

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AR0143ATSC00XUEA1-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0143ATSC00XUEA1-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0143ATSC00XUEA1-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0143ATSC00XUEA0-DRBR1	NA	AR0132AT6C00XPEA0-DPBR
AR0143ATSC00XUEA0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0143ATSC00XUEA0-DPBR	NA	AR0132AT6C00XPEA0-DPBR
MT9V128IA3XTC-TR	NA	AR0132AT6C00XPEA0-DPBR
MT9V128IA3XTC-DR	NA	AR0132AT6C00XPEA0-DPBR
MT9V128IA3XTC-DP	NA	AR0132AT6C00XPEA0-DPBR
MT9V127IA3XTC-DR	NA	AR0132AT6C00XPEA0-DPBR
MT9V126IA3XTC-TR	NA	AR0132AT6C00XPEA0-DPBR
MT9V126IA3XTC-TP	NA	AR0132AT6C00XPEA0-DPBR
MT9V126IA3XTC-DR	NA	AR0132AT6C00XPEA0-DPBR
MT9V126IA3XTC-DP	NA	AR0132AT6C00XPEA0-DPBR
ASX350AT3C00XPEA0-DR	NA	AR0132AT6C00XPEA0-DPBR
ASX344ATSC00XUEA0-TRBR	NA	AR0132AT6C00XPEA0-DPBR
ASX344ATSC00XUEA0-TPBR	NA	AR0132AT6C00XPEA0-DPBR
ASX344ATSC00XUEA0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
ASX344ATSC00XUEA0-DPBR	NA	AR0132AT6C00XPEA0-DPBR
ASX342ATSC00XPED0-DR	NA	AR0132AT6C00XPEA0-DPBR
ASX342ATSC00XPED0-DP	NA	AR0132AT6C00XPEA0-DPBR
ASX340AT3C00XPED0-TPBR	NA	AR0132AT6C00XPEA0-DPBR
ASX340AT3C00XPED0-KP-DPBR	NA	AR0132AT6C00XPEA0-DPBR
ASX340AT3C00XPED0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
ASX340AT3C00XPED0-DPBR	NA	AR0132AT6C00XPEA0-DPBR
ASX340AT2C00XPED0-TRBR	NA	AR0132AT6C00XPEA0-DPBR
ASX340AT2C00XPED0-TPBR	NA	AR0132AT6C00XPEA0-DPBR
ASX340AT2C00XPED0-KY-DRBR	NA	AR0132AT6C00XPEA0-DPBR
ASX340AT2C00XPED0-DRBR1	NA	AR0132AT6C00XPEA0-DPBR
ASX340AT2C00XPED0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
ASX340AT2C00XPED0-DPBR2	NA	AR0132AT6C00XPEA0-DPBR
ASX340AT2C00XPED0-DPBR1	NA	AR0132AT6C00XPEA0-DPBR
ASX340AT2C00XPED0-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AS0149ATSC00XUEA0-TRBR	NA	AR0132AT6C00XPEA0-DPBR
AS0149ATSC00XUEA0-DPBR	NA	AR0132AT6C00XPEA0-DPBR
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AR0147ATSC00XUEG5-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEG5-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEG5-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEG4-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEG3-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEG3-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEG0-TRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEG0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEG0-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEA5-TRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEA5-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEA5-P2-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEA3-VL-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEA3-TRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEA3-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEA3-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEA0-VL-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEA0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147ATSC00XUEA0-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0147AT2C00XUEG1-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0140AT3C00XUEA0-VL-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0140AT3C00XUEA0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0140AT3C00XUEA0-DPBR2	NA	AR0132AT6C00XPEA0-DPBR
AR0140AT3C00XUEA0-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0140AT2C00XUEA0-TRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0140AT2C00XUEA0-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0140AT2C00XUEA0-MG-TRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0140AT2C00XUEA0-CL-TRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0136AT3C00XUEA0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0136AT3C00XUEA0-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0135AT2M25XUEA0-TRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0135AT2M25XUEA0-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0135AT2M25XUEA0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0135AT2M25XUEA0-DPBR1	NA	AR0132AT6C00XPEA0-DPBR
AR0135AT2M25XUEA0-DPBR	NA	AR0132AT6C00XPEA0-DPBR

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AR0135AT2M00XUEA0-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0135AT2M00XUEA0-DRBR1	NA	AR0132AT6C00XPEA0-DPBR
AR0135AT2M00XUEA0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0135AT2M00XUEA0-DPBR1	NA	AR0132AT6C00XPEA0-DPBR
AR0135AT2M00XUEA0-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6R00XPEA0-TRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6R00XPEA0-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6R00XPEA0-TB-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6R00XPEA0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6R00XPEA0-DPBR1	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6R00XPEA0-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6M00XPEA0-DRBR1	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6M00XPEA0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6M00XPEA0-DPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6G00XPEA0-AA-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6C00XPEA0-TRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6C00XPEA0-TPBR	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6C00XPEA0-DRBR1	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6C00XPEA0-DRBR	NA	AR0132AT6C00XPEA0-DPBR
AR0132AT6C00XPEA0-DPBR	NA	AR0132AT6C00XPEA0-DPBR

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