



## Product Change Notification / ALAN-20ESKQ801

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**Date:**

23-Sep-2022

**Product Category:**

8-bit Microcontrollers

**PCN Type:**

Manufacturing Change

**Notification Subject:**

CCB 3397.006 Initial Notice: Qualification of MPHIL as an additional test location for selected ATMEGA88PB and ATMEGA48PB device families available in 32L VQFN (5x5x0.9mm) package.

**Affected CPNs:**

[ALAN-20ESKQ801\\_Affected\\_CPN\\_09232022.pdf](#)  
[ALAN-20ESKQ801\\_Affected\\_CPN\\_09232022.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 MPHIL as an additional test location for selected ATMEGA88PB and ATMEGA48PB device families available in 32L VQFN (5x5x0.9mm) package.

**Pre and Post Change Summary:**

	Pre Change	Post Change	
Test Location	ASE Test (ASE9)	ASE Test (ASE9)	Microchip Technology

			Operations Corporation (MPHIL)
Reel BQM	6000	6000	6000
Reel Pin 1 Orientation	Quadrant 2	Quadrant 2	Quadrant 2
Carrier Tape	No change. See pre and post change for comparison.		
Plastic Reel	With minor dimensional change. See pre and post change for comparison.		
Moisture Barrier Bag	With minor dimensional change. See pre and post change for comparison.		
Box	With minor dimensional change. See pre and post change for comparison.		
Tray BQM	490	490	490
Tray Pin 1 Orientation	Near Chamfer	Near Chamfer	Near Chamfer
Tray Bundling	No change. See pre and post change for comparison.		
Moisture Shielding Bag	See pre and post change for comparison.		
Inner Box	With minor dimensional change. See pre and post change for comparison.		

**Impacts to Data Sheet:**None

**Change Impact:**None

**Reason for Change:**To improve productivity by qualifying MPHIL as an additional test location.

**Change Implementation Status:**In Progress

**Estimated Qualification Completion Date:**September 2022

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:**

	September 2022				
Workweek	3 6	3 7	3 8	3 9	4 0
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:**September 23, 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-20ESKQ801 Qual Plan.pdf](#)

[PCN\\_ALAN-20ESKQ801\\_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.

# CCB 3397.006

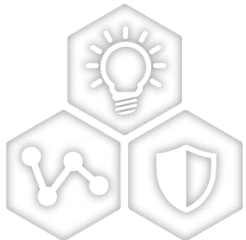
## Pre and Post Change Summary

### PCN# ALAN-20ESKQ801



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SMART | CONNECTED | SECURE


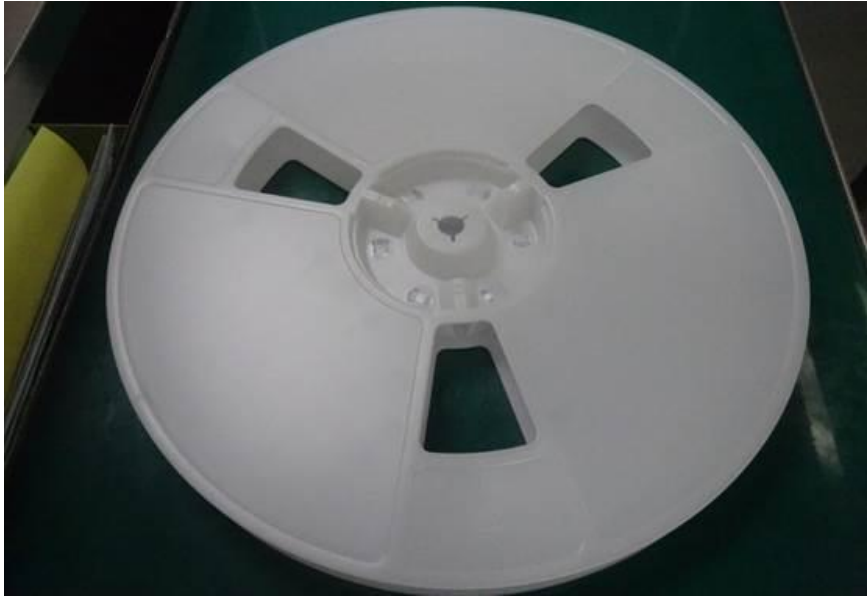
## Tape and Reel

Plant	BQM	Pin1
ASE9	6000 per reel	Quadrant 2
MPHIL	6000 per reel	Quadrant 2

# Carrier Tape

Plant	Width	Pitch	A0	B0	K0
ASE9	12 mm	8 mm	5.25 mm	5.25 mm	1.1 mm
MPHIL	12 mm	8 mm	5.25 mm	5.25 mm	1.1 mm

# Plastic Reel

ASE9	SIGP
	

Plant	Color	Diameter	Hub Dia	W1	W2
ASE9	White	330	102 mm	4.4 mm - 8.4 mm	7.1 mm - 11.1 mm
MPHIL	White	330	100 mm +/- 1.5	12.4 mm	18.4 mm

# Moisture Barrier Bag

ASE9	MPHIL
	

Plant	Length	Width
ASE9	495 mm	430 mm
MPHIL	457 mm	406 mm



# Box

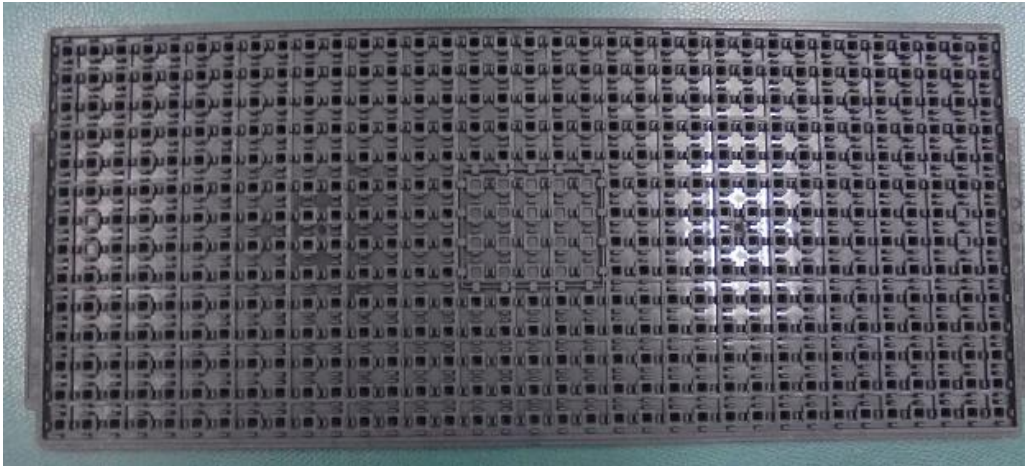


ASE9	MPHIL
	

Plant	Length	Width	Height
ASE9	370 mm	351 mm	53 mm
MPHIL	375 mm	352 mm	53 mm

# Tray

Plant	BQM	Pin1
ASE9	490 per Tray	Near Tray Chamfer
MPHIL	490 per Tray	Near Tray Chamfer

# Tray Bundling

ASE9	MPHIL
 	



Plant	Tray Quantity
ASE9	10 + 1 cover tray
MPHIL	10 + 1 cover tray

# Moisture Shielding Bag

ASE9	MPHIL
	

Plant	Shielding Bag
ASE9	Static Shielding Bag (SSB)
MPHIL	Static Shielding Bag (SSB)

# Inner Box

ASE9	MPHIL
	

Plant	Length	Width	Height
ASE9	371.5 mm	162 mm	88 mm
MPHIL	371 mm	162 mm	88 mm



# **QUALIFICATION PLAN SUMMARY**

**PCN# ALAN-20ESKQ801**

**Date:**  
**September 7, 2022**

**Qualification of MPHIL as an additional test location  
for selected ATMEGA88PB and ATMEGA48PB device  
families available in 32L VQFN (5x5x0.9mm) package.**

Purpose: Qualification of MPHIL as an additional test location for selected ATMEGA88PB and ATMEGA48PB device families available in 32L VQFN (5x5x0.9mm) package.

CCB# 3397.006

## Test Conversion Correlation

<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. 5K units are tested for each program conversion we perform.</li><li>– Accept on yield match within 0.1%</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</li><li>– Accept on 0 fails</li></ul>
<b>Parametric test stability verification</b>	<ul style="list-style-type: none"><li>– Use Real Time Statistics software</li></ul>

ALAN-20ESKQ801 - CCB 3397.006 Initial Notice: Qualification of MPHIL as an additional test location for selected ,

Affected Catalog Part Numbers(CPN)

ATMEGA88PB-MU  
ATMEGA48PB-MU  
ATMEGA88PB-MN  
ATMEGA48PB-MN  
ATMEGA88PB-MNR  
ATMEGA48PB-MNR  
ATMEGA88PB-MUR  
ATMEGA48PB-MUR