

Initial Product/Process Change Notification

Document #:IPCN24376Z Issue Date:24 Nov 2021

Title of Change:	Front end manufacturing site change for AR0233	
Proposed Changed Material First Ship Date:	01 Dec 2022 or earlier if approved by customer	
Current Material Last Order Date:	01 Jun 2022 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:	30 Nov 2022 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 or <pcn.samples@onsemi.com>. 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.</pcn.samples@onsemi.com>	
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 - Wafer Production	Move of all or part of wafer fab to a different location/site/subcontractor	

Description and Purpose:

The proposed change is to transfer all front side CMOS manufacturing of the AR0233 from TSMC Fab 12 to TSMC Fab 14. The current manufacturing wafer process flow is for front side processing to occur in FAB 12 and then backside processing to occur in Fab 14, with wafers shipping to Fab 14 after completing in Fab 12. In an effort to expand manufacturing capacity for Gen 2 product at TSMC, we will qualify material to run entirely at the Fab 14 facility. These two facilities use identical manufacturing equipment, processes and maintenance plans. The are located on separate TSMC sites in Taiwan. There will be no change to form, fit or function of the product.

	Before Change Description	After Change Description
Front-End MFG Site	TSMC Fab 12	TSMC Fab 14

There are no product material changes as a result of this change.

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

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Reason / Motivation for Change:	Capacity improvement			
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		TSMC Semiconductor, Taiwan		
Marking of Parts/ Traceability of Change:	Date code			

Reliability Data Summary:

Data will be available after AEC-Q100 Qualification; provided In Final PCN

Electrical Characteristics Summary:

Electrical characteristicts will be available after correlation between sites; provided in Final PCN

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
AR0233ATSC17XUEA1-DPBR1	NA	AR0233ATSC17XUEA1-DPBR
AR0233ATSC17XUEA1-DRBR1	NA	AR0233ATSC17XUEA1-DPBR
AR0233ATSC17XUEA1-TRBR	NA	AR0233ATSC17XUEA1-DPBR
AR0233ATSC17XUEA1-DRBR	NA	AR0233ATSC17XUEA1-DPBR
AR0233ATSC17XUEA1-TPBR	NA	AR0233ATSC17XUEA1-DPBR
AR0233ATSC17XUEA1-DPBR	NA	AR0233ATSC17XUEA1-DPBR
AR0233ATSE17XUD20	NA	AR0233ATSC17XUEA1-DPBR

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