



Product Change Notification / RMES-05OITM593

Date:

18-Mar-2022

Product Category:

Smart Energy SOC

PCN Type:

Manufacturing Change

Notification Subject:

CCB 3345.001 Final Notice: Qualification of MPHL as an additional final test site for selected Atmel ATSAM4Cxxx device family available in 100L LQFP (14x14x1.4mm) package.

Affected CPNs:

[RMES-05OITM593_Affected_CPN_03182022.pdf](#)
[RMES-05OITM593_Affected_CPN_03182022.csv](#)

Notification Text:

PCN Status:Final 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 MPHL as an additional final test site for selected Atmel ATSAM4Cxxx device family available in 100L LQFP (14x14x1.4mm) package.

Pre and Post Change Summary:

		Pre Change	Post Change		
Final Test Site		ASE Test (ASE9)	ASE Test (ASE9)	Microchip Technology Operations (Philippines) Corporation (MPHL)	
Base Quantity Multiple (BQM)	Tape and Reel	1500	1500	1500	
	Tray	90	90	90	
Pin 1 orientation	Tape and Reel	Quadrant 1	Quadrant 1	Quadrant 1	
	Tray	Near Chamfer side	Near Chamfer side	Near Chamfer side	
Carrier Tape		No changes. See Pre and Post comparison.			
Cover Tape		With dimensional changes. See Pre and Post comparison.			
Reel	Color	White	White	White	
	Dimension	With dimensional changes. See attached Pre and Post comparison.			
Tray	Color	Black	Black	Black	
	Dimension	No changes. See Pre and Post comparison.			
Packing Method		See attached Pre and Post comparison.			

Impacts to Data Sheet:None

Change Impact:None

Reason for Change:To improve manufacturability by qualifying MPHL as an additional final test site.

Change Implementation Status:In Progress

Estimated First Ship Date:April 30, 2022 (date code: 2218)

Note: Please be advised that after the estimated first ship date customers may receive pre and post change parts.

Time Table Summary:

	January 2021					>	March 2022				April 2022				
Workweek	01	02	03	04	05		10	11	12	13	14	15	16	17	18

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:

January 06, 2021: Issued initial notification.

March 18, 2022: Issued final notification. Attached the Qualification Report and updated timetable summary. Added Estimated First ship date by April 30, 2022. Updated the affected CPN list to remove ATSAM4CMS32CB and ATSAM4CMP32CB device families.

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-05OITM593_Pre_and_Post Change Summary.pdf](#)
- [PCN_RMES-05OITM593_Qual Report.pdf](#)

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

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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)

ATSAM4C16CB-AU

ATSAM4C8CB-AU

ATSAM4C4CB-AU

ATSAM4C16CB-AUR

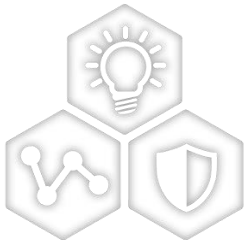
ATSAM4C8CB-AUR

ATSAM4C4CB-AUR

CCB 3345.001
Pre and Post Change Summary
PCN #: RMES-05OITM593



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SMART | CONNECTED | SECURE

List of Catalog Part Numbers

Catalog Part Number

ATSAM4C16CB-AUR

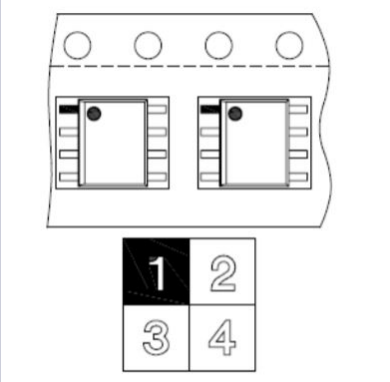
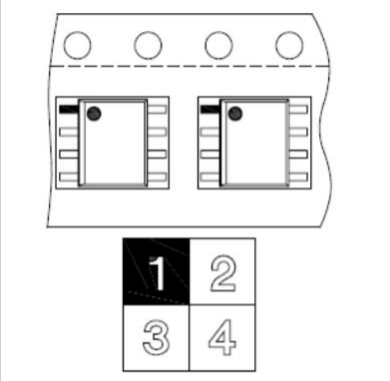
ATSAM4C8CB-AUR

ATSAM4C4CB-AUR

Pre and Post Change Summary

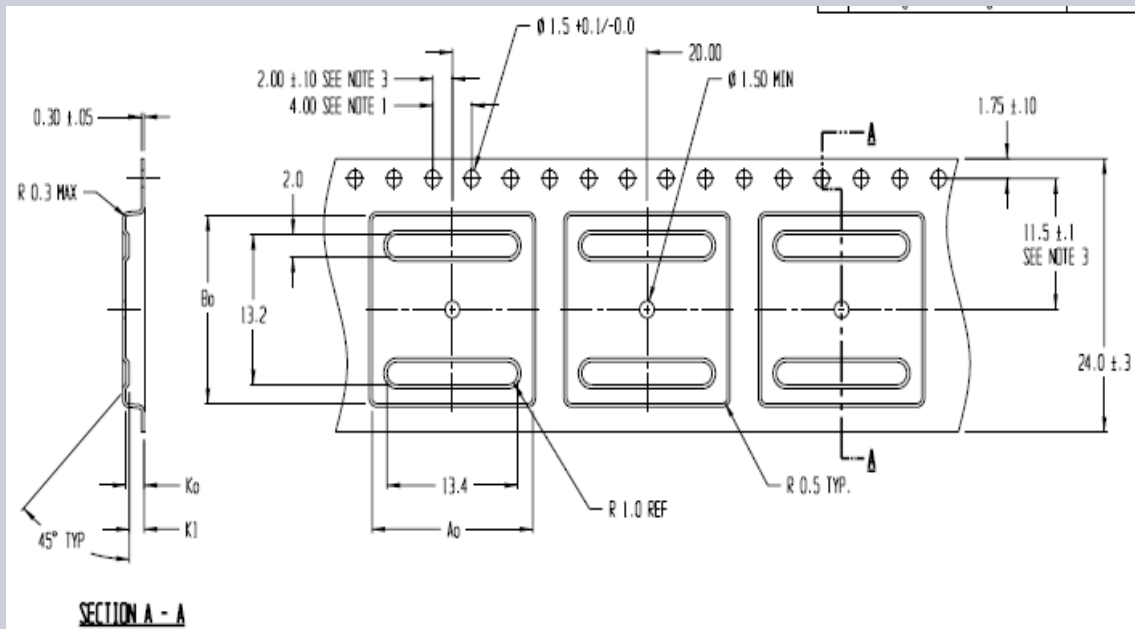
		ASE9	MPHL
Final Test Location		ASE Test (ASE9)	Microchip Technology Operations (Philippines) Corporation (MPHL)
Base Quantity Multiple (BQM)	Tape and Reel	1500	1500

Pre and Post Change Summary – Pin 1 Orientation for T/R

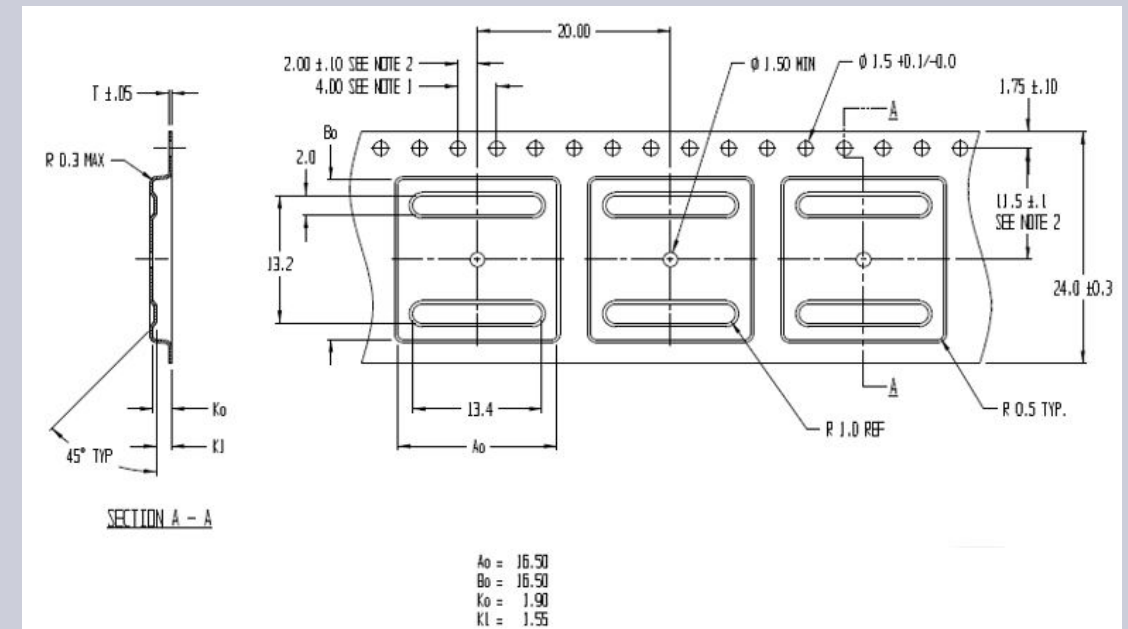
		ASE9	MPHL
Pin 1 Orientation	Tape and Reel	 <p>Diagram showing the ASE9 pin 1 orientation. The top row of the 2x2 grid is shaded black. The numbers 1, 2, 3, and 4 are arranged in a 2x2 grid below the diagram.</p>	 <p>Diagram showing the MPHL pin 1 orientation. The top row of the 2x2 grid is shaded black. The numbers 1, 2, 3, and 4 are arranged in a 2x2 grid below the diagram.</p>

Pre and Post Change Summary – Carrier Tape for T/R

ASE9



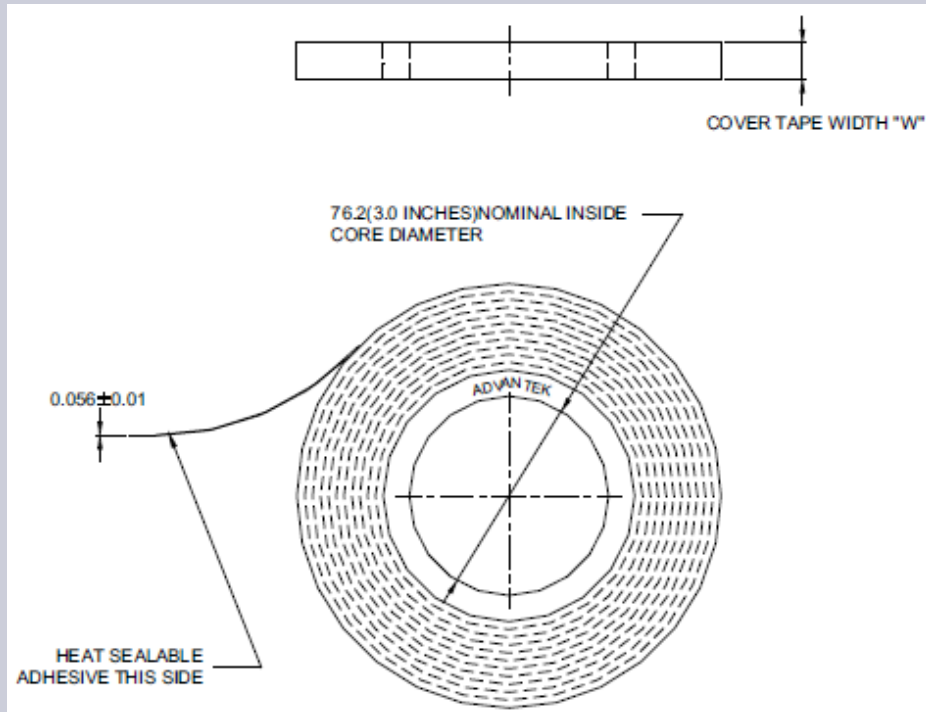
MPHL



Plant	Width (mm)	Pitch (mm)	A0 (mm)	B0 (mm)	K0 (mm)	T (mm)	Color
ASE9	24	20	16.50	16.50	1.90	0.3	Black
MPHL	24	20	16.50	16.50	1.90	0.3	Black

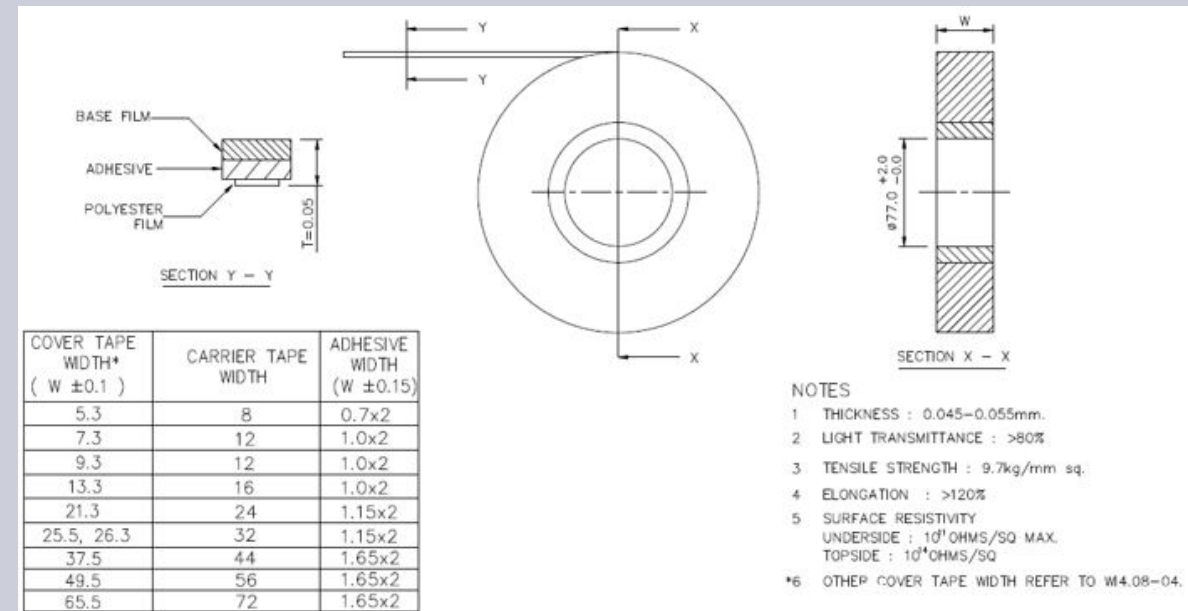
Pre and Post Change Summary – Cover Tape for T/R

ASE9



Cover tape color	Width ±0.1 (mm)	Thickness ±0.005 (mm)	Sealing Methodology
Clear	21	0.056	Heat

MPHL



Cover tape color	Width ±0.1 (mm)	Thickness ±0.005 (mm)	Sealing Methodology
Clear	21.3	0.050 +/-0.005	Pressure Seal Activated

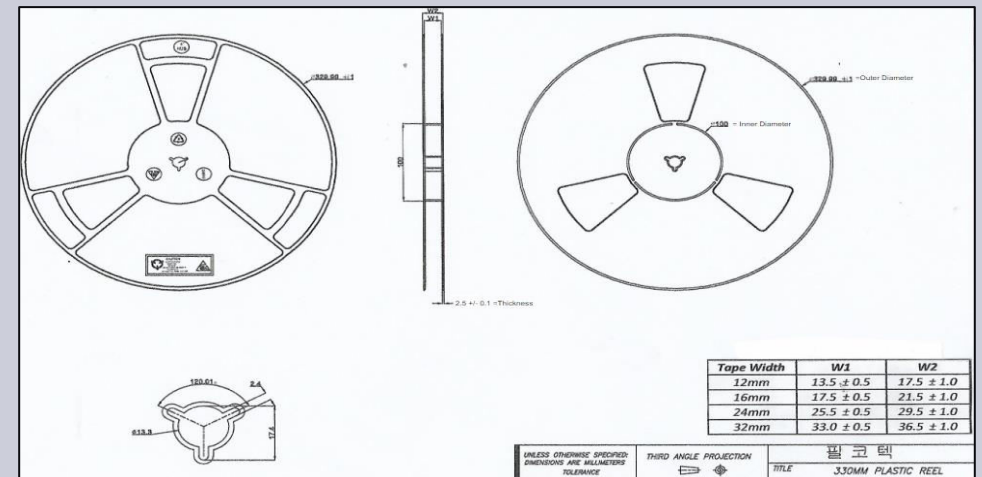
Pre and Post Change Summary – Plastic Reel for T/R

ASE9



Reel Color	Reel diameter (mm)	Hub (mm)
White	330	102

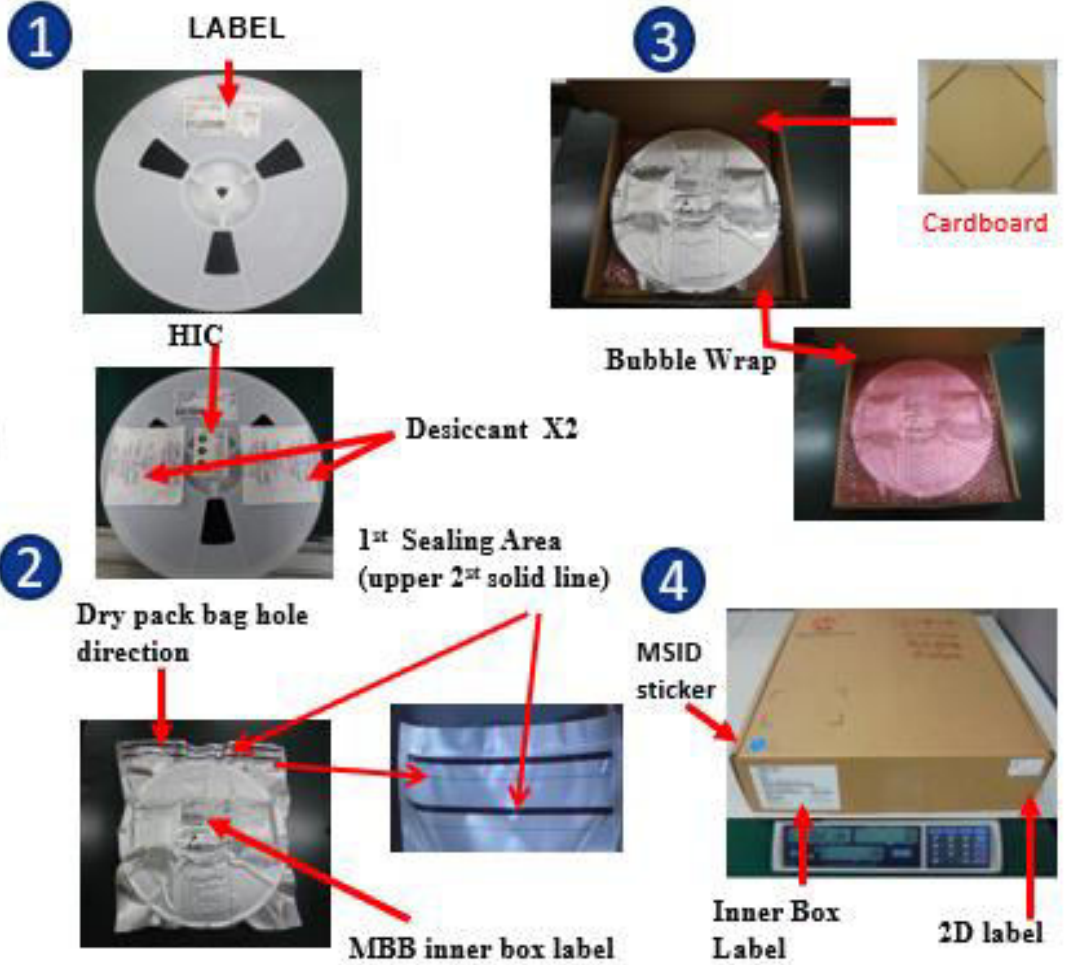
MPHL



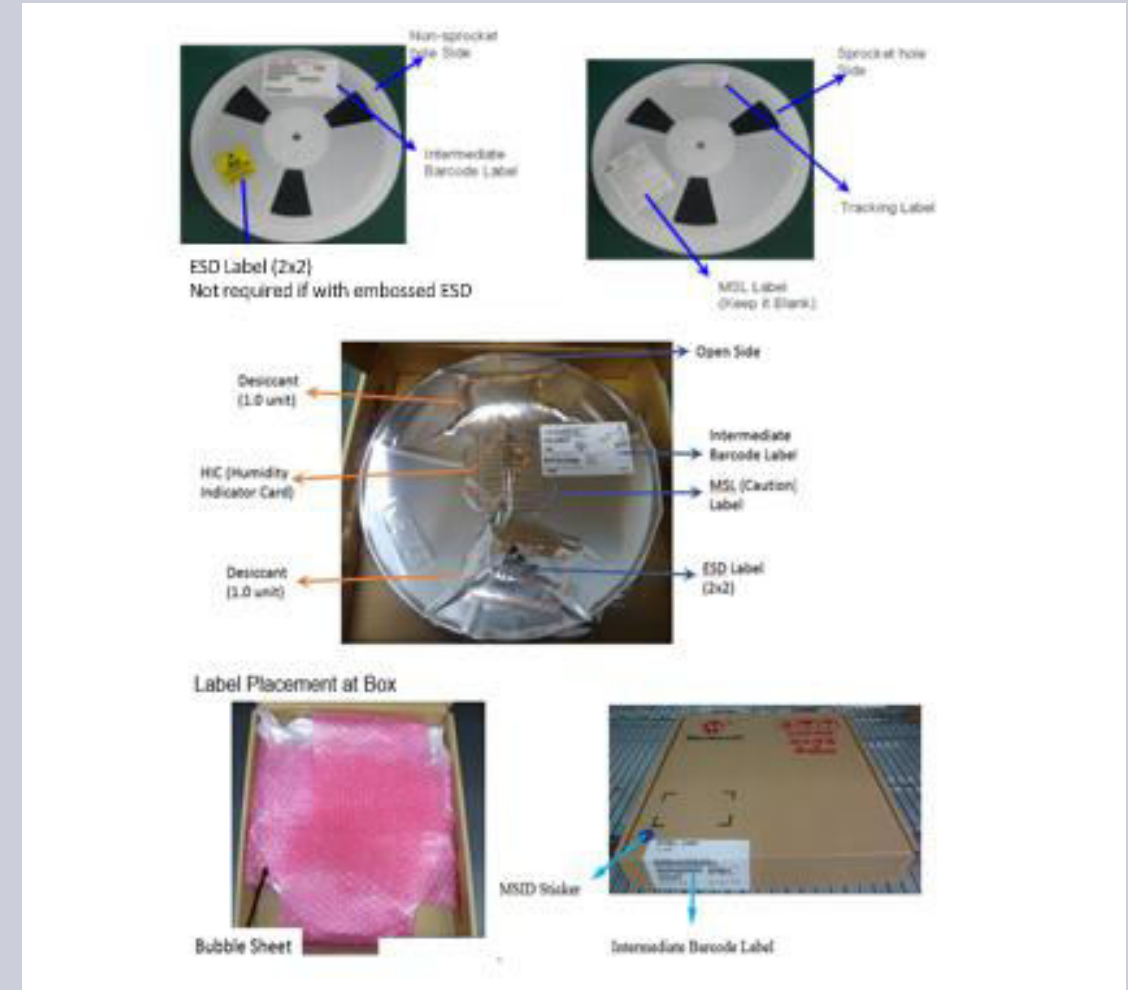
Reel Color	Reel diameter (mm)	Hub (mm)
White	330	100

Packing Method – Tape and Reel Packing Method

ASE9



MPHL



List of Catalog Part Numbers

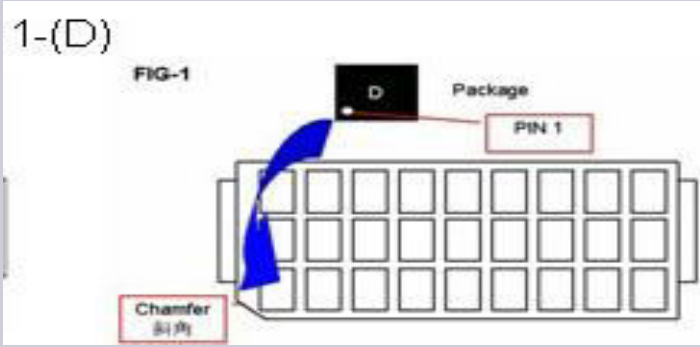
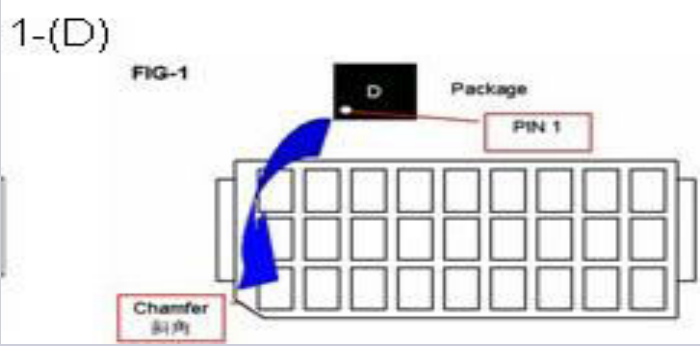
Catalog Part Number

ATSAM4C16CB-AU

ATSAM4C8CB-AU

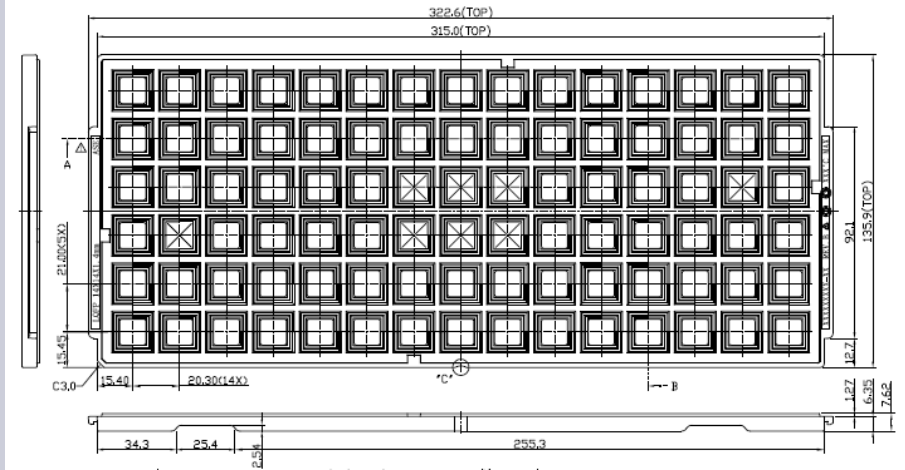
ATSAM4C4CB-AU

Pre and Post Change Summary – Tray

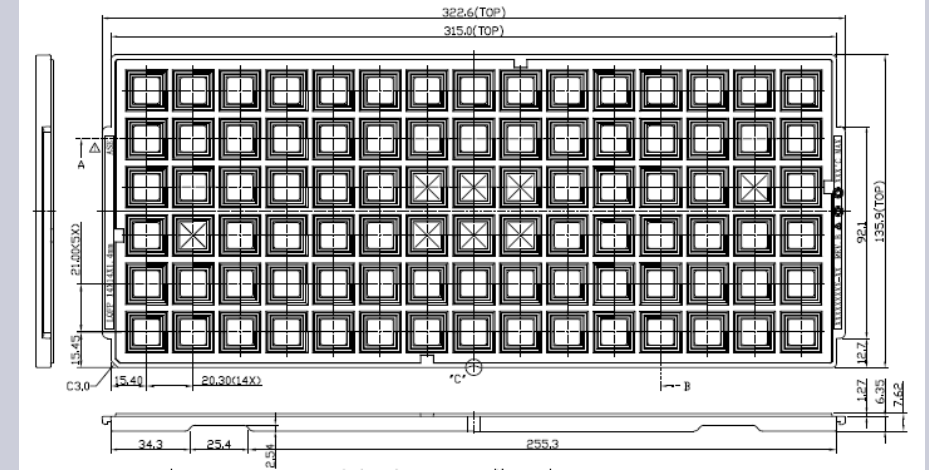
		ASE9	MPHL
Final Test Location		ASE Test (ASE9)	Microchip Technology Operations (Philippines) Corporation (MPHL)
Base Quantity Multiple (BQM)	Tray	90	90
Pin 1 Orientation		 <p>Near Chamfer side</p>	 <p>Near Chamfer side</p>

Packing Method – Tray Dimension

ASE9



MPHL



Plant	Length – max outer (mm)	Width – max outer (mm)	Thickness – max (mm)	Color
ASE	315	138.9	7.62	BLACK
MPHL	315	138.9	7.62	BLACK

Packing Method – Tray Packing Method

ASE9

1 10+1 stack STRAPS (3SIL) 打包帶 (3短1長)
CHAMFER 斜角
HIC 溼度指示卡

2 Chamfer 斜角
Desiccant 1 units x 2 1單位乾燥劑 x2
inner box Label 真空袋標籤
MBB 真空袋

3 Bubble Wrap 粉紅氣泡布
MSID sticker MSID 標籤

4 膠帶 Tape
Tray Inner Box Label 內盒標籤
ASET small bar code ASET2維小標籤

MPHL

Pin 1 Orientation / Tray Bundling	Inner Box Packing
<p>1. Pin 1 Orientation – near tray chamfer</p> <p>2. Tray Bundling > 10 full trays + 1 empty tray cover > PP Strapping: 3 crosswise & 1 lengthwise</p>	<p>4. Wrap bag with bubble pack</p>
<p>3. Moisture Barrier Bag Labels</p> <p>Desiccant (1.0 unit) HIC (Humidity Indicator Card) Desiccant (1.0 unit) Open Side Intermediate Barcode Label MSL (Caution) Label ESD Label (2x2)</p>	<p>5. Tray Box Packing</p> <p>Inner Box Tray: 16.2x37.1x8.8 cm</p>



MICROCHIP
QUALIFICATION REPORT SUMMARY

PCN #: RMES-05OITM593

Date:
March 02, 2022

**Qualification of MPHL as an additional final test site for
selected Atmel ATSAM4Cxxx device family available in 100L
LQFP (14x14x1.4mm) package.**

Purpose: Qualification of MPHL as an additional final test site for selected Atmel ATSAM4Cxxx device family available in 100L LQFP (14x14x1.4mm) package.

CCB No.: 3345.001

Test Name	Test Conditions	Result
Datalog/Bin Comparison	Test the same units at existing and destination locations and compare BIN and Yield data. FT Yield and bin-to-bin difference should be 0.1% and accepted QC yield should be 100%	PASSED
Parametric Comparison	Characterize at least 33 good units at original test site to be re-characterize at destination test site	PASSED
Cross Correlation	Run at least 33 untested parts at destination test site, to be retested at original test site	PASSED
Correlation lot report	Run 1 qualification lot with 3000 units at currently qualified test site (original site – ASE9) to be retested at new test site (destination site – MPHL)	PASSED