



Product Change Notification / CADA-30MRZM669

Date:

03-Jun-2022

Product Category:

8-bit Microcontrollers

PCN Type:

Manufacturing Change

Notification Subject:

CCB 5132 Final Notice: Qualification of MTAI as an additional Scan/Pack process site and implement packing changes for selected ATTINY804, ATTINY814, ATTINY1604 and ATTINY1614 device families available in 14L SOIC (0.150in) package

Affected CPNs:

[CADA-30MRZM669_Affected_CPN_06032022.pdf](#)

[CADA-30MRZM669_Affected_CPN_06032022.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 MTAI as an additional Scan/Pack process site and implement packing changes for selected ATTINY804, ATTINY814, ATTINY1604 and ATTINY1614 device families available in 14L SOIC (0.150in) package.

Pre and Post Change Summary:

	Pre Change	Post Change
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Scan/Pack Site		Microchip Technology Operations (Philippines) Corporation (MPHL)	Microchip Technology Operations (Philippines) Corporation (MPHL)	Microchip Technology Thailand (HQ) (MTAI)
Base Quantity Multiple (BQM)	Tape and Reel	3000	3000	3000
	Tube	57	57	57
Pin 1 Orientation	Tape and Reel	See Pre and Post Change comparison.		
	Tube	See Pre and Post Change comparison.		
Carrier tape		No dimensional changes. See Pre and Post Change comparison.		
Cover Tape	Dimensions	With minor dimensional changes. See Pre and Post Change comparison.		
Carrier Reel	Color	White	White	Dark Blue
	Dimensions	No dimensional changes. See Pre and Post Change comparison.		
Tape and Reel Packing Method		See Pre and Post Change comparison.		
Tube	Dimensions	No dimensional changes. See Pre and Post Change comparison.		
	Color	Clear	Clear	Clear
Tube Packing Method		See Pre and Post Change comparison.		
Carton Box		See Pre and Post Change comparison.		
Desiccant		1-unit	1-unit	None

Impacts to Data Sheet:None

Change ImpactNone

Reason for Change:To improve on-time delivery performance by qualifying MTAI as an additional Scan/Pack process site.

Change Implementation Status:In Progress

Estimated First Ship Date:June 15, 2022 (date code: 2225)

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

Time Table Summary:

	June 2022				
Workweek	23	24	25	26	27
Final PCN Issue Date	x				
Estimated Implementation Date			x		

Method to Identify Change:Traceability code

Qualification Report:Not applicable

Revision History:June 3, 2022: Issued final 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_CADA-30MRZM669_Pre and Post Change Summary.pdf](#)

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

Terms and Conditions:

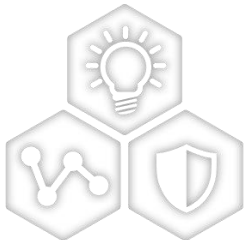
If you wish to receive Microchip PCNs via email please register for our PCN email service at our [PCN home page](#) select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the [PCN FAQ](#) section.

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 5132
Pre and Post Change Summary
PCN #: CADA-30MRZM669

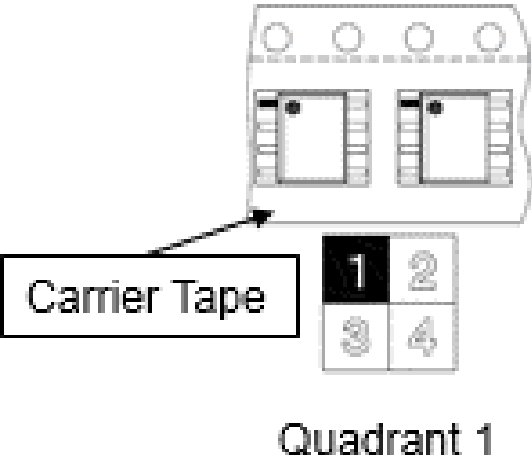
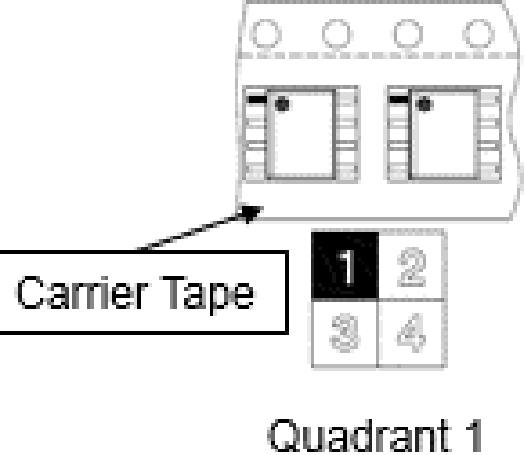


A Leading Provider of Smart, Connected and Secure Embedded Control Solutions

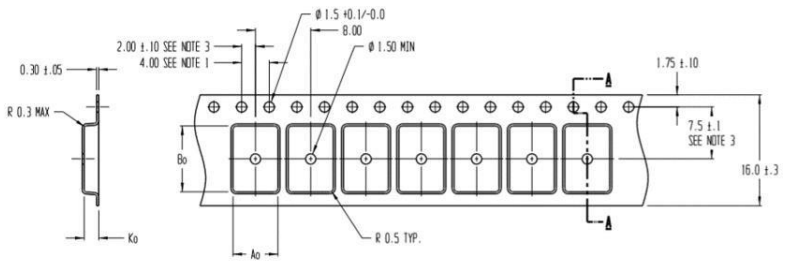
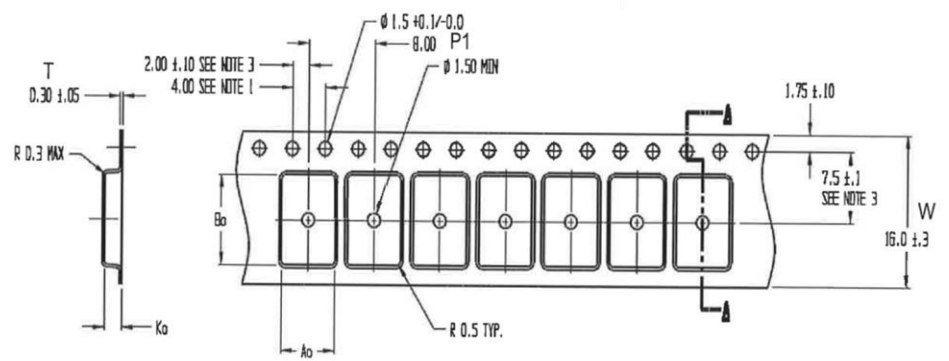


SMART | CONNECTED | SECURE

Tape and Reel – MSL-1

	MPHL	MTAI
Base Quantity Multiple (BQM)	3000	3000
Pin 1 orientation	 <p>Carrier Tape</p> <p>Quadrant 1</p>	 <p>Carrier Tape</p> <p>Quadrant 1</p>

Carrier Tape

	MPHL	MTAI
Drawing and Dimension	 <p>SECTION A - A</p> <p> $A_0 = 6.50$ $B_0 = 9.50$ $K_0 = 2.10$ </p> <p>NOTES: 1. 10 SPROCKET HOLE PITCH CUMULATIVE TOLERANCE ± 0.2 2. CAMBER IN COMPLIANCE WITH EIA 481 3. POCKET POSITION RELATIVE TO SPROCKET HOLE MEASURED AS TRUE POSITION OF POCKET, NOT POCKET HOLE </p>	

Cover Tape

Drawing and Dimension

MPHL

COVER TAPE WIDTH* (W ± 0.1)	CARRIER TAPE WIDTH	ADHESIVE WIDTH (W ± 0.15)
5.3	8	0.7x2
7.3	12	1.0x2
9.3	12	1.0x2
13.3	16	1.0x2
21.3	24	1.15x2
25.5, 26.3	32	1.15x2
37.5	44	1.65x2
49.5	56	1.65x2
65.5	72	1.65x2

NOTES

- 1 THICKNESS : 0.045-0.055mm.
- 2 LIGHT TRANSMITTANCE : >80%
- 3 TENSILE STRENGTH : 9.7kg/mm sq.
- 4 ELONGATION : >120%
- 5 SURFACE RESISTIVITY
UNDERSIDE : 10^9 OHMS/SQ MAX.
TOPSIDE : 10^{10} OHMS/SQ

*6 OTHER COVER TAPE WIDTH REFER TO W4.08-04.

ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED.

Width: W (mm)

13.3

Thickness T (mm)

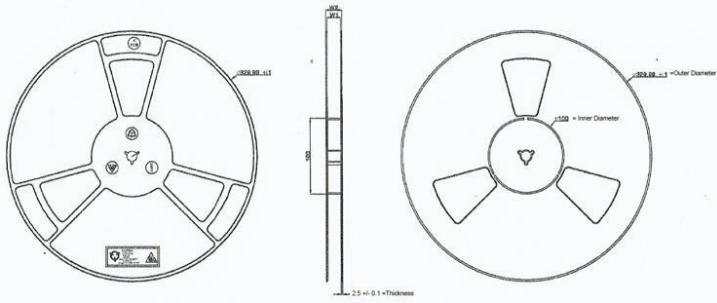
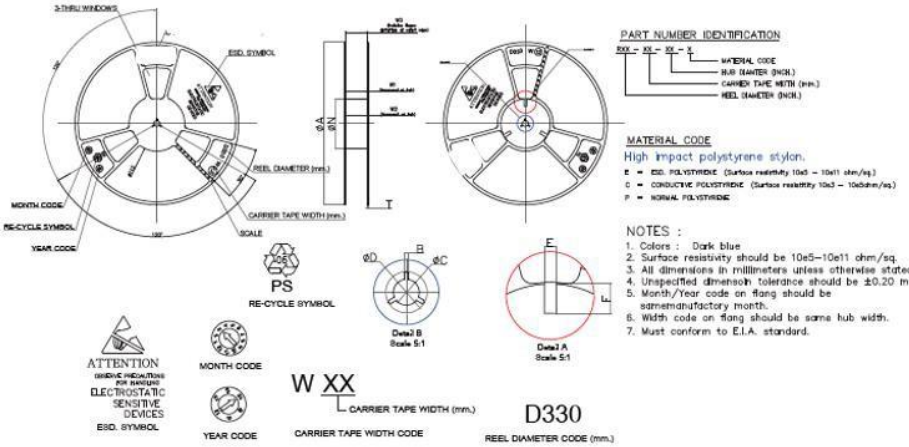
0.050 \pm 0.005

MTAI

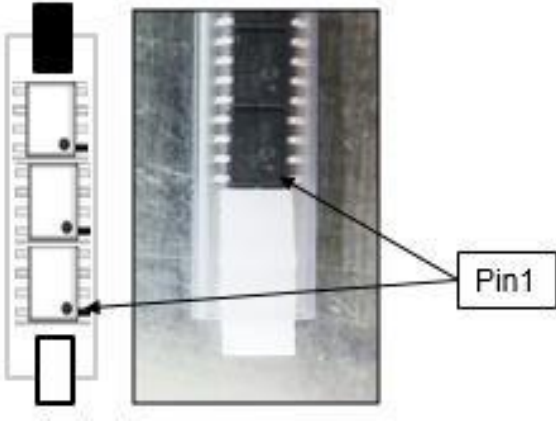
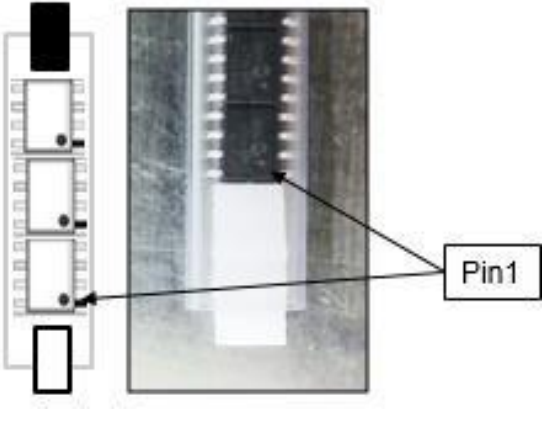
STRUCTURE

Cover Tape Width: W (mm)	Thickness: T (mm)
13.3 ± 0.1	0.050 ± 0.010

Carrier Reel

	MPHL	MTAI															
Color	White	Dark Blue															
Drawing and Dimensions	<div><table><thead><tr><th>Tape Width</th><th>W1</th><th>W2</th></tr></thead><tbody><tr><td>12mm</td><td>13.5 ± 0.5</td><td>17.5 ± 1.0</td></tr><tr><td>16mm</td><td>17.5 ± 0.5</td><td>21.5 ± 1.0</td></tr><tr><td>24mm</td><td>25.5 ± 0.5</td><td>29.5 ± 1.0</td></tr><tr><td>32mm</td><td>33.0 ± 0.5</td><td>36.5 ± 1.0</td></tr></tbody></table></div>	Tape Width	W1	W2	12mm	13.5 ± 0.5	17.5 ± 1.0	16mm	17.5 ± 0.5	21.5 ± 1.0	24mm	25.5 ± 0.5	29.5 ± 1.0	32mm	33.0 ± 0.5	36.5 ± 1.0	<div><p>PART NUMBER IDENTIFICATION</p><p>XXX - XX - X MATERIAL CODE HUB DIAMETER (mm) CARRIER TAPE WIDTH (mm) REEL DIAMETER (mm)</p><p>MATERIAL CODE High impact polystyrene stylen. E = ISO POLYSTYRENE (Surface resistivity 10⁹ - 10¹¹ ohm/sq.) C = CONDUCTIVE POLYSTYRENE (Surface resistivity 10³ - 10⁶ohm/sq.) P = NORMAL POLYSTYRENE</p><p>NOTES : 1. Colors : Dark blue 2. Surface resistivity should be 10e5-10e11 ohm/sq. 3. All dimensions in millimeters unless otherwise stated. 4. Unspecified dimension tolerance should be ±0.20 mm. 5. Month/Year code on flang should be same as factory month. 6. Width code on flang should be same hub width. 7. Must conform to EIA standard.</p></div>
Tape Width	W1	W2															
12mm	13.5 ± 0.5	17.5 ± 1.0															
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	<div><div>Media</div><div>Reel</div><div>Diameter</div><div>330mm</div></div>	<div><div>Media</div><div>Reel</div><div>Diameter</div><div>330mm</div></div>															

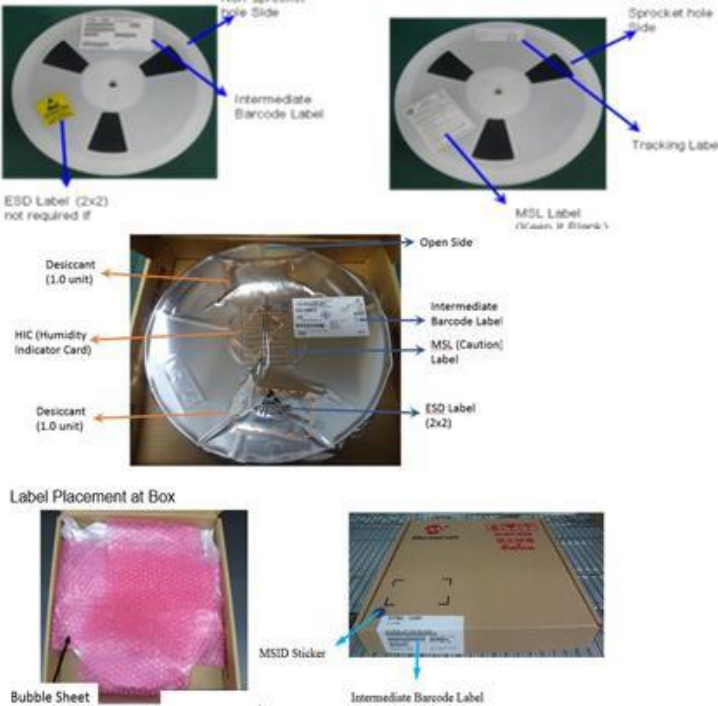
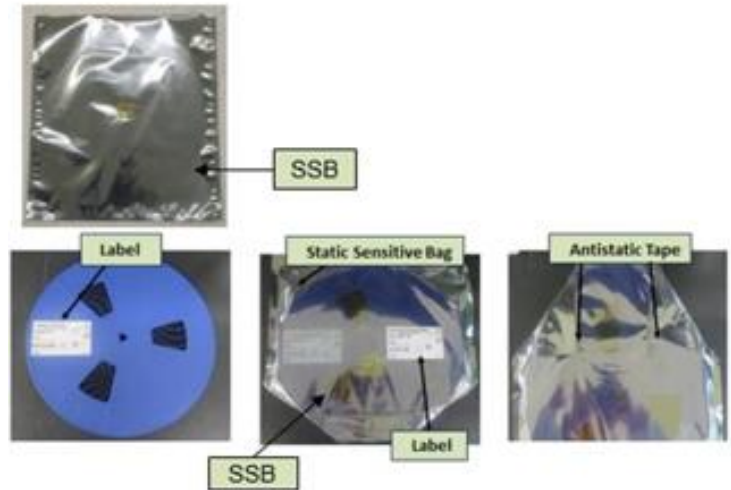
Tube– MSL-1

	MPHL	MTAI												
Base Quantity Multiple (BQM)	57	57												
Pin 1 orientation	<div><p>The diagram for the MPHL package shows a side view of the package with a black rectangular marker at the top. A white rectangular area on the bottom edge is labeled 'Pin1' with an arrow pointing to it. Below the diagram is a table:</p><table><thead><tr><th>Media</th><th>Pin1 Side</th><th>Opposite Side</th></tr></thead><tbody><tr><td>TUBE</td><td>White</td><td>Black</td></tr></tbody></table></div>	Media	Pin1 Side	Opposite Side	TUBE	White	Black	<div><p>The diagram for the MTAI package shows a side view of the package with a black rectangular marker at the top. A white rectangular area on the bottom edge is labeled 'Pin1' with an arrow pointing to it. Below the diagram is a table:</p><table><thead><tr><th>Media</th><th>Pin1 Side</th><th>Opposite Side</th></tr></thead><tbody><tr><td>TUBE</td><td>White</td><td>Black</td></tr></tbody></table></div>	Media	Pin1 Side	Opposite Side	TUBE	White	Black
Media	Pin1 Side	Opposite Side												
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TUBE	White	Black												

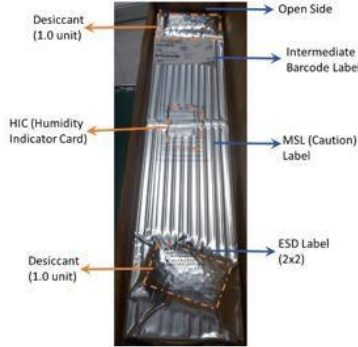





Tube

	MPHL	MTAI
Color	Clear	Clear
Drawing and Dimensions	<p>TOP SIDE VIEW</p> <p>DETAIL "B"</p> <p>ANTISTATIC YYWW XXX</p> <p>0.078(1 TYP)</p> <p>0.08 ± 0.02</p> <p>0.81 ± 0.1</p> <p>15.00 ± 0.05</p> <p>20.50 ± 0.05</p> <p>0.018 - 0.022 TYP (4X)</p> <p>0.09 MAX</p> <p>16 ± 0.003</p> <p>0.31 ± 0.003</p> <p>0.28 MIN</p> <p>0.73 ± 0.002</p> <p>12 ± 0.1</p> <p>19 ± 0.1</p> <p>R 6 REF (4X)</p> <p>0.05 ± 0.003</p> <p>10" MAX. VARIATION</p> <p>0.132 ± 0.010</p> <p>0.065 ± 0.010</p> <p>0.080 ± 0.010</p> <p>0.080 ± 0.010</p> <p>72°</p> <p>0.330 ± 0.010</p> <p>0.070 ± 0.010</p> <p>0.140 ± 0.010</p> <p>0.175 ± 0.024</p> <p>ANTISTATIC RUBBER STOPPER (RS-018)</p> <p>1. (Recycle Symbol) Refers to MS-16220</p> <p>2. Tube to be coated (inside and outside) with anti-static agent (MS-15094) and the surface resistivity $\geq 1 \times 10^{10}$ $< 1 \times 10^{11}$ OHMS/Sq shall be between surface resistance $\geq 1 \times 10^{10}$ $< 1 \times 10^{11}$ OHMS.</p> <p>DETAIL B</p> <p>3</p> <p>PVC</p> <p>0.012 ± 0.007</p> <p>0.135 ± 0.01</p> <p>0.040 ± 0.003</p> <p>0.030 ± 0.003</p> <p>0.15 ± 0.01</p> <p>K07-042-3 (FROM MTAI)</p> <p>Length</p> <p>20.50 +/-0.05 inch</p>	<p>TOP SIDE VIEW</p> <p>DETAIL "B"</p> <p>ANTISTATIC YYWW XXX</p> <p>0.078(1 TYP)</p> <p>0.08 ± 0.02</p> <p>0.81 ± 0.1</p> <p>15.00 ± 0.05</p> <p>20.50 ± 0.05</p> <p>0.018 - 0.022 TYP (4X)</p> <p>0.09 MAX</p> <p>16 ± 0.003</p> <p>0.31 ± 0.003</p> <p>0.28 MIN</p> <p>0.73 ± 0.002</p> <p>12 ± 0.1</p> <p>19 ± 0.1</p> <p>R 6 REF (4X)</p> <p>0.05 ± 0.003</p> <p>10" MAX. VARIATION</p> <p>0.132 ± 0.010</p> <p>0.065 ± 0.010</p> <p>0.080 ± 0.010</p> <p>0.080 ± 0.010</p> <p>72°</p> <p>0.330 ± 0.010</p> <p>0.070 ± 0.010</p> <p>0.140 ± 0.010</p> <p>0.175 ± 0.024</p> <p>ANTISTATIC RUBBER STOPPER (RS-018)</p> <p>1. (Recycle Symbol) Refers to MS-16220</p> <p>2. Tube to be coated (inside and outside) with anti-static agent (MS-15094) and the surface resistivity $\geq 1 \times 10^{10}$ $< 1 \times 10^{11}$ OHMS/Sq shall be between surface resistance $\geq 1 \times 10^{10}$ $< 1 \times 10^{11}$ OHMS.</p> <p>DETAIL B</p> <p>3</p> <p>PVC</p> <p>0.012 ± 0.007</p> <p>0.135 ± 0.01</p> <p>0.040 ± 0.003</p> <p>0.030 ± 0.003</p> <p>0.15 ± 0.01</p> <p>K07-042-3 (FROM MTAI)</p> <p>Length</p> <p>20.50 +/-0.05 inch</p>

Tape & Reel - Packing Material/Method

	MPHL	MTAI
Procedure	 <p>The MPHL packing procedure diagram illustrates the following steps and components:</p> <ul style="list-style-type: none">Top Left: A top-down view of a reel with labels: "Hole Side", "Intermediate Barcode Label", and "ESD Label (2x2) not required if".Top Right: A top-down view of a reel with labels: "Sprocket hole Side", "Tracking Label", and "MSL Label (Caution if Blank)".Middle: A view of the reel inside a clear bag with labels: "Desiccant (1.0 unit)", "HIC (Humidity Indicator Card)", "Open Side", "Intermediate Barcode Label", "MSL (Caution) Label", "ESD Label (2x2)", and another "Desiccant (1.0 unit)".Bottom Left: "Label Placement at Box" showing a "Bubble Sheet" and an "MSID Sticker".Bottom Right: A view of the box with an "Intermediate Barcode Label".	 <p>The MTAI packing procedure diagram illustrates the following steps and components:</p> <ul style="list-style-type: none">Top: A view of a reel inside a bag labeled "SSB".Bottom Left: A view of a reel labeled "Label".Bottom Middle: A view of a reel inside a bag labeled "Static Sensitive Bag", "SSB", and "Label".Bottom Right: A view of a reel inside a bag labeled "Antistatic Tape".

Tube - Packing Material/Method

	MPHL	MTAI
Procedure	<div><p>Diagram illustrating the components of the MPHL tube packing method:</p><ul style="list-style-type: none">Desiccant (1.0 unit)HIC (Humidity Indicator Card)Desiccant (1.0 unit)Open SideIntermediate Barcode LabelMSL (Caution) LabelESD Label (2x2)</div> <div><p>Image showing the tube packed in a box with bubble sheet.</p></div> <div><p>Image showing the MPHL box with labels: Open Side of Box, MSL Sticker, Intermediate Label.</p></div>	<div><p>Image showing the SSB (Static Shielding Bag) component.</p></div> <div><p>Image showing the tube packed in a bag.</p></div> <div><p>Image showing the Anti-static Tape component.</p></div>

Tape and Reel – Carton Box

MPHL

A photograph of a brown cardboard box for Microchip MPHL. The box features the Microchip logo, a 'DO NOT DROP' warning in English and Thai, and a blue circular logo at the bottom left.

Length	Width	Height
375 mm	352 mm	53 mm

MTAI

A photograph of a brown cardboard box for Microchip MTAI. The box features the Microchip logo, a 'DO NOT DROP' warning in English and Thai, and a 'STATIC SENSITIVE' warning with a triangle symbol.

Carton	Dimension W x L x H (cm)	Total Reel per Box
M01-011 (TT)	36.5x38x39.5	14
M01-013 (B2)	35.5x35.5x4	1
M01-014 (B3)	35.5x35.5x6	2
M01-015 (B8)	35.5x35.5x16.5	6

Tube – Carton Box


MPHL

Length	Width	Height
560 mm	130 mm	78 mm

MTAI

Carton	Dimension W x L x H (cm)	Number of Bag/carton
M01-025 (C1)	15x64x5.5	1
M01-026 (C2)	15x64x10	2
M01-027 (C3)	15x64x14	3
M01-028 (C4)	28x63x11	4
M01-029 (C6)	28x63x15.5	6
M01-030 (C8)	28x63x20	8

Desiccant

MPHL	MTAI
<p>1-unit desiccant</p> 	<p>N/A</p>

Affected Catalog Part Numbers (CPN)

ATTINY1604-SSF
ATTINY804-SSF
ATTINY1604-SSN
ATTINY804-SSN
ATTINY804-SSNR
ATTINY1604-SSNR
ATTINY804-SSFR
ATTINY1604-SSFR
ATTINY1614-SSF
ATTINY1614-SSZ-VAO
ATTINY1614-SSN
ATTINY1614-SSB-VAO
ATTINY1614-SSNR
ATTINY1614-SSBT-VAO
ATTINY1614-SSFR
ATTINY1614-SSZT-VAO
ATTINY814-SSZ-VAO
ATTINY814-SSB-VAO
ATTINY814-SSNR
ATTINY814-SSNRA1
ATTINY814-SSBT-VAO
ATTINY814-SSFR
ATTINY814-SSZT-VAO