



## Product Change Notification / ASER-30YJUP974

### Date:

15-Sep-2021

### Product Category:

Wireless Modules

### PCN Type:

Manufacturing Change

### Notification Subject:

CCB 3344.004 Final Notice: Qualification of MPHL as an additional final test site for selected AT86RF232-ZX and AT86RF232-ZXR catalog part numbers available in 32L VQFN (5x5x0.9mm) package.

### Affected CPNs:

[ASER-30YJUP974\\_Affected\\_CPN\\_09152021.pdf](#)

[ASER-30YJUP974\\_Affected\\_CPN\\_09152021.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 AT86RF232-ZX and AT86RF232-ZXR catalog part numbers available in 32L VQFN (5x5x0.9mm) package.

### 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)	T/R	5000	5000	5000
	Tray	490	490	490
Packing Color	T/R	White	White	White
	Tray	Black	Black	Black
Pin 1 Orientation	T/R	Quadrant 1	Quadrant 1	Quadrant 1
	Tray	Tray Chamfer Side	Tray Chamfer Side	Tray Chamfer Side
Carrier Tape	See Pre and Post Change Summary for Comparison.			
Cover Tape				
Reel				
Packing Method				

**Impacts to Data Sheet:**None

**Change Impact:**None

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

**Change Implementation Status:**In Progress

**Estimated First Ship Date:**

November 29, 2021 (date code: 2149)

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

**Time Table Summary:**

Workweek	August 2021					September 2021					>	November 2021				
	3 2	3 3	3 4	3 5	3 6	3 7	3 8	3 9	3 10	3 11		45	46	47	48	49
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 6, 2021:** Issued initial notification.

**September 15, 2021:** Issued final notification. Attached the Qualification Report. Revised the affected parts list to remove CPNs AT86RF233-ZU/ZUR that were previously qualified. Revised notification subject and description to reflect the change in affected parts list. Provided estimated first ship date to be on November 29, 2021.

The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable products.

## Attachments:

[PCN\\_ASER-30YJUP974\\_Qual Report.pdf](#)

[PCN\\_ASER-30YJUP974 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 3344.004**  
**Pre and Post Change Summary**  
**PCN #: ASER-30YJUP974**



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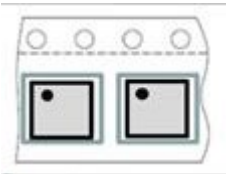
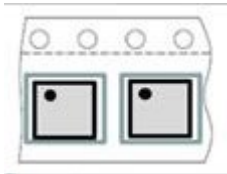
A Leading Provider of Smart, Connected and Secure Embedded Control Solutions



SMART | CONNECTED | SECURE

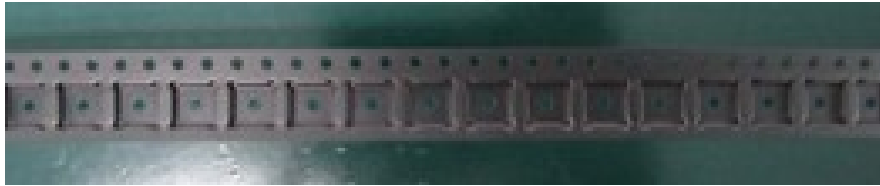
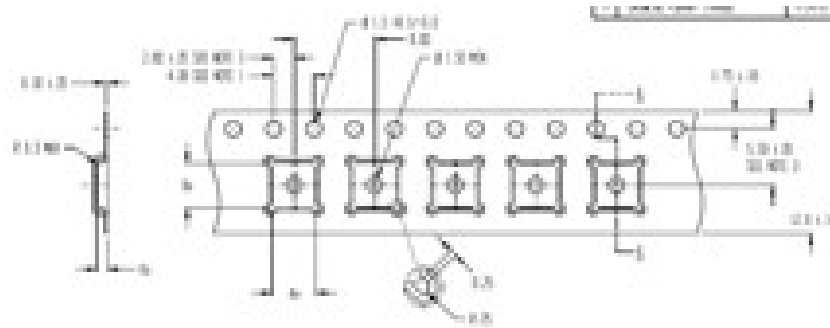
**Qualification of MPHL as an additional final test site for selected AT86RF232-ZX and AT86RF232-ZXR catalog part numbers available in 32L VQFN (5x5x0.9mm) package.**

# BQM and Pin 1 Orientation

		ATP7	MPHL
Base Quantity Multiple (BQM)	Tape and Reel	5000	5000
	Tray	490	490
Pin 1 orientation	Tape and Reel	Quadrant 1 	Quadrant 1 
	Tray	Tray Chamfer Side	Tray Chamfer Side

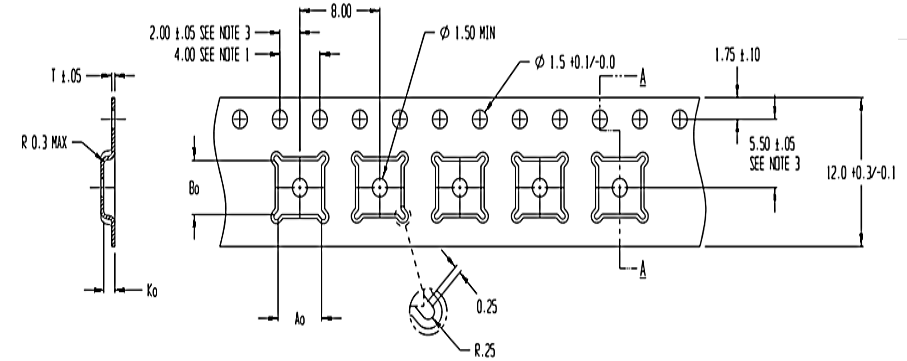
# Tape and Reel - Carrier Tape

## ATP7



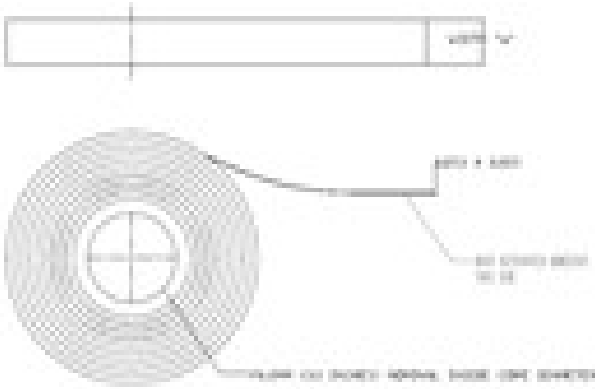
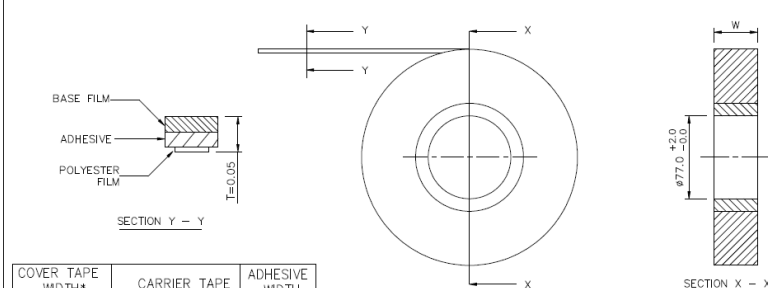
Supplier Mfg. part no.	ML0505-A
Width (mm)	12
Pitch (mm)	8
A0 (mm)	5.25
B0 (mm)	5.25
K0 (mm)	1.1

## MPHL





Supplier Mfg. part no.	ML0505-A	QFN0500X0500E
Width (mm)	12	12
Pitch (mm)	8	8
A0 (mm)	5.25	5.30
B0 (mm)	5.25	5.30
K0 (mm)	1.1	1.1

# Tape and Reel - Cover Tape


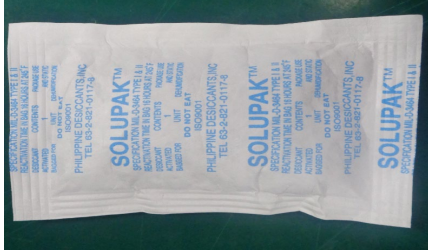

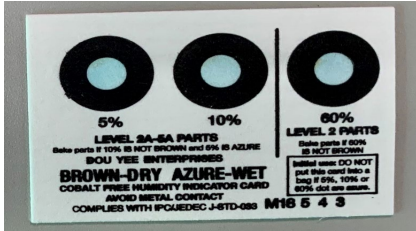




ATP7		MPHL									
											
<table border="1"> <thead> <tr> <th>Cover Tape Width</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>9.2 mm</td> <td>Black</td> </tr> </tbody> </table>		Cover Tape Width	Color	9.2 mm	Black	<table border="1"> <thead> <tr> <th>Cover Tape Width</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>9.3 mm</td> <td>Black</td> </tr> </tbody> </table>		Cover Tape Width	Color	9.3 mm	Black
Cover Tape Width	Color										
9.2 mm	Black										
Cover Tape Width	Color										
9.3 mm	Black										

# Tape and Reel – Plastic Reel

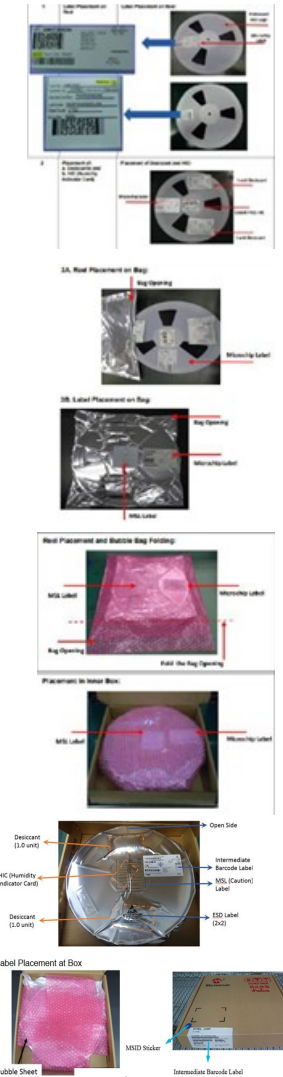
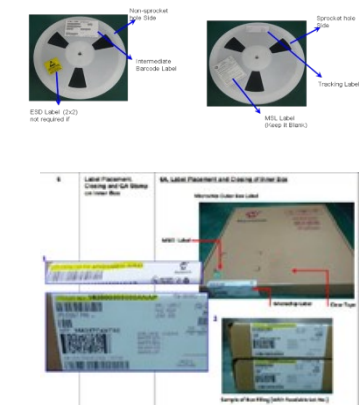
ATP7	MPHL
 <p data-bbox="751 1168 919 1219">12mm</p>	 <p data-bbox="1727 1168 1895 1219">12mm</p>



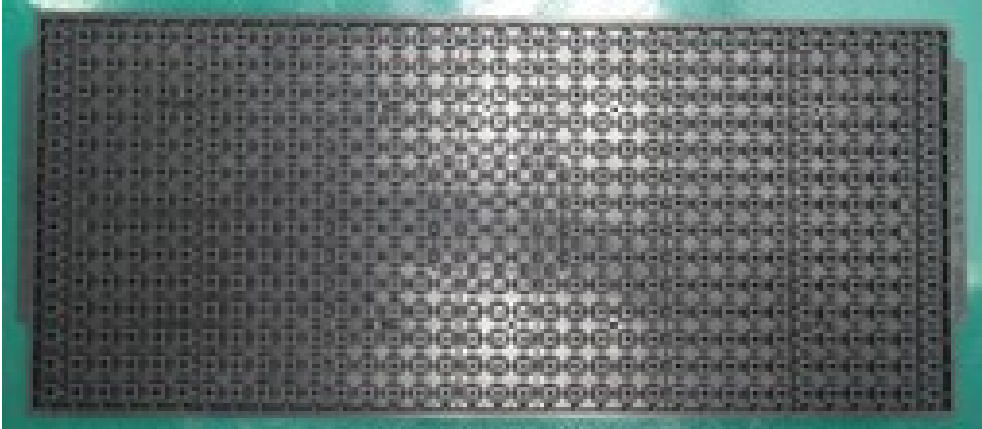
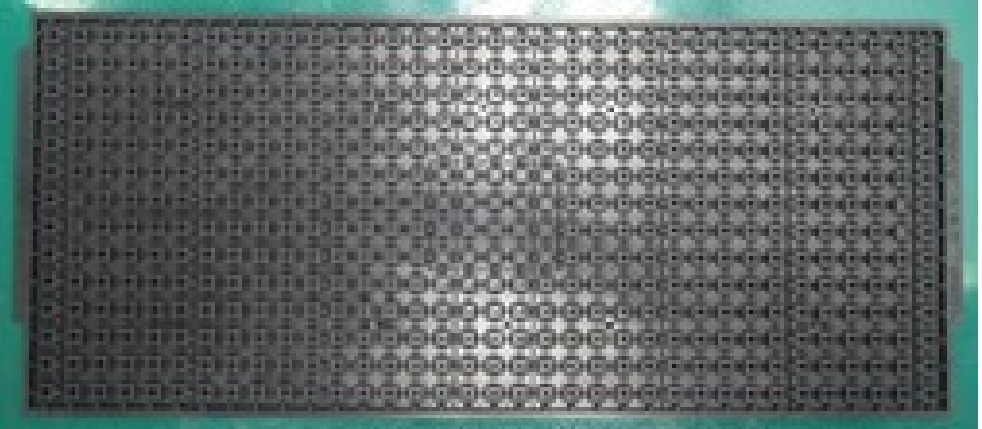
# Tape and Reel – Packaging

Final Test Site	ATP7	MPHL
Desiccant		
HIC		
Boxes		
Bags		




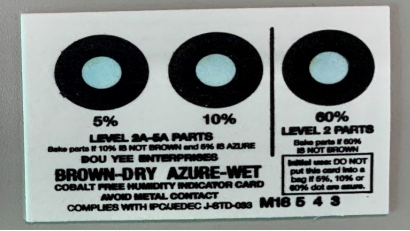




# Tape and Reel – Packing Procedure

ATP7	MPHL
 <p>ATP7 packing procedure diagrams showing:</p> <ul style="list-style-type: none"> <li>Label Placement on Bag (top)</li> <li>2A. Bag Placement on Bag (middle)</li> <li>2B. Label Placement on Bag (middle)</li> <li>Bag Placement and Bubble Bag Folding (middle)</li> <li>Placement in Inner Box (middle)</li> <li>Open Side (middle)</li> <li>Label Placement at Box (bottom)</li> </ul>	 <p>MPHL packing procedure diagrams showing:</p> <ul style="list-style-type: none"> <li>ESD Label (2x2) not required F (top left)</li> <li>MSL Label (2x2) (top right)</li> <li>Label Placement, Loading and QIP Straps on Inner Box (middle left)</li> <li>MSL Label Placement and Closing of Inner Box (middle right)</li> </ul>

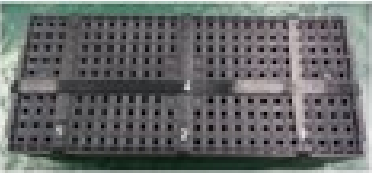




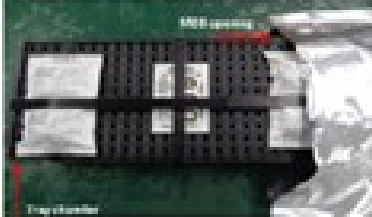
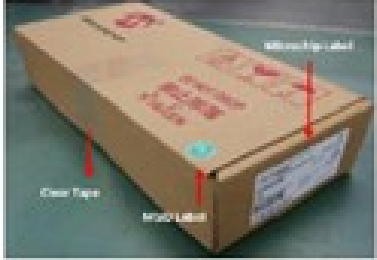
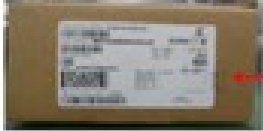


# Tray

ATP7	MPHL
 A photograph of a rectangular ATP7 tray, which is a dark-colored carrier for integrated circuits. The tray features a dense grid of small, circular components arranged in a regular pattern across its surface.	 A photograph of a rectangular MPHL tray, similar in design to the ATP7 tray. It also features a dense grid of small, circular components arranged in a regular pattern across its surface.

# Tray – Packaging

Final Test Site	ATP7	MPHL
Desiccant		
HIC		
Boxes		
Bags		

# Tray – Packing Procedure

ATP7	MPHL
<p><b>Tray Strapping:</b></p>  <p><b>4A. Inner Box Preparation:</b></p>  <p><b>4B. Tray Placement on Inner Box:</b></p> 	  <p>Desiccant (1.0 unit)</p> <p>HC (Humidity Indicator Card)</p> <p>Desiccant (1.0 unit)</p> <p>Open Side</p> <p>Intermediate Barcode Label</p> <p>MSL (Caution) Label</p> <p>ESD Label (2x2)</p>
<p><b>4C. Tray Placement on MIB:</b></p>  <p><b>4D. Label Placement and Closing of Inner Box:</b></p>  <p><b>4E. QA Stamp:</b></p> 	  <p>Bubble Sheet</p> <p>Open Side of Box</p> <p>Intermediate Label</p>



**MICROCHIP**

## **QUALIFICATION REPORT SUMMARY**

**PCN #: ASER-30YJUP974**

**Date**

**July 25, 2021**

**Qualification of MPHL as an additional final test site for selected AT86RF232-ZX and AT86RF232-ZXR catalog part numbers available in 32L VQFN (5x5x0.9mm) package.**

**Purpose:** Qualification of MPHL as an additional final test site for selected AT86RF232-ZX and AT86RF232-ZXR catalog part numbers available in 32L VQFN (5x5x0.9mm) package.

**CCB No.:** 3344.004

Test / Evaluation	Test Conditions / Parameters	Results
Datalog / Bin Comparison	<ul style="list-style-type: none"><li>5,000-unit yield sample for bin comparison</li></ul>	PASSED
Yield Comparison	<ul style="list-style-type: none"><li>Lot Validation, Good vs. rejects comparison.</li><li>5,000 units matching to 0.1% yield</li></ul>	PASSED
Parametric Comparison	<ul style="list-style-type: none"><li>50 units of parametric data comparison</li></ul>	PASSED

Affected Catalog Part Numbers (CPN)

AT86RF232-ZX

AT86RF232-ZXR