



Product Change Notification / ALAN-23NFTN142

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**Date:**

25-May-2023

**Product Category:**

8-bit Microcontrollers

**PCN Type:**

Manufacturing Change

**Notification Subject:**

CCB 6111 Initial Notice: Qualification of MTAI as an additional final test location for ATMEGA168PBxx, ATMEGA48PBxx, and ATMEGA88PBxx device family available in 32L TQFP (7x7x1mm) package.

**Affected CPNs:**

[ALAN-23NFTN142\\_Affected\\_CPN\\_05252023.pdf](#)  
[ALAN-23NFTN142\\_Affected\\_CPN\\_05252023.csv](#)

**Notification Text:**

**PCN Status:**Initial Notification

**PCN Type:**Manufacturing Change

**Microchip Parts Affected:**Please open one of the files found in the Affected CPNs section.  
Note: For your convenience Microchip includes identical files in two formats (.pdf and .xls)

**Description of Change:**Qualification of MTAI as an additional final test location for ATMEGA168PBxx, ATMEGA48PBxx, and ATMEGA88PBxx device family available in 32L TQFP (7x7x1mm) package.

**Pre and Post Change Summary:**

	Pre Change	Post Change
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Final Test Location		ASE Group Chung-Li (ASCL)	ASE Group Chung-Li (ASCL)	Microchip Technology Thailand (HQ) (MTAI)
Pin 1 Orientation		1	1	1
MSL		3	3	1
Desiccant		Desiccant 1 unit x 2 pcs per bag	Desiccant 1 unit x 2 pcs per bag	None
Tape and Reel	BQM	2000	2000	2000
	Color	White	White	Dark Blue
	Carrier Tape	See pre and post change for comparison.		
	Reel	See pre and post change for comparison.		
	Antistatic Shield Bag	See pre and post change for comparison.		
	Carton Box	See pre and post change for comparison.		
Tray	BQM	250	250	250
	Color	Black	Black	Blue
	Antistatic Shield Bag	See pre and post change for comparison.		
	Carton Box	See pre and post change for comparison.		
Desiccant		See pre and post change for comparison		

**Impacts to Data Sheet:**None

**Change Impact**None

**Reason for Change:**To improve manufacturability by qualifying MTAI as an additional test location.

**Change Implementation Status:**In Progress

**Estimated Qualification Completion Date:**June 2023

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:**

	May 2023					June 2023			
Workweek	1 8	1 9	2 0	2 1	2 2	2 3	2 4	2 5	2 6

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:**May 25, 2022: 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.

**Attachments:**

- [PCN\\_ALAN-23NFTN142 Qual\\_Plan.pdf](#)
- [PCN\\_ALAN-23NFTN142\\_Pre and Post Change\\_Summary.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.



**QUALIFICATION PLAN SUMMARY**  
RELIABILITY LABORATORY

**PCN# ALAN-23NFTN142**

**Date:**  
**May 23, 2023**

**Qualification of MTAI as an additional final test location for ATMEGA168PBxx, ATMEGA48PBxx, and ATMEGA88PBxx device family available in 32L TQFP (7x7x1mm) package.**



## MICROCHIP PACKAGE QUALIFICATION REPORT

**Purpose**

Qualification of MTAI as an additional final test location for ATMEGA168PBxx, ATMEGA48PBxx, and ATMEGA88PBxx device family available in 32L TQFP (7x7x1mm) package.

**CCB**

6111

<b>Test</b>	<b>Condition</b>
<b>Datalog/Bin Comparison</b>	<ul style="list-style-type: none"><li>- Compare test numbers, test names, test sequence bin assignments &amp; pass/fail results</li><li>- Accept if all match or justify the differences</li></ul>
<b>Site by Site verification</b>	<ul style="list-style-type: none"><li>- Verifies the channel map has the correct site assignments and tester/handler communications work correctly</li></ul>
<b>Correlation lot report</b>	<ul style="list-style-type: none"><li>- Yield at each step and reject analysis between systems.</li><li>- Accept on yield match within 1%</li></ul>
<b>Unit to unit parametric correlation</b>	<ul style="list-style-type: none"><li>- A full assembly strip characterized on both systems and graphed vs each other &amp; the data sheet limits</li></ul>
<b>Test stability</b>	<ul style="list-style-type: none"><li>- 50 loop test performed with no datalog delays<ul style="list-style-type: none"><li>• Accept on 0 fails</li></ul></li></ul>
<b>Parametric test stability verification</b>	<ul style="list-style-type: none"><li>- Use Real Time Statistics software</li></ul>

Affected Catalog Part Numbers (CPN)

ATMEGA168PB-AN  
ATMEGA168PB-ANR  
ATMEGA48PB-AU  
ATMEGA88PB-AN  
ATMEGA48PB-AN  
ATMEGA88PB-ANR  
ATMEGA48PB-ANR  
ATMEGA48PB-AUR



**MICROCHIP**

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