



Product Change Notification / ASER-30 YJUP974

Date:

04-Aug-2021

Product Category:

Wireless Modules

PCN Type:

Manufacturing Change

Notification Subject:

CCB 3344.004 Initial Notice: Qualification of MPHL as an additional final test site for selected AT86RF232/3 device family available in 32L VQFN (5x5x0.9mm) package.

Affected CPNs:

[ASER-30 YJUP974_Affected_CPN_08042021.pdf](#)
[ASER-30 YJUP974_Affected_CPN_08042021.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 MPHL as an additional final test site for selected AT86RF232/3 device family 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 Qualification Completion Date:October 2021

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 2021					-->	October 2021				
	3 2	3 3	3 4	3 5	3 6		4 0	4 1	4 2	4 3	4 4
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 4, 2021: 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_ASER-30YJUP974_Pre and Post Change Summary.pdf](#)
[PCN_ASER-30YJUP974_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.

Affected Catalog Part Numbers (CPN)

AT86RF232-ZX

AT86RF233-ZU

AT86RF232-ZXR

AT86RF233-ZUR

CCB 3344.004
Pre and Post Change Summary
PCN #: ASER-30YJUP974



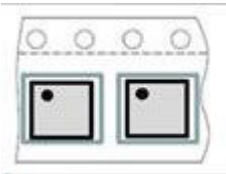
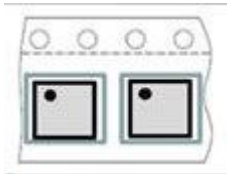
A Leading Provider of Smart, Connected and Secure Embedded Control Solutions

**Qualification of MPHL as an additional final test site for
selected AT86RF232/3 device family available in 32L VQFN
(5x5x0.9mm) package.**



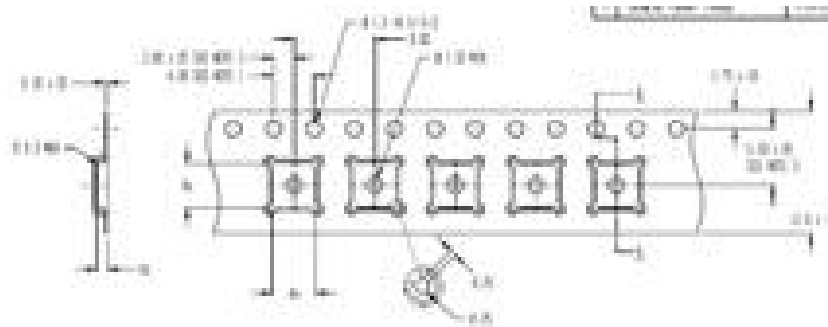
SMART | CONNECTED | SECURE

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

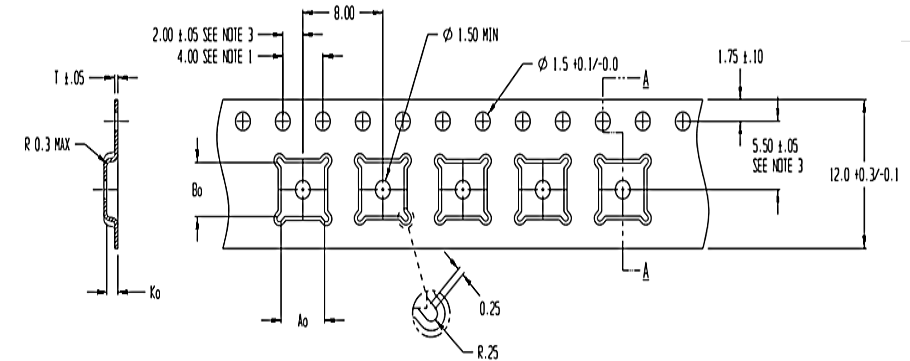
Tape and Reel - Carrier Tape

ATP7



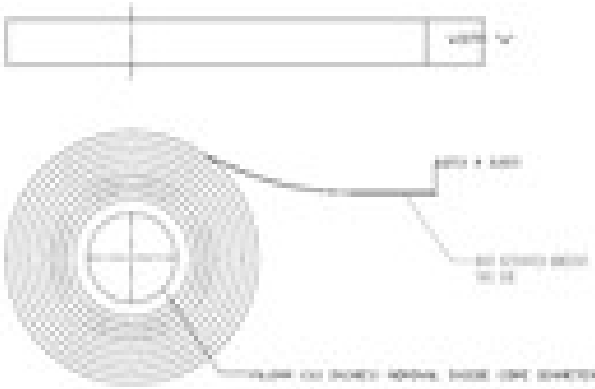
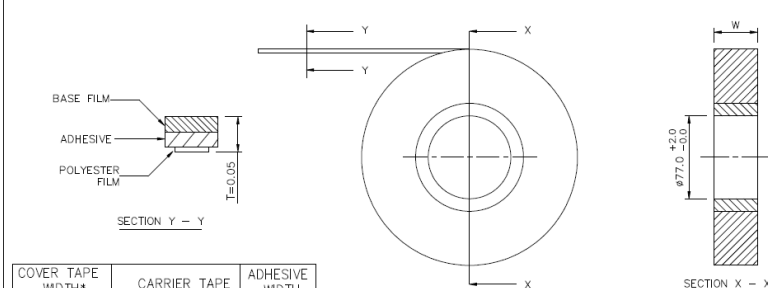
Supplier Mfg. part no.	ML0505-A
Width (mm)	12
Pitch (mm)	8
A0 (mm)	5.25
B0 (mm)	5.25
K0 (mm)	1.1

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


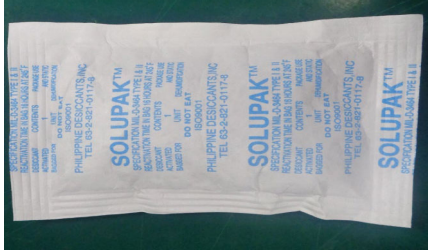

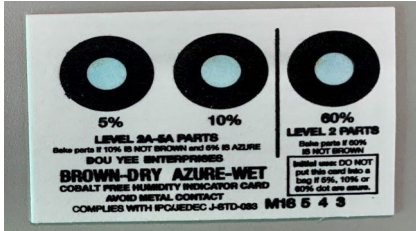




Tape and Reel - Cover Tape

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										
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Cover Tape Width	Color										
9.3 mm	Black										

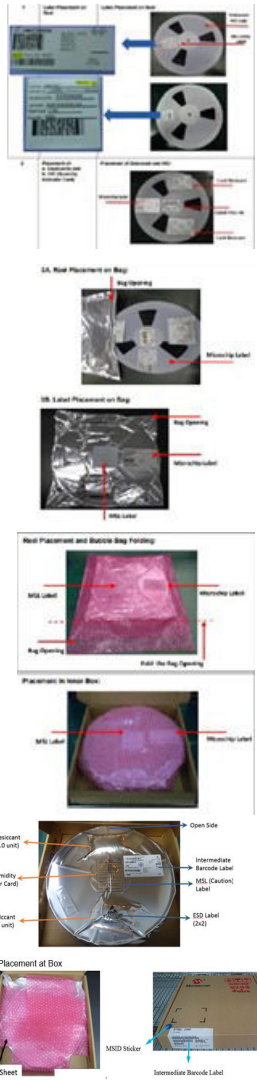

Tape and Reel – Plastic Reel

ATP7	MPHL
 <p data-bbox="751 1168 919 1219">12mm</p>	 <p data-bbox="1730 1168 1898 1219">12mm</p>

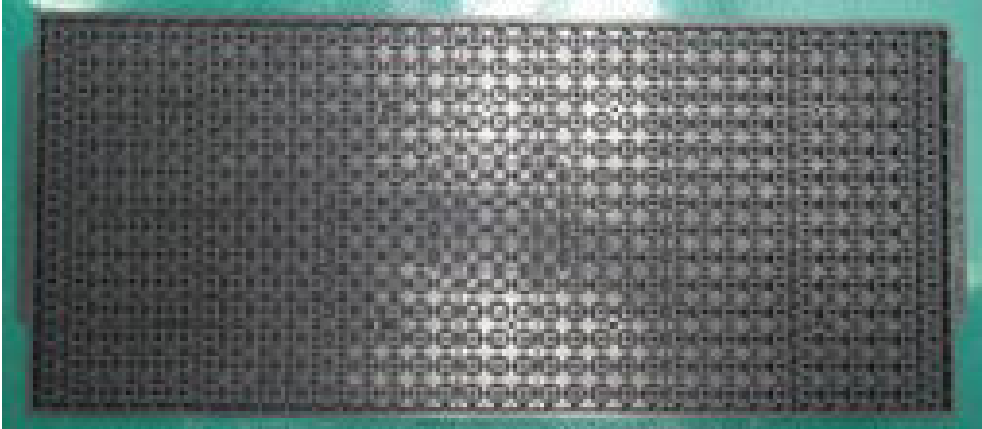
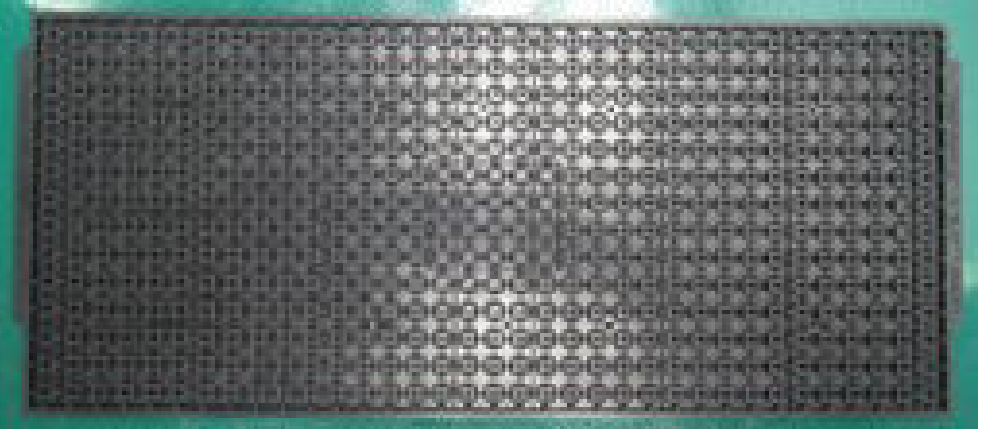
Tape and Reel – Packaging

Final Test Site	ATP7	MPHL
Desiccant		
HIC		
Boxes		
Bags		




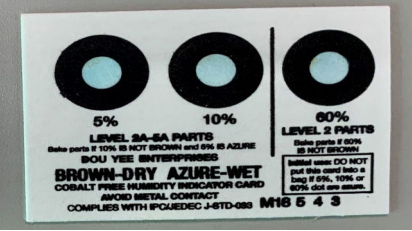




Tape and Reel – Packing Procedure

ATP7	MPHL
 <p>The ATP7 section contains several diagrams illustrating the packing process:</p> <ul style="list-style-type: none"> Initial Reel Labeling: Shows a reel with labels for 'ESD Label (2x2) not required', 'Intermediate Barcode Label', and 'MSL Label (2x2)'. Arrows indicate the placement of these labels on the reel. 2A. Reel Placement on Bag: Shows the reel being placed into a bag with an 'MSL Label' and 'Bag Opening' indicated. 2B. Label Placement on Bag: Shows the bag with 'MSL Label' and 'MSL Label' placed on it. Reel Placement and Bubble Bag Forcing: Shows the reel in a pink bubble bag with 'MSL Label', 'MSL Label', and 'Bag Opening' labeled. Placement in Inner Box: Shows the bubble bag in a box with 'MSL Label' and 'MSL Label' placed on it. Final Reel Labeling: Shows the final reel with 'Desiccant (1.0 unit)', 'HC (Humidity Indicator Card)', 'Desiccant (1.0 unit)', 'Intermediate Barcode Label', 'MSL (Caution) Label', and 'ESD Label (2x2)'. Label Placement at Box: Shows the final box with 'Bubble Sheet' and 'Intermediate Barcode Label'. 	 <p>The MPHL section contains diagrams illustrating the packing process:</p> <ul style="list-style-type: none"> Initial Reel Labeling: Shows a reel with labels for 'ESD Label (2x2) not required', 'Intermediate Barcode Label', 'MSL Label (2x2) (Strip & Blank)', and 'Tracking Label'. Arrows indicate the placement of these labels on the reel. Label Placement, Loading and QP Sealing of Inner Box: Shows the reel being placed into a box with 'MSL Label' and 'ESD Label'. MSL Label Placement and Closing of Inner Box: Shows the box with 'MSL Label' and 'ESD Label' placed on it.

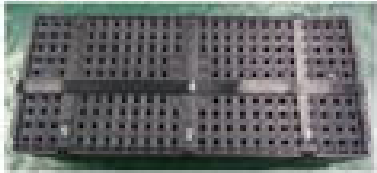
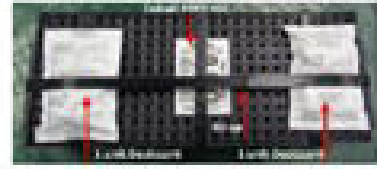
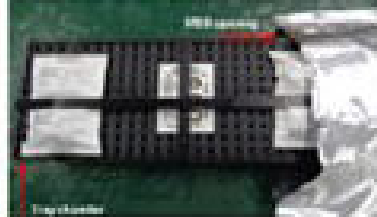
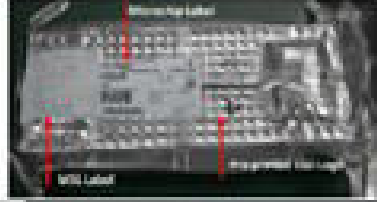




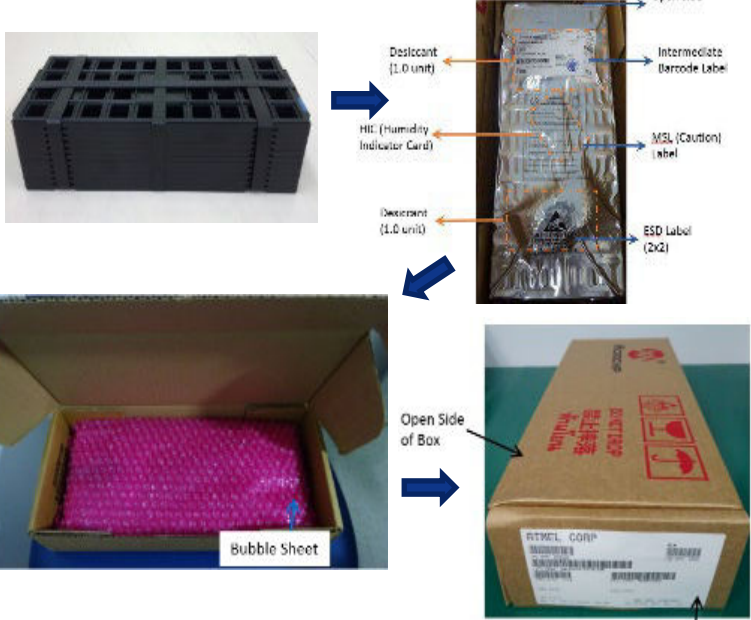
Tray

ATP7	MPHL
 A rectangular microarray chip with a dense grid of small, dark, circular spots. The spots are arranged in a regular pattern across the entire surface of the chip.	 A rectangular microarray chip with a dense grid of small, dark, circular spots. The spots are arranged in a regular pattern across the entire surface of the chip.

Tray – Packaging

Final Test Site	ATP7	MPHL
Desiccant		
HIC		
Boxes		
Bags		

Tray – Packing Procedure

ATP7	MPHL
<p>Tray Strapping</p>  <p>Placement of Desiccant and IHL</p>  <p>Tray Placement on IWB</p>  <p>Label Placement on IWB</p>  <p>4A. Inner Box Preparation</p>  <p>4B. Tray Placement on Inner Box</p>  <p>5A. Label Placement and Closing of Inner Box</p>  <p>5B. QA Stamp</p> 	<p>Desiccant (1.0 unit)</p> <p>IHL (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>Bubble Sheet</p> <p>Open Side of Box</p> <p>Intermediate Label</p> 



MICROCHIP

QUALIFICATION PLAN SUMMARY

PCN #: ASER-30YJUP974

Date

July 25, 2021

**Qualification of MPHL as an additional final test site for
selected AT86RF232/3 device family available in
32L VQFN (5x5x0.9mm) package.**

Purpose: Qualification of MPHL as an additional final test site for selected AT86RF232/3 device family available in 32L VQFN (5x5x0.9mm) package.

CCB No.: 3344.004

Test / Evaluation	Test Conditions / Parameters
Datalog / Bin Comparison	<ul style="list-style-type: none"><li data-bbox="646 516 1146 541">• 5,000-unit yield sample for bin comparison
Yield Comparison	<ul style="list-style-type: none"><li data-bbox="646 638 1162 663">• Lot Validation, Good vs. rejects comparison.<li data-bbox="646 667 1058 693">• 5,000 units matching to 0.1% yield
Parametric Comparison	<ul style="list-style-type: none"><li data-bbox="646 806 1107 831">• 50 units of parametric data comparison