



## Product Change Notification / RMES-02CRED041

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**Date:**

05-Aug-2020

**Product Category:**

32-bit Microcontrollers

**PCN Type:**

Manufacturing Change

**Notification Subject:**

CCB 4325 Initial Notice: Qualification of MPHL as an additional final test site for selected Atmel ATSAM10Exxx and ATSAM11Exxx device families available in 32L VQFN (5x5x1.0mm) package.

**Affected CPNs:**

[RMES-02CRED041\\_Affected\\_CPN\\_08052020.pdf](#)  
[RMES-02CRED041\\_Affected\\_CPN\\_08052020.csv](#)

**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 MPHL as an additional final test site for selected Atmel ATSAM10Exxx and ATSAM11Exxx device families available in 32L VQFN (5x5x1.0mm) package.

**Pre Change:**

Tested at ATP7 final test site

**Post Change:**

Tested at ATP7 or MPHL final test site

**Pre and Post Change Summary:**

		Pre Change	Post Change	
<b>Final Test Site</b>		Amkor Technology Philippines (P3/P4), INC.  (ATP7)	Amkor Technology Philippines (P3/P4), INC.  (ATP7)	Microchip Technology Operations (Philippines) Corporation (MPHL)
<b>Base Quantity Multiple (BQM)</b>	<b>Tray</b>	490	490	490
	<b>Tape and Reel</b>	5000	5000	5000
<b>Pin1 Orientation</b>		Quadrant 1	Quadrant 1	Quadrant 1
<b>Carrier Tape</b>		No change		
<b>Cover Tape</b>		Minor dimensional changes – see attachment		
<b>Plastic Reel</b>		No change		
<b>Tray</b>		No change		
<b>Packing Procedure for Tray and Tape &amp; Reel</b>		No change		

**Impacts to Data Sheet:**

None

**Change Impact:**

None

**Reason for Change:**

To improve on-time delivery performance by qualifying MPHL as an additional final test site.

**Change Implementation Status:**

In Progress

**Estimated Qualification Completion Date:**

August 2020

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:**

	August 2020				
Workweek	32	33	34	35	36
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: August 05, 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.

**Attachments:**

- [PCN\\_RMES-02CRED041\\_Pre and Post Change Summary.pdf](#)
- [PCN\\_RMES-02CRED041\\_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.

**CCB 4325**  
**Pre and Post Change Summary**  
**PCN #: RMES-02CRED041**



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A Leading Provider of Smart, Connected and Secure Embedded Control Solutions



SMART | CONNECTED | SECURE

**Qualification of MPHL as an additional final test site for selected Atmel ATSAML10Exxx and ATSAML11Exxx device families available in 32L VQFN (5x5x1.0mm) package.**

# Pre and Post Change

		Pre-Change	Post Change	
<b>Final Test Site</b>		ATP7	ATP7	MPHL
<b>Base Quantity Multiple (BQM)</b>	<b>Tray</b>	490	490	490
	<b>Tape and Reel</b>	5000	5000	5000
<b>Pin1 Orientation</b>		Quadrant 1	Quadrant 1	Quadrant 1

# Tray – No change

ATP7



# of Rows : 14
# of Columns: 35
Pocket on Tray: 490 (BQM)
Tray Stack: 10 + 1 (10 + Cover)
Bakeable

MPHL



# of Rows : 14
# of Columns: 35
Pocket on Tray: 490 (BQM)
Tray Stack: 10 + 1 (10 + Cover)
Bakeable

# Tray Packing Procedure – No change

## ATP7



**TRAY BUNDLING:**  
3 straps crosswise & 1 lengthwise  
Max: 10 full trays + 1 empty tray cover



Inner Box Tray: 16.2x37.1x8.8 cm

## MPHL



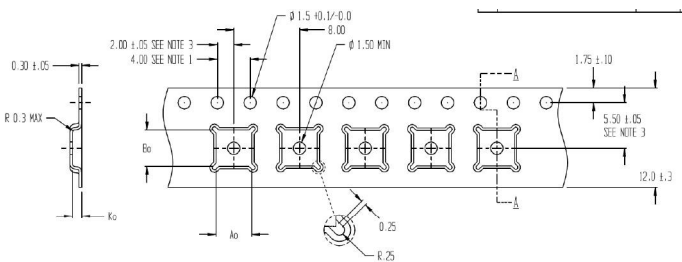
**TRAY BUNDLING:**  
3 straps crosswise & 1 lengthwise  
Max: 10 full trays + 1 empty tray cover



Inner Box Tray: 16.2x37.1x8.8 cm

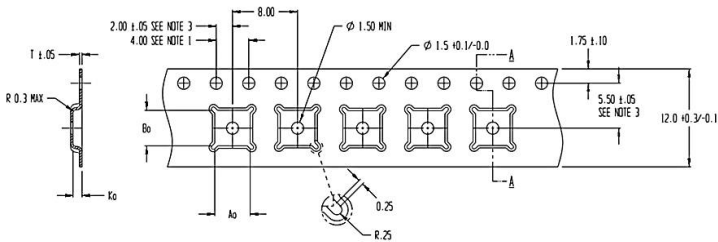
# Tape and Reel - Carrier Tape – No change

## ATP7



Width (mm)	Pitch (mm)	A0 (mm)	B0 (mm)	K0 (mm)	Thickness (mm)
12	8	5.25	5.25	1.10	0.30

## MPLH



Width (mm)	Pitch (mm)	A0 (mm)	B0 (mm)	K0 (mm)	Thickness (mm)
12	8	5.25	5.25	1.10	0.30



# Tape and Reel - Cover Tape

ATP7		MPHL									
<table border="1"><thead><tr><th>Cover Tape Width (W +/- 0.1)</th><th>Sealing Method</th></tr></thead><tbody><tr><td>9.2 mm</td><td>Heat Seal Activated</td></tr></tbody></table>	Cover Tape Width (W +/- 0.1)	Sealing Method	9.2 mm	Heat Seal Activated		<table border="1"><thead><tr><th>Cover Tape Width (W +/- 0.1)</th><th>Sealing Method</th></tr></thead><tbody><tr><td>9.3 mm</td><td>Pressure Seal Activated</td></tr></tbody></table>	Cover Tape Width (W +/- 0.1)	Sealing Method	9.3 mm	Pressure Seal Activated	
Cover Tape Width (W +/- 0.1)	Sealing Method										
9.2 mm	Heat Seal Activated										
Cover Tape Width (W +/- 0.1)	Sealing Method										
9.3 mm	Pressure Seal Activated										

Note: Both Supplier are qualified and Cover Tape's 0.1mm difference is accepted for both seal type at each test site.

## Tape and Reel – Plastic Reel – No change

**ATP7**



Color	Diameter	Hub Diameter	W1
White	330 mm	100 mm	13.5 +/- 0.5

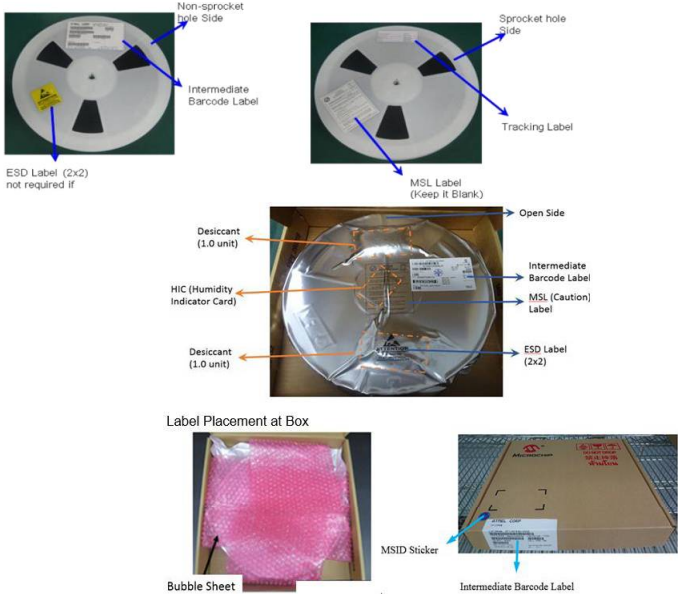
**MPHL**



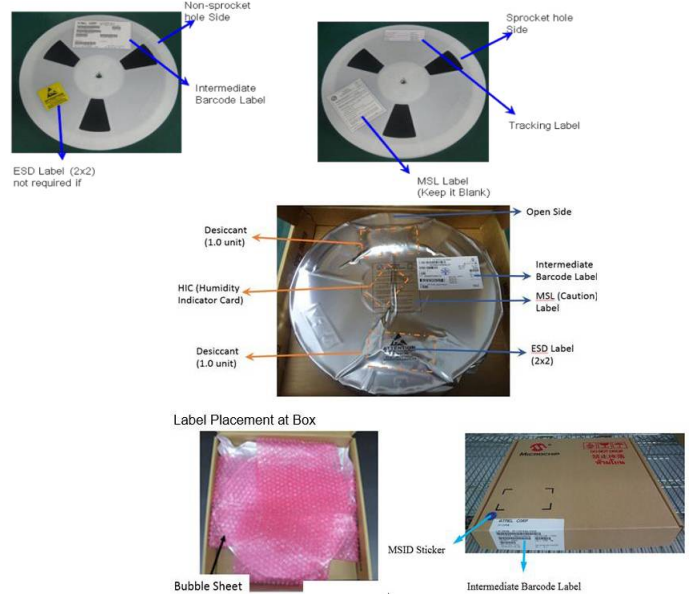
Color	Diameter	Hub Diameter	W1
White	330 mm	100 mm	13.5 +/- 0.5

# Tape and Reel – Packing Procedure – No Change

## ATP7



## MPHL





**MICROCHIP**

**QUALIFICATION PLAN SUMMARY**

**PCN #: RMES-02CRED041**

**Date**

**July 17, 2020**

**Qualification of MPHL as an additional final test site for selected Atmel ATSAML10Exxx and ATSAML11Exxx device families available in 32L VQFN (5x5x1.0mm) package.**

**Purpose:** Qualification of MPHL as an additional final test site for selected Atmel ATSAML10Exxx and ATSAML11Exxx device families available in 32L VQFN (5x5x1.0mm) package.

**CCB No.:** 4325

Test / Evaluation	Test Conditions / Parameters
Datalog / Bin Comparison	<ul style="list-style-type: none"> <li>• Compare test numbers, test names, test limit, test sequence, bin assignments &amp; pass/fail results.</li> <li>• Accept if all match or justify the differences</li> </ul>
Site by site verification	<ul style="list-style-type: none"> <li>• Verifies the channel map has the correct site assignments and tester/handler communication work correctly</li> </ul>
Correlation lot report	<ul style="list-style-type: none"> <li>• Yield at each step and reject analysis between systems. 3K units are tested for each program conversion we perform.</li> <li>• Accept on yield match within 1%</li> </ul>
Unit to unit parametric correlation	<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>
Test stability	<ul style="list-style-type: none"> <li>• 50 loop test performed with no datalog delays</li> <li>• Accept on 0 fails</li> </ul>
Parametric test stability verification	<ul style="list-style-type: none"> <li>• Use Real Time Statistics software to create report of all parametric tests</li> </ul>

RMES-02CRED041 - CCB 4325 Initial Notice: Qualification of MPHL as an additional final test site for selecter

Affected Catalog Part Numbers(CPN)

ATSAML10E14A-MU  
ATSAML10E15A-MU  
ATSAML10E16A-MU  
ATSAML11E14A-MU  
ATSAML11E15A-MU  
ATSAML11E16A-MU  
ATSAML10E14A-MUT  
ATSAML10E15A-MUT  
ATSAML10E16A-MUT  
ATSAML11E14A-MUT  
ATSAML11E15A-MUT  
ATSAML11E16A-MUT