



## Product Change Notification / LIAL-12WRCV778

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**Date:**

19-Jan-2021

**Product Category:**

Memory

**PCN Type:**

Manufacturing Change

**Notification Subject:**

CCB 2927.001 and CCB 3280.002 Final Notice: Qualification of MTAI as an additional assembly and final test site for selected Atmel AT24C0xC, AT24C128C, AT24C16C, AT24C256C, AT24C32D and AT24C64D device families available in 8L SOIC package.

**Affected CPNs:**

[LIAL-12WRCV778\\_Affected\\_CPN\\_01192021.pdf](#)

[LIAL-12WRCV778\\_Affected\\_CPN\\_01192021.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 MTAI as an additional assembly and final test site for selected Atmel AT24C0xC, AT24C128C, AT24C16C, AT24C256C, AT24C32D and AT24C64D device families available in 8L SOIC package.

**Pre Change:**

Assembled at ANAP assembly site using palladium coated copper (PdCu) bond wire, 8290 die attach and G700A mold compound material with NiPdAu lead plating in 60 x 60 mils paddle size without lead lock. **or** Assembled at ASSH assembly site using palladium coated copper (PdCu) bond wire or palladium coated copper with gold flash (CuPdAu) bond wire, EN-4900G die attach and G700LY molding compound or CEL-9240HF10AK mold compound material with NiPdAu or Matte tin lead plating in 93 x 93 mils paddle size without lead lock. **and** Tested at ASSH or ANAP Final Test site.

**Post Change:**Assembled at ANAP assembly site using palladium coated copper (PdCu) bond wire, 8290 die attach and G700A mold compound material with NiPdAu lead plating in 60 x 60 mils paddle size without lead lock.**or**Assembled at ASSH assembly site using palladium coated copper (PdCu) bond wire or palladium coated copper with gold flash (CuPdAu) bond wire, EN-4900G die attach and G700LY molding compound or CEL-9240HF10AK mold compound material withNiPdAu or Matte tin lead plating in 93 x 93 mils paddle size without lead lock.**or**Assembled at MTAI assembly site using gold (Au) bond wire, 8390A die attach and G600V mold compound material with Matte tin lead plating in 90 x 90 mils paddle size with lead lock.**and**Tested at ASSH, ANAP or MTAI Final Test site.

**Pre and Post Change Summary:**

	Pre Change			Post Change			
Assembly Site	Amkor Technology Philippines (P1/P2), INC. (ANAP)	ASE Advanced Semiconductor (Shanghai) Co., Ltd. (ASSH)		Amkor Technology Philippines (P1/P2), INC. (ANAP)	ASE Advanced Semiconductor (Shanghai) Co., Ltd. (ASSH)		Microchip Technology Thailand (HQ) (MTAI)
Wire material	PdCu	PdCu	CuPdAu	PdCu	PdCu	CuPdAu	Au
Die attach material	8290	EN-4900G		8290	EN-4900G		8390A
Molding compound material	G700A	G700LY	CEL-9240HF 10AK	G700A	G700LY	CEL-9240HF 10AK	G600V
Lead frame material	CDA194	CDA194		CDA194	CDA194		CDA194
Paddle size	60 x 60 mils	93 x 93 mils		60 x 60 mils	93 x 93 mils		90 x 90 mils
Lead Lock	No	No		No	No		Yes
Lead Plating	NiPdAu	NiPdAu	Matte tin	NiPdAu	NiPdAu	Matte tin	Matte Tin

		Pre Change		Post Change		
Final Test Site		ASE Advanced Semiconductor (Shanghai) Co., Ltd. (ASSH)	Amkor Technology Philippines (P1/P2), INC. (ANAP)	ASE Advanced Semiconductor (Shanghai) Co., Ltd. (ASSH)	Amkor Technology Philippines (P1/P2), INC. (ANAP)	Microchip Technology Thailand (MTAI)
Base Quantity Multiple (BQM)	Tube	100	100	100	100	100
	Tape and Reel	4000	4000	4000	4000	4000
Pin1 Orientation	Tube	Pin 1 side (Black)	Not Applicable	Pin 1 side (Black)	Not Applicable	Pin 1 side (White)
	Tape and Reel	Quadrant 1	Quadrant 1	Quadrant 1	Quadrant 1	Quadrant 1

<b>Tube</b>	Minor dimensional changes – see attachment
<b>Carrier Tape</b>	No change
<b>Cover Tape</b>	Minor dimensional changes – see attachment
<b>Plastic Reel</b>	Minor dimensional changes – see attachment
<b>Packing Procedure for Tube and Tape &amp; Reel</b>	See attachment

**Impacts to Data Sheet:**None

**Change Impact:**None

**Reason for Change:**To improve on-time delivery performance by qualifying MTAL as an additional assembly and final test site

**Change Implementation Status:**In Progress

**Estimated First Ship Date:**February 15, 2021 (date code: 2108)

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

**Time Table Summary:**

	January 2021					February 2021				
Workweek	01	02	03	04	05	06	07	08	09	10
Qual Report Availability				X						
Final PCN Issue Date				X						
Estimated First Ship Date								X		

**Method to Identify Change:** Traceability code

**Qualification Report:**Please open the attachments included with this PCN labeled as PCN\_#\_Qual\_Report.PCN\_LIAL-12WRCV778 Qual\_Report – Assembly site Qualification ReportPCN\_LIAL-12WRCV778\_Qual\_Report – Final Test site Qualification Report

**Revision History:**January 19, 2021: Issued final notification. Attached the qualification report. Provided estimated first ship date to be on February 15, 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\\_LIAL-12WRCV778\\_Pre and Post Change Summary.pdf](#)

[PCN LIAL-12WRCV778\\_ Qual Report - Assembly.pdf](#)

[PCN LIAL-12WRCV778\\_ Qual Report - Final Test.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 part numbers

AT24C04C-SSHM-B

AT24C04C-SSHM-T

AT24C08C-SSHM-B

AT24C08C-SSHM-T

AT24C01C-SSHM-B

AT24C01C-SSHM-T

AT24C02C-SSHM-B

AT24C02C-SSHM-T

AT24C256C-SSHL-B

AT24C256C-SSHL-T

AT24C16C-SSHM-B

AT24C16C-SSHM-T

AT24C64D-SSHM-B

AT24C64D-SSHM-T

AT24C128C-SSHM-B

AT24C128C-SSHM-T

AT24C32D-SSHM-B

AT24C32D-SSHM-T



**MICROCHIP**

**QUALIFICATION REPORT SUMMARY  
RELIABILITY LABORATORY**

**PCN#: LIAL-12WRCV778**

**Date**

June 24, 2017

**Qualification of MTAI as an additional assembly site for  
selected Atmel AT24C0xC, AT24C128C, AT24C16C,  
AT24C256C, AT24C32D and AT24C64D device families available  
in 8L SOIC package.**



## **MICROCHIP**

### **PACKAGE QUALIFICATION REPORT**

<b>Purpose</b>	Qualification of MTAI as an additional assembly site for selected Atmel AT24C0xC, AT24C128C, AT24C16C, AT24C256C, AT24C32D and AT24C64D device families available in 8L SOIC package.
<b>CN</b>	ES098794
<b>QUAL ID</b>	Q17084 Rev A
<b>CCB</b>	2927.001
<b>MP CODE</b>	DEDX2YC2XA00
<b>Part No.</b>	24LC512T-E/SN
<b>Bonding No.</b>	BDM-001302 Rev. A
<b><u>Package</u></b>	
<b>Type</b>	8L SOIC
<b>Package size</b>	150 mils
<b><u>Lead Frame</u></b>	
<b>Paddle size</b>	95 x 130 mils
<b>Material</b>	CDA194
<b>Surface</b>	Bare Cu paddle
<b>Process</b>	Stamped
<b>Lead Lock</b>	Yes
<b>Part Number</b>	10100842
<b>Treatment</b>	Roughened
<b><u>Material</u></b>	
<b>Epoxy</b>	8390A
<b>Wire</b>	Au
<b>Mold Compound</b>	G600V
<b>Plating Composition</b>	Matte Tin



## **MICROCHIP** **PACKAGE QUALIFICATION REPORT**

### **Manufacturing Information**

<b>Assembly Lot No.</b>	<b>Wafer No.</b>	<b>Date Code</b>
MTAI180702622.000	GRSM417152115.300	1719PE7
MTAI180702623.000	GRSM417152115.340	1719PE8
MTAI180703101.000	GRSM417152115.300	1719U5E

### **Result**

☒ Pass ☐ Fail ☐ \_\_\_\_\_

8L SOIC (.150") assembled by MTAI pass reliability test per QCI-39000. This package was qualified the Moisture/Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020D standard.



# PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
<b>Moisture/Reflow Sensitivity Classification Test (At MSL Level 1)</b>	85°C/ 85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH 3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243  ( IPC/JEDEC J-STD-020D)	IPC/JEDEC C J-STD- 020D	135	0/135	Pass	

<b><u>Precondition Prior Perform Reliability Tests (At MSL Level 1)</u></b>	<b>Electrical Test</b> :+25°C,85°C and 125°C System: NEXTEST_PT	JESD22- A113	693(0)	693		Good Devices
	Bake 150°C, 24 hrs System: CHINEE			693		
	85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH			693		
	3x Convection-Reflow 265°C max  System: Vitronics Soltec MR1243			693		
	<b>Electrical Test</b> :+25°C,85°C and 125°C System: NEXTEST_PT			0/693	Pass	

# PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
<b>Temp Cycle</b>	<b>Stress Condition:</b> -65°C to +150°C, 500 Cycles System : TABAI ESPEC TSA-70H <b>Electrical Test:</b> + 85°C System: NEXTEST_PT <b>Bond Strength:</b> Wire Pull (> 2.5 grams) Bond Shear (>15.00 grams)	JESD22-A104	231(0)	231 0/231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot
<b>UNBIASED-HAST</b>	<b>Stress Condition:</b> +130°C/85%RH, 96 hrs. System: HAST 6000X <b>Electrical Test:</b> +25°C System: NEXTEST_PT	JESD22-A118	231(0)	231 0/231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot
<b>HAST</b>	<b>Stress Condition:</b> +130°C/85%RH, 96 hrs. <b>Bias Volt:</b> 5.5 Volts System: HAST 6000X <b>Electrical Test:</b> +25°C,85°C and 125°C System: NEXTEST_PT	JESD22-A110	231(0)	231 0/231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot
<b>High Temperature Storage Life</b>	<b>Stress Condition:</b> Bake 175°C, 504 hrs System: SHEL LAB <b>Electrical Test :</b> +25°C,85°C and 125°C System: NEXTEST_PT	JESD22-A103	45(0)	45 0/45	Pass	45 units

# PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
<b>Solderability</b> <b>Temp 215°C</b>	<b>Steam Aging:</b> Temp 93°C,8Hrs System: SAS-3000 Solder Dipping: Solder Temp.215°C Solder material: SnPb Sn63,Pb37 System: ERS A RA 2200D Visual Inspection: External Visual Inspection	JESD22B-102E	22 (0)	22 22 0/22	Pass	
<b>Solderability</b> <b>Temp 245°C</b>	<b>Steam Aging:</b> Temp 93°C,8Hrs System: SAS-3000 Solder Dipping:Solder Temp.245°C Solder material:Pb Free Sn 95.5Ag3.9 Cu0.6 System: ERS A RA 2200D Visual Inspection: External Visual Inspection	JESD22B-102E	22 (0)	22 22 0/22	Pass	
<b>Bond Strength</b> <b>Data Assembly</b>	Wire Pull (> 2.5 grams)  Bond Shear (>15.00 grams)	M2011  JESD22-B116	30 (0) Wires  30 (0) bonds	0/30  0/30	Pass  Pass	

# CCB 2927.001 and 3280.002 Pre and Post Change Summary PCN #: LIAL-12WRCV778



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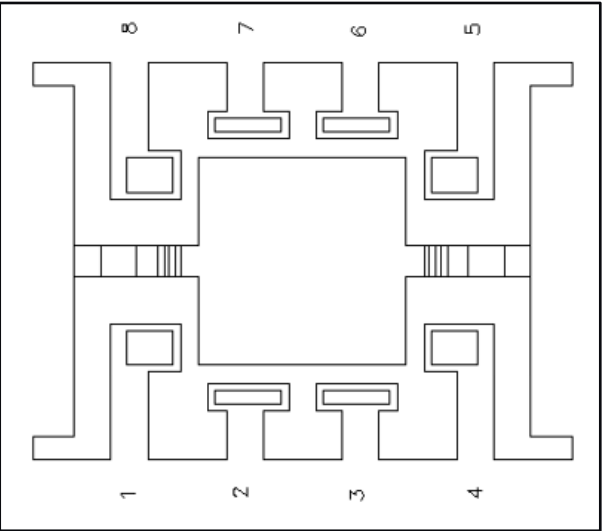


SMART | CONNECTED | SECURE

Qualification of MTAI as an additional assembly and final test site for selected Atmel for selected Atmel AT24C0xC, AT24C128C, AT24C16C, AT24C256C, AT24C32D and AT24C64D device families available in 8L SOIC package. .

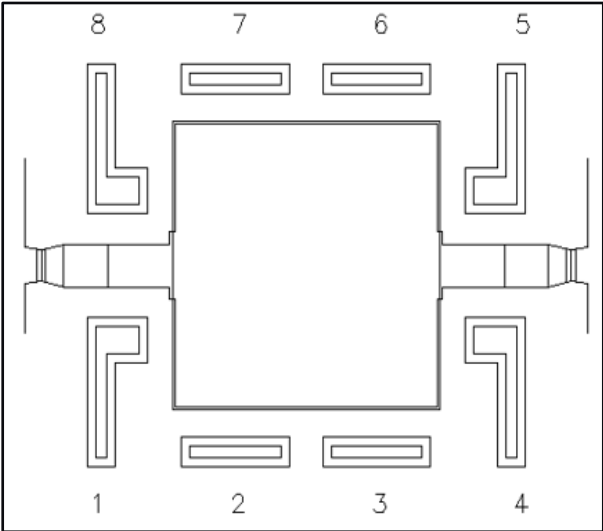
# LEAD FRAME COMPARISON

ANAP



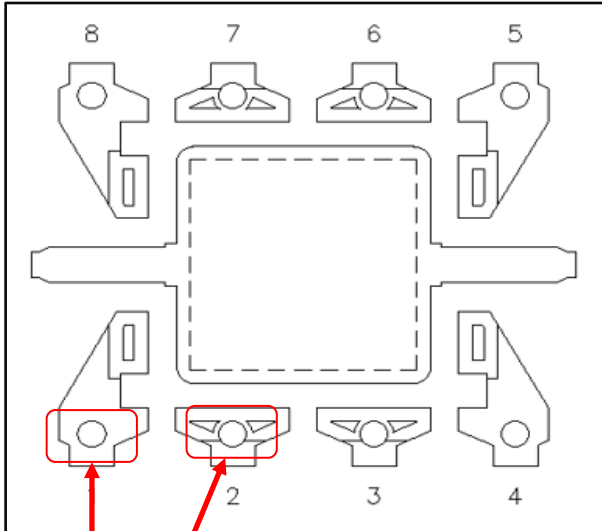
Paddle size	60 x 60 mils
Lead Lock	No
Lead Plating	NiPdAu

ASSH



Paddle size	93 x 93 mils
Lead Lock	No
Lead Plating	Matte tin

MTAI



Paddle size	90 x 90 mils
Lead Lock	Yes
Lead Plating	Matte Tin

# TUBE BQM AND PIN1 ORIENTATION

ASSH

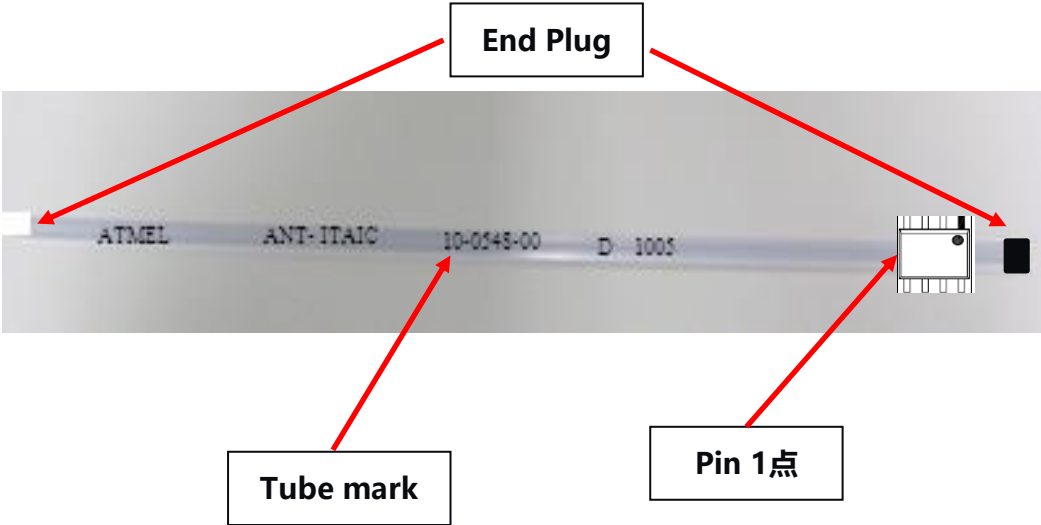


Diagram of ASSH tube with labels: End Plug, Tube mark, Pin 1点. The tube has markings: ATMEL, ANT-ITAIC, 10-0548-00, D 1005.

Media	Unit/ Tube	Tubes /Bag	Pin 1 Orientation
Tube	100	100	Black end plug

MTAI

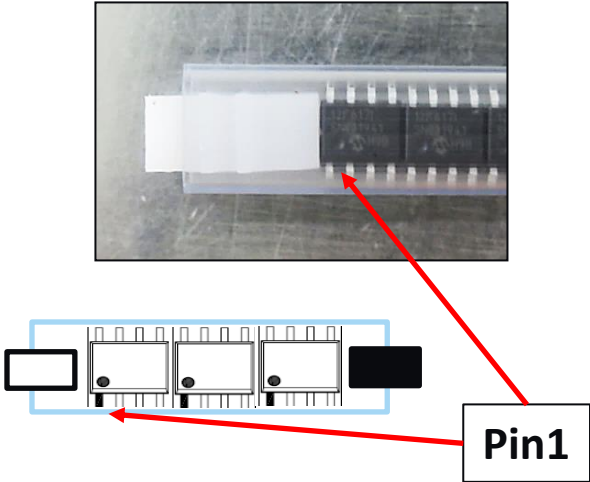
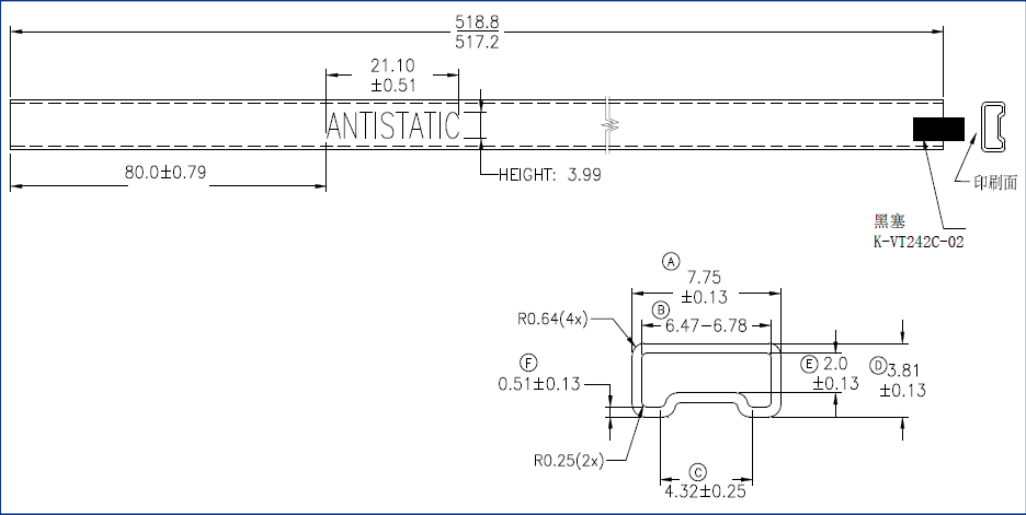
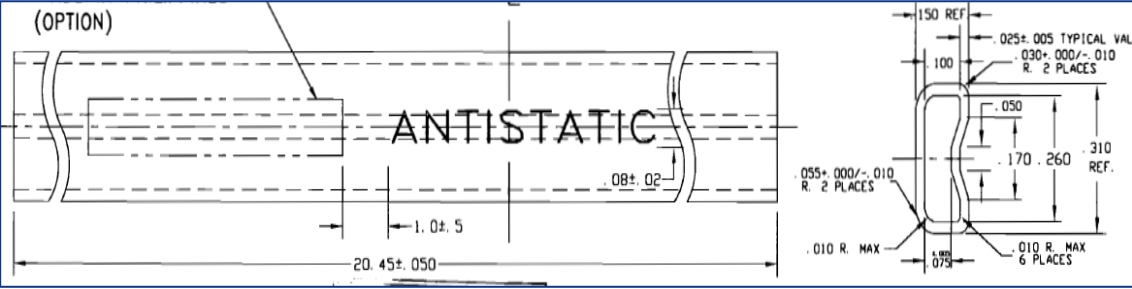


Diagram of MTAI tube with labels: Pin1. The tube has a white end plug.


Media	Unit/ Tube	Tubes /Bag	Pin 1 Orientation
Tube	100	100	White end plug

# TUBE DIMENSION – Minor changes

ASSH	MTAI								
 <p>Technical drawing of ASSH tube. The main view shows a tube with a length of 518.8 (517.2) and a diameter of 21.10 ±0.51. The word "ANTISTATIC" is printed on the tube. The height is 3.99. A cross-section view shows a U-shaped profile with dimensions: R0.64(4x), 7.75 ±0.13, 6.47-6.78, 0.51 ±0.13, R0.25(2x), 4.32 ±0.25, 2.0 ±0.13, 3.81 ±0.13, and 0.08 ±0.02. A black cap (黑塞 K-VT242C-02) is shown on the right end.</p>	 <p>Technical drawing of MTAI tube. The main view shows a tube with a length of 20.45 ±0.050 and a diameter of 1.0 ±0.5. The word "ANTISTATIC" is printed on the tube. A cross-section view shows a U-shaped profile with dimensions: 150 REF, 100, 0.025 ±0.005 TYPICAL VAL, 0.030 ±0.000/-0.010 R. 2 PLACES, 0.050, 0.170, 0.260, 0.310 REF, 0.055 ±0.000/-0.010 R. 2 PLACES, 0.010 R. MAX, 0.010 R. MAX 6 PLACES, and 0.075.</p>								
<table><tr><th>Length</th><th>Color</th></tr><tr><td>20.00 +/- 0.03 inch (518 +/-0.8 mm)</td><td>Clear</td></tr></table>	Length	Color	20.00 +/- 0.03 inch (518 +/-0.8 mm)	Clear	<table><tr><th>Length</th><th>Color</th></tr><tr><td>20.50 +/-0.05 inch (520.7 +/-1.2 mm)</td><td>Clear</td></tr></table>	Length	Color	20.50 +/-0.05 inch (520.7 +/-1.2 mm)	Clear
Length	Color								
20.00 +/- 0.03 inch (518 +/-0.8 mm)	Clear								
Length	Color								
20.50 +/-0.05 inch (520.7 +/-1.2 mm)	Clear								


# TUBE NON-DRY PACK

ASSH



SSB

Material	Width	Length
SSB	254 mm	762 mm




ESD标签

生产标签


Material	Dimension W x L x H (cm)	Number of Bag/carton
Carton	27*62*11	6

MTAI




SSB

Material	Width	Length
SSB	160 mm	650 mm



ESD logo

Label



ANTI STATIC TAPE

(MTHAI No inner Box)

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

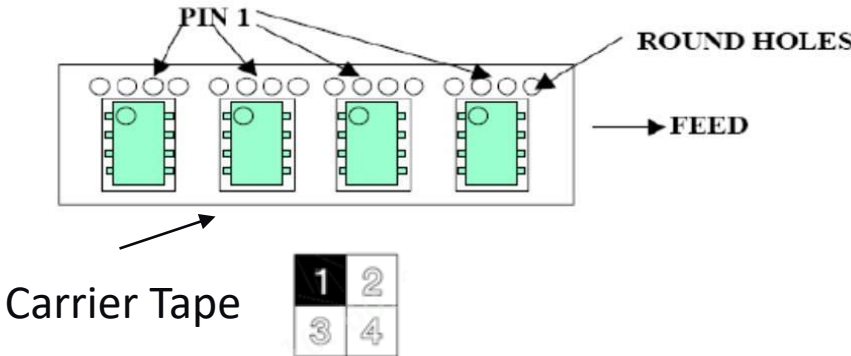


# TUBE DRY PACK

ASSH	MTAI																																
<div>NO DRY PACKING</div>	<table> <tr> <th>Material</th><th>Width</th><th>Length</th></tr> <tr> <td>MBB</td><td>160 mm</td><td>650 mm</td></tr> </table> <div> </div> <div> </div> <table> <tr> <th colspan="2">Inner box</th><th colspan="2">Carton</th><th rowspan="2">Number of Inner box(es) per carton</th></tr> <tr> <th>Drawing number</th><th>Dimension W x L x H (cm)</th><th>Drawing number</th><th>Dimension W x L x H (cm)</th></tr> <tr> <td rowspan="5">M02-010</td><td rowspan="5">12.9x56.5x8</td><td>M01-022 (PP)</td><td>15.5x62.0x14.0</td><td>1 per 1</td></tr> <tr> <td>M01-028 (C4)</td><td>28x63.5x11</td><td>2 per 1</td></tr> <tr> <td>M01-029 (C6)</td><td>28x63.5x15.5</td><td>3 per 1</td></tr> <tr> <td>M01-030 (C8)</td><td>28x63.5x20</td><td>4 per 1</td></tr> <tr> <td>M01-040 (S6)</td><td>43x59x19</td><td>6 per 1</td></tr> </table>	Material	Width	Length	MBB	160 mm	650 mm	Inner box		Carton		Number of Inner box(es) per carton	Drawing number	Dimension W x L x H (cm)	Drawing number	Dimension W x L x H (cm)	M02-010	12.9x56.5x8	M01-022 (PP)	15.5x62.0x14.0	1 per 1	M01-028 (C4)	28x63.5x11	2 per 1	M01-029 (C6)	28x63.5x15.5	3 per 1	M01-030 (C8)	28x63.5x20	4 per 1	M01-040 (S6)	43x59x19	6 per 1
Material	Width	Length																															
MBB	160 mm	650 mm																															
Inner box		Carton		Number of Inner box(es) per carton																													
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		M01-030 (C8)	28x63.5x20	4 per 1																													
		M01-040 (S6)	43x59x19	6 per 1																													

# T/R BQM AND PIN1 ORIENTATION

ASSH

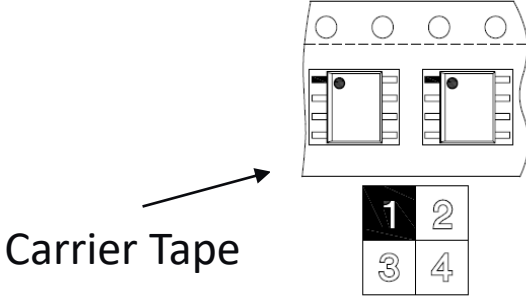


Carrier Tape

Quadrant 1

Media	Reel/Bag	Unit/Reel
T/R	1	4000

MTAI



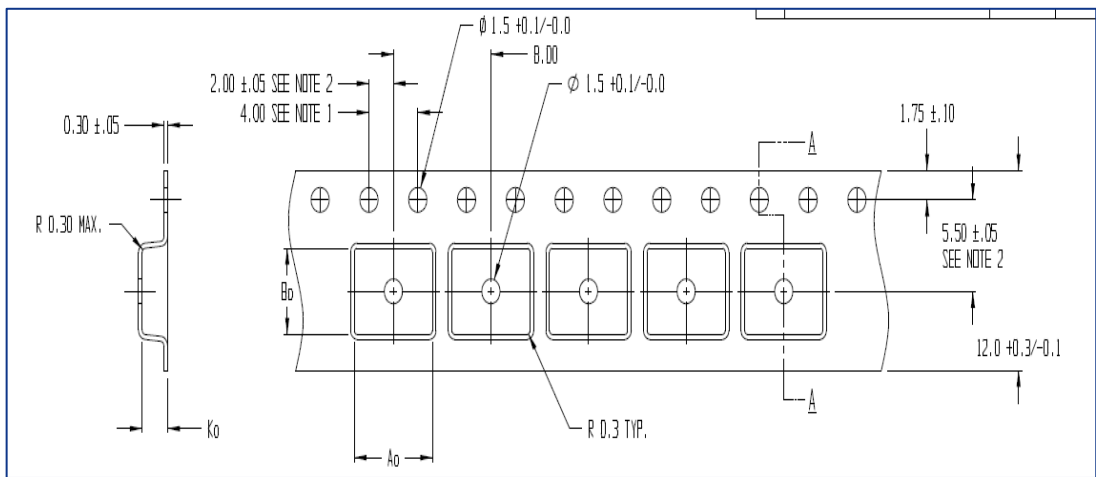
Carrier Tape

Quadrant 1

Media	Reel/Bag	Unit/Reel
T/R	1	4000

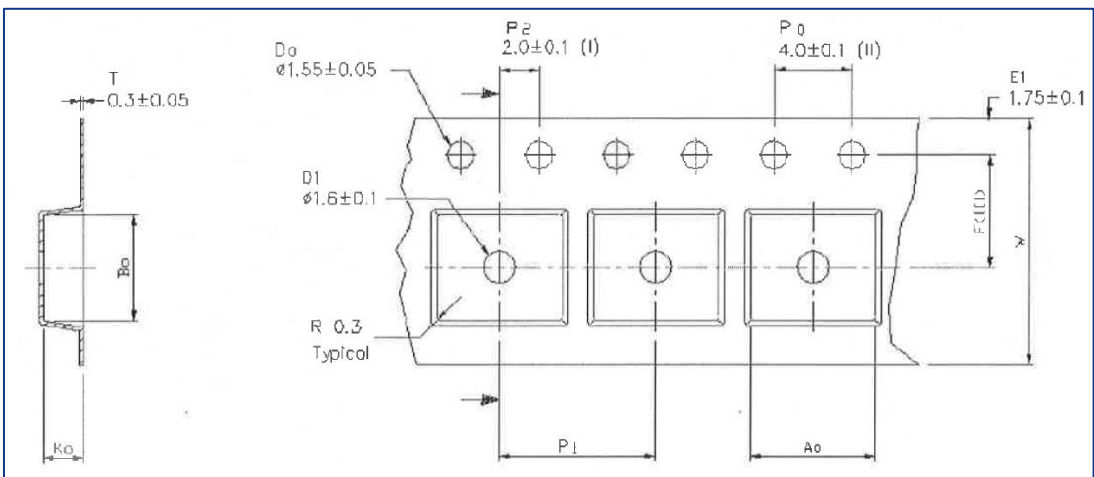
# CARRIER TAPE – No changes

## ASSH



W (mm.) $\pm 0.3$ or Specific	P (mm.) $\pm 0.1$ or Specific	A <sub>0</sub> $\pm 0.1$ or Specific	B <sub>0</sub> $\pm 0.1$ or Specific	K <sub>0</sub> $\pm 0.1$ or Specific	Thickness
12	8	6.40	5.20	2.10	-

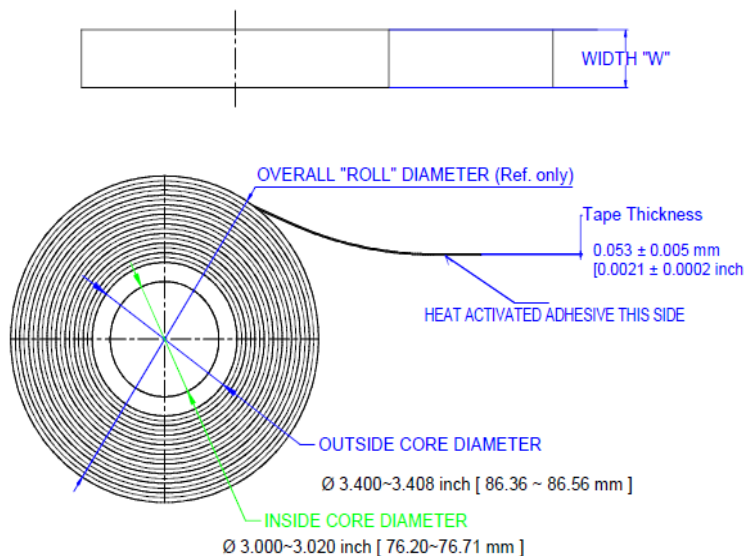
## MTAI



W (mm.) $\pm 0.3$ or Specific	P (mm.) $\pm 0.1$ or Specific	A <sub>0</sub> $\pm 0.1$ or Specific	B <sub>0</sub> $\pm 0.1$ or Specific	K <sub>0</sub> $\pm 0.1$ or Specific	Thickness
12	8	6.40	5.20	2.10	-

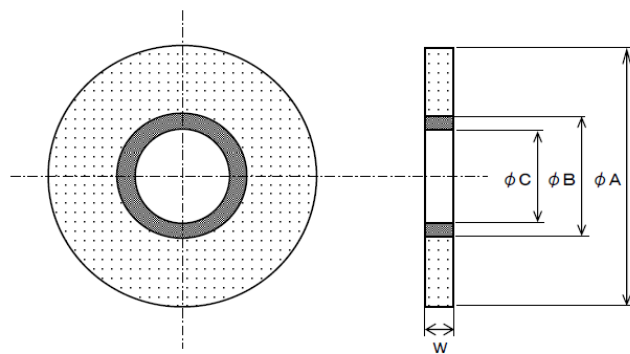
# COVER TAPE – Minor changes

## ASSH

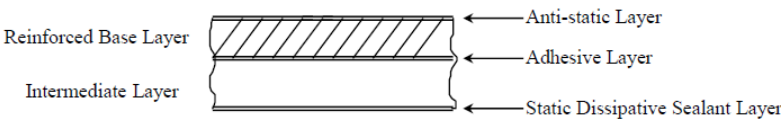


Width	Width "W" (mm)	Thickness (mm)	Sealing Mythology
12 mm	9.2+/-0.07	0.053±0.005	Heat seal

## MTAI



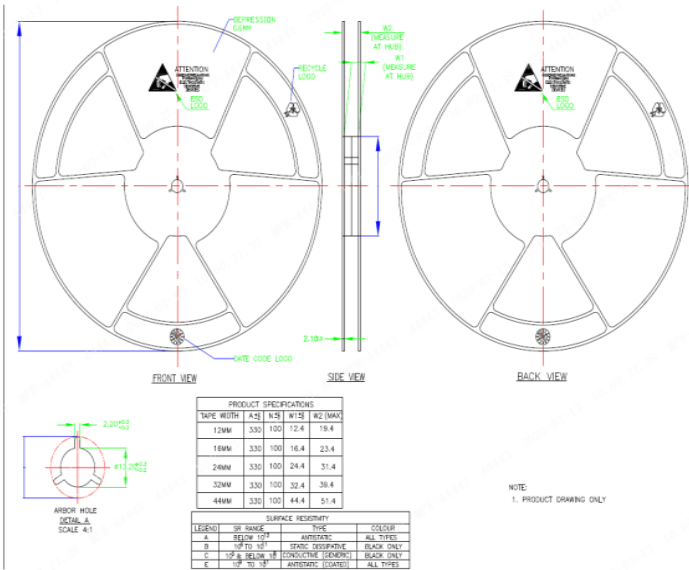
### STRUCTURE



Width	Width "W" (mm)	Thickness (mm)	Sealing Mythology
12 mm	9.05+0.05/-0.15	0.050 ±0.010	Heat seal

# PLASTIC REEL – Minor changes

**ASSH**



PRODUCT SPECIFICATIONS						
TAPE WIDTH		AZE	N.5	W.5E	W2 (MAX)	
12MM		330	100	12.4	19.4	
16MM		330	100	16.4	23.4	
24MM		330	100	24.4	31.4	
32MM		330	100	32.4	36.4	
44MM		330	100	44.4	51.4	

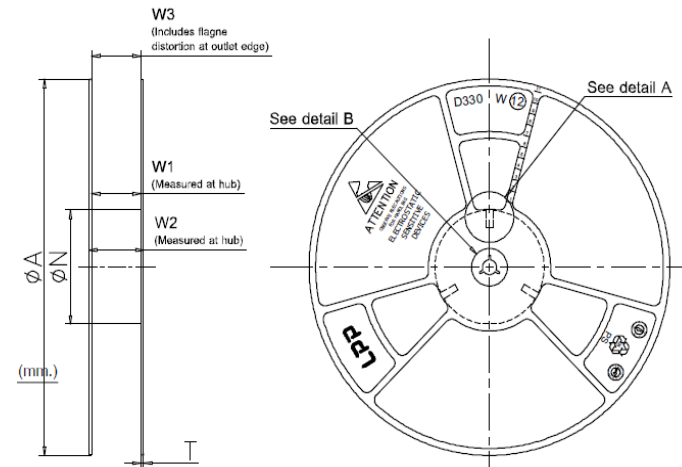
  

SURFACE RESISTIVITY		
LEGEND	SP. RANGE	TYPE
A	BELOW $10^9$	ANTISTATIC
B	$10^9$ TO $10^{11}$	STATIC DISSIPATIVE
C	$10^{12}$ BELOW $10^{14}$	CONDUCTIVE (GROUNDING)
E	$10^{15}$ TO $10^{18}$	ANTISTATIC (COATED)
		ALL TYPES
		BLACK ONLY
		BLACK ONLY
		ALL TYPES

NOTE:  
1. PRODUCT DRAWING ONLY

Reel Diameter	Hub	W2 Max (mm)	Color
330 mm	4 inch (100mm)	12.40	White


## MTAI



Reel Diameter	Hub	W2 Max (mm)	Color
330 mm	4 inch (100mm)	18.40	Dark Blue

# T/R NON-DRY PACK

ASSH






Material	WIDTH	LENGTH
SSB	370mm	460mm


SSB

Reel Logo

Tracking label




SSB



label

Material	Dimension	Number of reel per carton
	W x L x H (cm)	Reel diameter (D) = 330mm
		Carrier Tape Width 12mm
Carton	38.4x36.2x38.5	15

MTAI



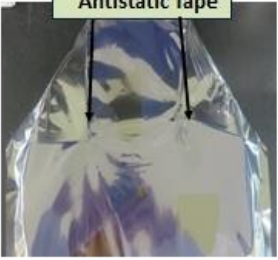

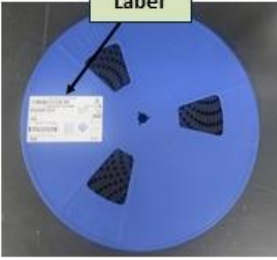
Material	WIDTH	LENGTH
SSB	370mm	420mm

SSB

Label

Static Sensitive Bag

Antistatic Tape




SSB

Label

(MTHAI No inner Box)

Carton	Dimension W x L x H (cm)	Number of reel per carton
		Reel diameter (D) = 330mm
		Carrier Tape Width 12mm
M01-011 (TT)	36.5x38x39.5	15
M01-012 (B1)	35.5x35.5x2.8	1
M01-013 (B2)	35.5x35.5x4	2
M01-014 (B3)	35.5x35.5x6	3
M01-015 (B8)	35.5x35.5x16.5	8

12

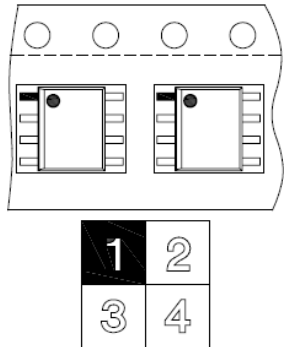


# T/R DRY PACK

ASSH	MTAI																													
<div>NO DRY PACKING</div>	<table> <tr> <th>Material</th><th>WIDTH</th><th>LENGTH</th></tr> <tr> <td>MBB</td><td>370mm</td><td>420mm</td></tr> </table> <div> <div> <div>Label</div> <div>Desiccant 2 Units</div> <div>HIC</div> </div> <div> <div>Moisture Barrier Bag</div> <div>Caution Label</div> <div>Label</div> </div> <div> <div>Inner Box</div> </div> <div> <div>MBB</div> </div> <div> <div>Bubble Sheet</div> <div>Moisture Sensitive Label</div> <div>Transparent Tape</div> </div> <div> <div>Label</div> <div>Inner Box</div> </div> </div> <table> <tr> <th colspan="2">Inner box</th><th colspan="2">Carton</th><th rowspan="2">Number of Inner box(es) per carton</th></tr> <tr> <th>Drawing number</th><th>Dimension W x L x H (cm)</th><th>Drawing number</th><th>Dimension W x L x H (cm)</th></tr> <tr> <td rowspan="4">M02-015 (Small)</td><td rowspan="4">37x35.1x5.3</td><td>M01-044 (SM)</td><td>37.0x38.0x11.0</td><td>1 : 1</td></tr> <tr> <td>M01-045 (S4)</td><td>37.0x38.0x22.5</td><td>3 : 1</td></tr> <tr> <td>M01-046 (S5)</td><td>37.0x39.0x39.0</td><td>6 : 1</td></tr> <tr> <td>M01-047 (S3)</td><td>42.0x66.0x39.0</td><td>11 : 1</td></tr> </table>	Material	WIDTH	LENGTH	MBB	370mm	420mm	Inner box		Carton		Number of Inner box(es) per carton	Drawing number	Dimension W x L x H (cm)	Drawing number	Dimension W x L x H (cm)	M02-015 (Small)	37x35.1x5.3	M01-044 (SM)	37.0x38.0x11.0	1 : 1	M01-045 (S4)	37.0x38.0x22.5	3 : 1	M01-046 (S5)	37.0x39.0x39.0	6 : 1	M01-047 (S3)	42.0x66.0x39.0	11 : 1
Material	WIDTH	LENGTH																												
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		M01-046 (S5)	37.0x39.0x39.0	6 : 1																										
		M01-047 (S3)	42.0x66.0x39.0	11 : 1																										

# T/R BQM AND PIN1 ORIENTATION

ANAP

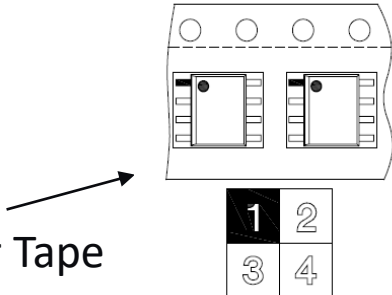


Quadrant 1

Media	Reel/Bag	Unit/Reel
T/R	1	4000

MTAI

Carrier Tape



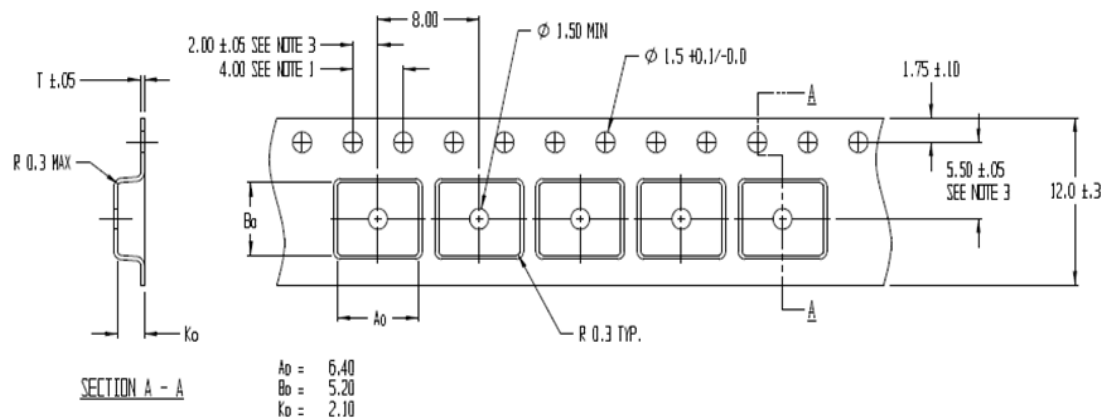
Quadrant 1

Media	Reel/Bag	Unit/Reel
T/R	1	4000



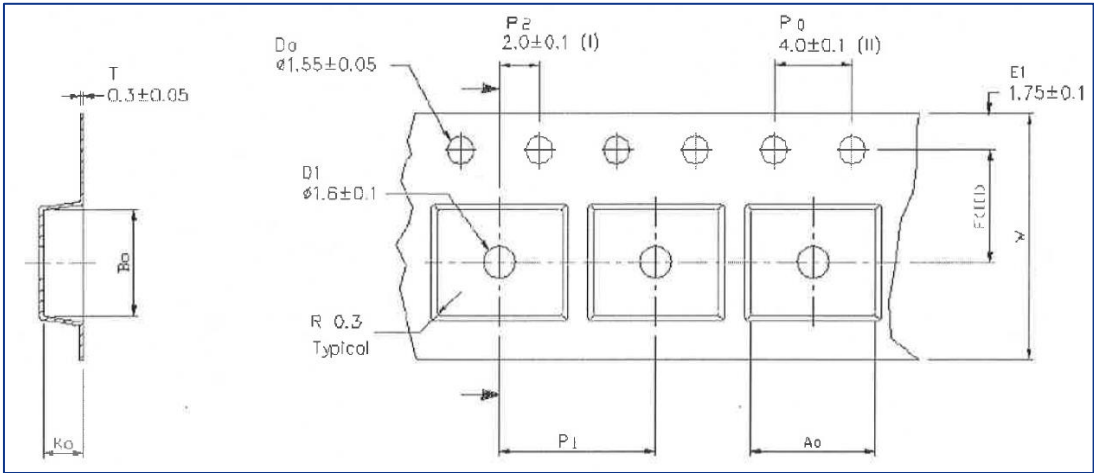
# CARRIER TAPE – No changes

ANAP



W (mm.) $\pm 0.3$ or Specific	P (mm.) $\pm 0.1$ or Specific	A <sub>0</sub> $\pm 0.1$ or Specific	B <sub>0</sub> $\pm 0.1$ or Specific	K <sub>0</sub> $\pm 0.1$ or Specific	Thickness
12	8	6.40	5.20	2.10	-

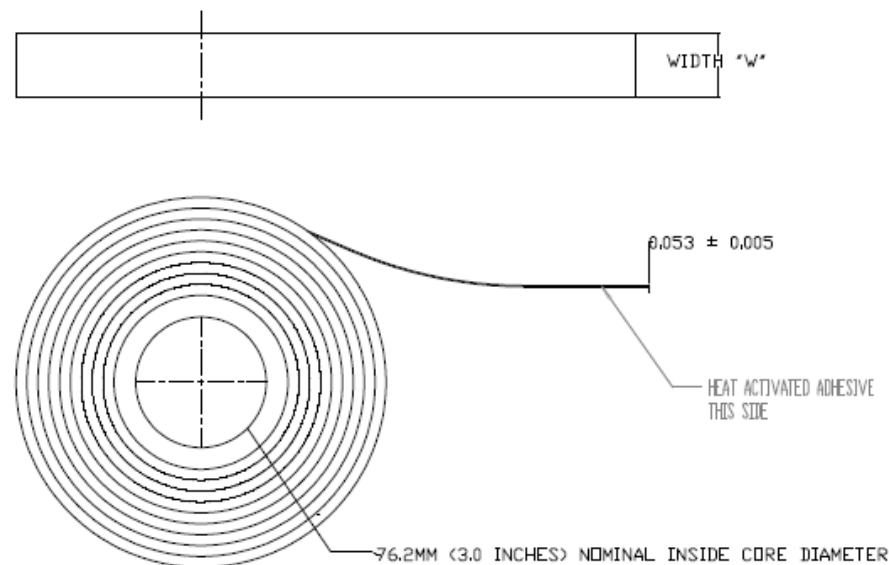
MTAI



W (mm.) $\pm 0.3$ or Specific	P (mm.) $\pm 0.1$ or Specific	A <sub>0</sub> $\pm 0.1$ or Specific	B <sub>0</sub> $\pm 0.1$ or Specific	K <sub>0</sub> $\pm 0.1$ or Specific	Thickness
12	8	6.40	5.20	2.10	-

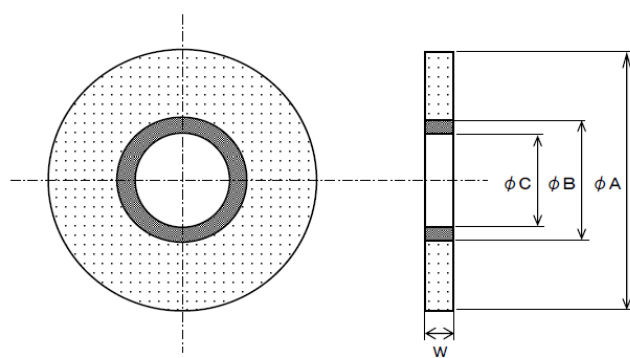
# COVER TAPE – Minor changes

## ANAP

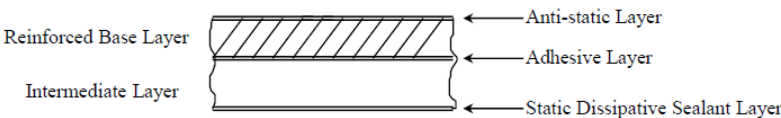


Width	Width "W" (mm)	Thickness (mm)	Sealing Mythology
12 mm	9.2+/-0.010	0.053±0.005	Heat seal

## MTAI



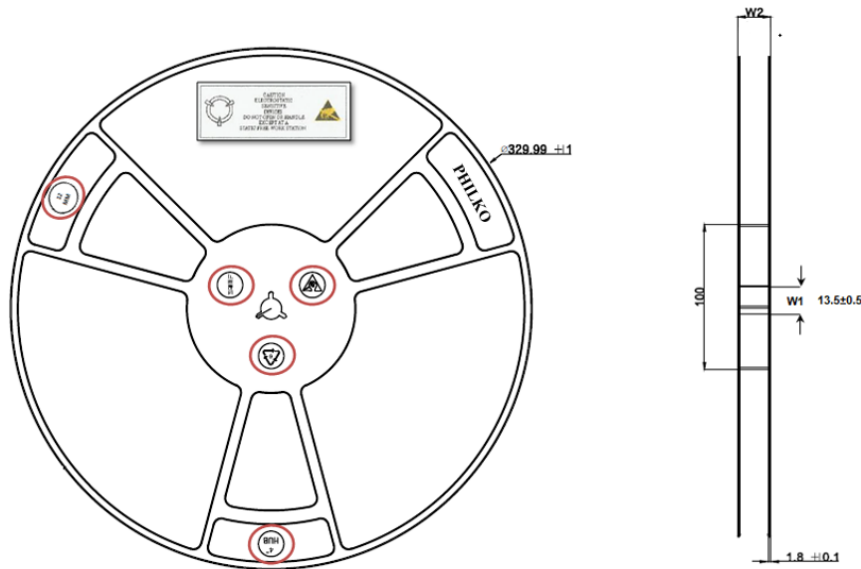
### STRUCTURE



Width	Width "W" (mm)	Thickness (mm)	Sealing Mythology
12 mm	9.05+0.05/-0.15	0.050 ±0.010	Heat seal

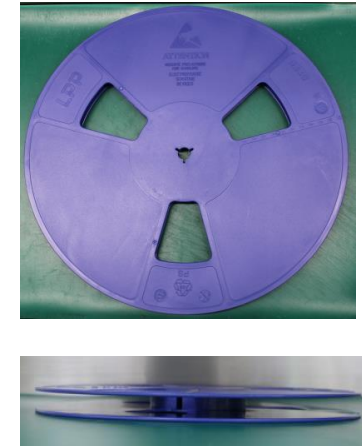
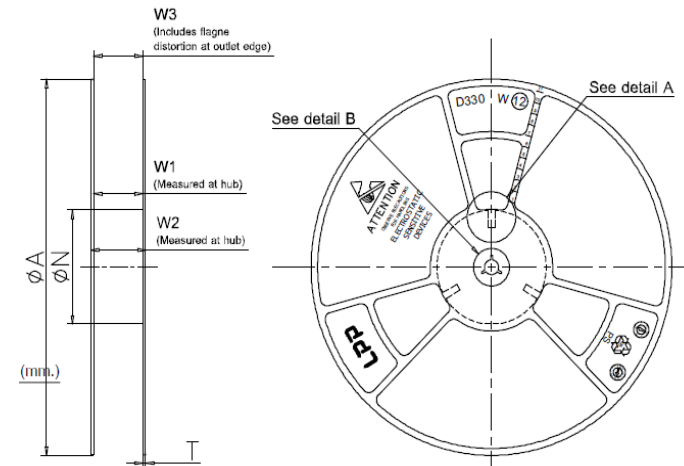
# PLASTIC REEL – Minor changes

## ANAP



Reel Diameter	Hub	W2 Max (mm)	Color
330 mm	4 inch (100mm)	17.50	White

## MTAI



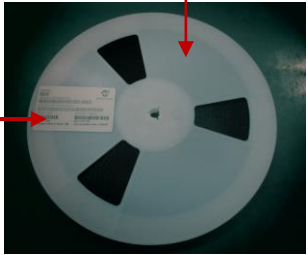
Reel Diameter	Hub	W2 Max (mm)	Color
330 mm	4 inch (100mm)	18.40	Dark Blue

# T/R NON-DRY PACK


ANAP

Embossed ESD

Barcode Label




Barcode Label




Bubble Bag

Barcode Label




Tracking Label

Embossed ESD



Note: With discussion with MCHIP QE (Jonas) to removed tracking label as this is not included on MCHIP requirement.



MTAI (MSL 1 – no inner box)


Label




Static Sensitive Bag


Antistatic Tape

Embossed ESD

Label








Bubble sheet

Carton Box	Dimension
M01-012 (B1)	35.5x35.5x2.8 cm (Max 1 Reel)
M01-013 (B2)	35.5x35.5x4 cm (Max 2 Reel)
M01-014 (B3)	35.5x35.5x6 cm (Max 3 Reel)
M01-015 (B8)	35.5x35.5x16.5 cm (Max 8 Reel)
M01-011 (TT)	36.5x38x39.5 cm (Max 15 Reel)

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**MICROCHIP**

## **QUALIFICATION REPORT SUMMARY**

**PCN #: LIAL-12WRCV778**

**Date:  
December 08, 2020**

**Qualification of MTAI as an additional final test site for  
selected Atmel AT24C0xC, AT24C128C, AT24C16C,  
AT24C256C, AT24C32D and AT24C64D device families  
available in 8L SOIC package.**

**Purpose:** Qualification of MTAI as a additional final test site for selected Atmel AT24C0xC, AT24C128C, AT24C16C, AT24C256C, AT24C32D and AT24C64D device families available in 8L SOIC package.

**CCB No.:** 3280.002

Test / Evaluation	Test Conditions / Parameters	Results / Remarks
Datalog / Bin Comparison	<ul style="list-style-type: none"><li>Compare test numbers, test names, test limit, test sequence, bin assignments &amp; pass/fail results.</li><li>Accept if all match or justify the differences</li></ul>	PASSED
Test stability verification	<ul style="list-style-type: none"><li>Test stability verification with TC at -40°C, 25°C and 85°C for singulated</li><li>Accept on Cpk &gt; 1.67 or justify/waive parameters if needed</li></ul>	PASSED
Tester to Tester verification	<ul style="list-style-type: none"><li>Perform GR&amp;R. Site 1: Nextest_PT vs Nextest_SSV2t Platform</li></ul>	PASSED
Yield correlation	<ul style="list-style-type: none"><li>Lot Validation, Good vs. rejects comparison. (5000 pcs).</li><li>Accept <math>\pm 2\%</math> yield difference</li></ul>	PASSED
Rejects verification	<ul style="list-style-type: none"><li>The one failure is marginal fail at 85C with Singulates test program, but on Strip test program the failure get always pass result. Reject rate is 0%.</li></ul>	PASSED