



Product Change Notification / RMES-02CRED041

Date:

14-Aug-2020

Product Category:

32-bit Microcontrollers

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4325 Final 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_08142020.pdf](#)
[RMES-02CRED041_Affected_CPN_08142020.csv](#)

Notification Text:

PCN Status: Final 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	
Final Test Site		Amkor Technology Philippines (P3/P4), INC. (ATP7)	Amkor Technology Philippines (P3/P4), INC. (ATP7)	Microchip Technology Operations (Philippines) Corporation (MPHL)
Base Quantity Multiple (BQM)	Tray	490	490	490
	Tape and Reel	5000	5000	5000
Pin1 Orientation		Quadrant 1	Quadrant 1	Quadrant 1
Carrier Tape		No change		
Cover Tape		Minor dimensional changes – see attachment		
Plastic Reel		No change		
Tray		No change		
Packing Procedure for Tray and Tape & Reel		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 First Ship Date:August 31, 2020 (Date code: 2036)

NOTE: Please be advised that after the estimated first ship date 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			
Estimated Implementation Date					X

Method to Identify Change:

Traceability code

Qualification Report

Please open the attachments included with this PCN labeled as PCN_#_Qual_Report

Revision History:

August 05, 2020: Issued initial notification.

August 14, 2020: Issued final notification. Attached the qualification report. Provided estimated ship date to be on August 31, 2020.

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_Qual_Report.pdf](#)

[PCN_RMES-02CRED041_Pre and Post Change Summary.pdf](#)

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

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



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SMART | CONNECTED | SECURE

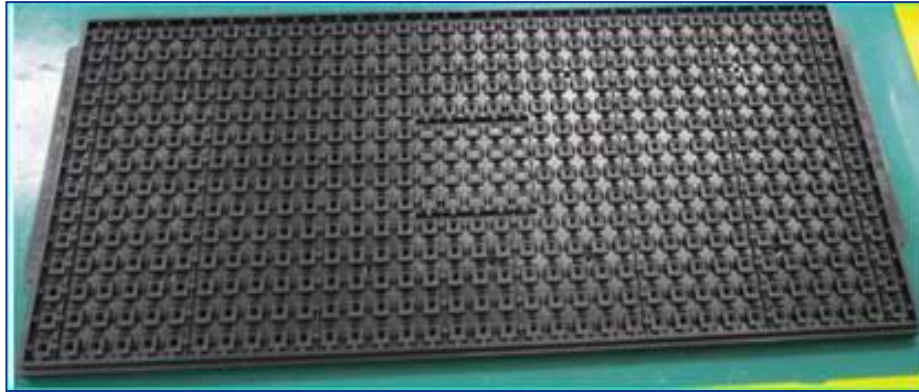
Qualification of MPHL as an additional final test site for selected Atmel ATSAM10Exxx and ATSAM11Exxx device families available in 32L VQFN (5x5x1.0mm) package.

Pre and Post Change

		Pre-Change	Post Change	
Final Test Site		ATP7	ATP7	MPHL
Base Quantity Multiple (BQM)	Tray	490	490	490
	Tape and Reel	5000	5000	5000
Pin1 Orientation		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



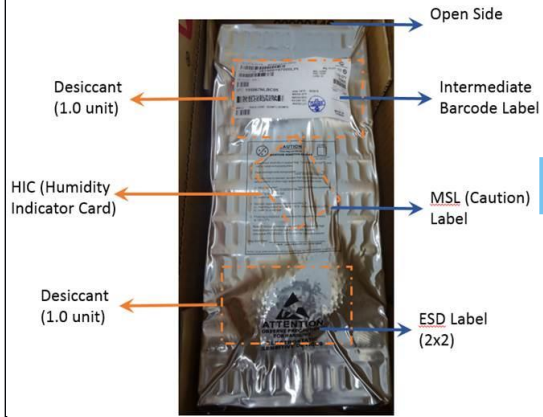
of Rows : 14
of Columns: 35
Pocket on Tray: 490 (BQM)
Tray Stack: 10 + 1 (10 + Cover)
Bakeable

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



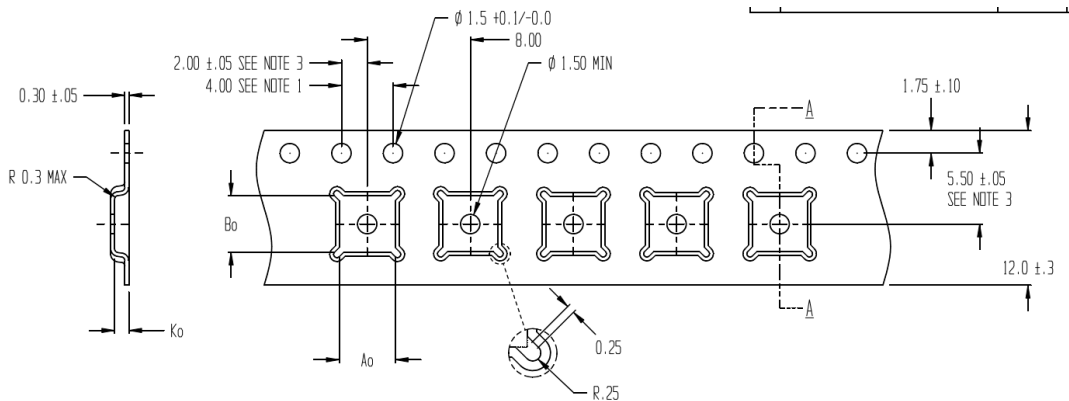
TRAY BUNDLING:
3 straps crosswise & 1 lengthwise
Max: 10 full trays + 1 empty tray cover



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

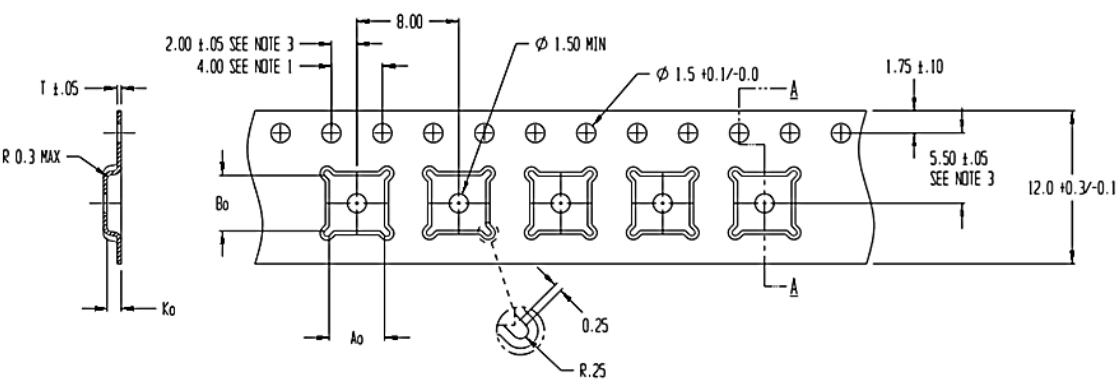
Tape and Reel - Carrier Tape – No change

ATP7



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

MPHL



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

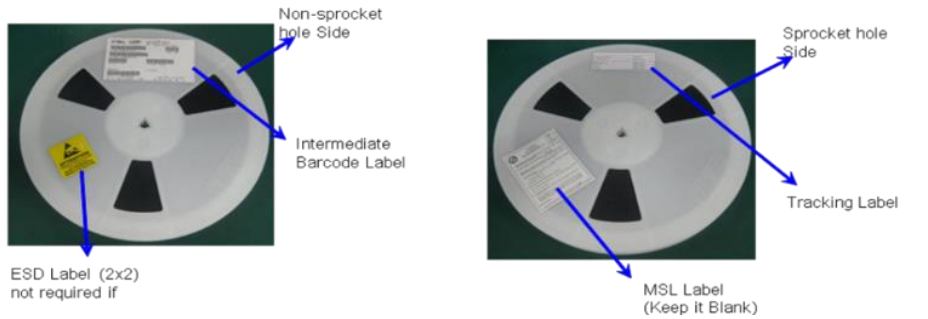
MPHL



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

Tape and Reel – Packing Procedure – No Change

ATP7



Label Placement at Box



MPHL



Label Placement at Box





MICROCHIP

QUALIFICATION REPORT SUMMARY

PCN #: RMES-02CRED041

Date

August 6, 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	Result
Datalog / Bin Comparison	<ul style="list-style-type: none"> • Compare test numbers, test names, test limit, test sequence, bin assignments & pass/fail results. • Accept if all match or justify the differences 	Passed
Site by site verification	<ul style="list-style-type: none"> • Verifies the channel map has the correct site assignments and tester/handler communication work correctly 	Passed
Correlation lot report	<ul style="list-style-type: none"> • Yield at each step and reject analysis between systems. 3K units are tested for each program conversion we perform. • Accept on yield match within 1% 	Passed
Unit to unit parametric correlation	<ul style="list-style-type: none"> • A full assembly strip characterized on both systems and graphed vs each other & the data sheet limits 	Passed
Test stability	<ul style="list-style-type: none"> • 50 loop test performed with no datalog delays • Accept on 0 fails 	Passed
Parametric test stability verification	<ul style="list-style-type: none"> • Use Real Time Statistics software to create report of all parametric tests 	Passed

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