



Product Change Notification - JAON-07XXOG939

Date:

18 Feb 2020

Product Category:

Wireless Modules

Affected CPNs:**Notification subject:**

CCB 4109 Initial Notice: Qualification of DEI6 as a new assembly site for selected ATML ATSAMR21B18 and ATSAMR21G18 device families available in 9L and 48L Module package.

Notification text:**PCN Status:**

Initial notification

PCN Type:

Manufacturing Change

Microchip Parts Affected:

Please open one of the icons found in the Affected CPNs section above.

NOTE: For your convenience Microchip includes identical files in two formats (.pdf and .xls)

Description of Change:

Qualification of DEI6 as a new assembly site for selected ATML ATSAMR21B18 and ATSAMR21G18 device families available in 9L and 48L Module package.

Pre Change:

Assembled at DEI5 (Delta Electronics, Inc. - China)

Post Change:

Assembled at DEI6 (Delta Electronics, Inc. -Taiwan)

Pre and Post Change Summary

	Pre Change	Post Change
Assembly Site	Delta Electronics, Inc. -China (DEI5)	Delta Electronics, Inc. -Taiwan (DEI6)
Substrate material	FR4 (TU-768)	FR4 (TU-768)
Solder ball material	SAC305	SAC305

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve on-time delivery performance by qualifying DEI6 as a new assembly site.

Change Implementation Status:

In Progress

Estimated Qualification Completion Date:

March 2021

Note: Please be advised the qualification completion times may be extended because of unforeseen business conditions however implementation will not occur until after qualification has completed and a final PCN has been issued. The final PCN will include the qualification report and estimated first



ship date. Also note that after the estimated first ship date guided in the final PCN customers may receive pre and post change parts.

Time Table Summary:

	February 2020				->	March 2021				
Workweek	06	07	08	09		10	11	12	13	14
Initial PCN Issue Date			X							
Qual Report Availability								X		
Final PCN Issue Date								X		

Method to Identify Change:

Traceability code

Qualification Plan:

Please open the attachments included with this PCN labeled as PCN_#_Qual Plan.

Revision History:

February 18, 2020: Issued initial notification.

The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable products.

Attachment(s):

[PCN JAON-07XXOG939_Qual_Plan.pdf](#)

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

Terms and Conditions:

If you wish to receive Microchip PCNs via email please register for our PCN email service at our [PCN home page](#) select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the [PCN FAQ](#) section.

If you wish to change your PCN profile, including opt out, please go to the [PCN home page](#) select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.

Affected Catalog Part Numbers (CPN)

ATSAMR21B18-MZ210PA

ATSAMR21G18-MR210UA

ATSAMR21G18-MR210UAT

ATSAMR21B18-MZ210PAT



MICROCHIP

QUALIFICATION PLAN SUMMARY

PCN#: JAON-07XXOG939

Date:

February 06, 2020

**Qualification of DEI6 as a new assembly site for selected
ATML ATSAMR21B18 and ATSAMR21G18 device families
available in 9L and 48L Module package.**

Purpose: Qualification of DEI6 as a new assembly site for selected ATML
 ATSAMR21B18 and ATSAMR21G18 device families available in 9L and
 48L Module package.

CCB No.: 4109

<u>Misc.</u>	Assembly site	DELTA (Taiwan)
	MP Code (MPC)	662A5YLKBM11
	Part Number (CPN)	ATSAMR21B18-MZ210PAT
	MSL information	3
	Assembly Shipping Media (T/R, Tube/Tray)	T&R
	Base Quantity Multiple (BQM)	200
	Reliability Site	MTHAI
<u>Substrate</u>	Core Material	FR4 (TU-768)
	Core Thickness	31mil
<u>PKG</u>	PKG Type	MODULE
	Pin/Ball Count	9
	PKG width/size	19.70 x 16.30 mm
	Solder Ball Material	SAC305

Test Name	Conditions	Sample Size	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instructions
High Temperature Storage Life (HTSL)	JESD22A-103. 150°C for 1008 hours . Readpoints at 0, 504, and 1008 hours . Electrical test pre and post stress at +25°C.	8	3	24	0	50	Spare should be properly identified.
Preconditioning - Required for surface mount devices	+150°C Bake for 24 hours, moisture loading requirements per MSL level (MSL3) + 3X reflow at peak reflow temperature per Jedec-STD-020D for package type; Electrical test pre and post stress at +25°C. JESD22A113	32	3	96	0	15	Spares should be properly identified. 32 parts from each lot to be used for HTSL, unbiased HAST, unbiased Temperature/Humidity, & Temp Cycle test.
Unbiased HAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C.	8	3	24	0	10	Spare should be properly identified. Use the parts which have gone through Pre-conditioning.
Unbiased High Temperature/Humidity	+85°C/85% RH for 1000 hours. Readpoints at 0, 500, and 1000 hours . Electrical test pre and post stress at +25°C.	8	3	24	0	50	Spare should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	JESD22A104. -40°C to +125°C for 1000 cycles. Readpoints at 0, 500, and 1000 cycles. Electrical test pre and post stress at +25°C.	8	3	24	0	30	Spare should be properly identified. Use the parts which have gone through Pre-conditioning.