



## Product Change Notification / ASER-23WWAI681

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**Date:**

14-Jul-2020

**Product Category:**

Memory

**PCN Type:**

Manufacturing Change

**Notification Subject:**

CCB 4235 Final Notice: Qualification of MMT as a new final test site for selected Atmel AT27C/BV/LVxxxPU/JUxxx products

**Affected CPNs:**

[ASER-23WWAI681\\_Affected\\_CPN\\_07142020.pdf](#)  
[ASER-23WWAI681\\_Affected\\_CPN\\_07142020.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 MMT as a new final test site for selected Atmel AT27C/BV/LVxxxPU/JUxxx products.

**Pre Change:**Tested at MPHIL final test site.

**Post Change:**Tested at MMT final test site.

**Pre and Post Change Summary:**

|                 | Pre Change           | Post Change                   |
|-----------------|----------------------|-------------------------------|
| Final Test Site | Microchip Technology | Microchip Technology Thailand |

|                                 |                                    | Operations (Philippines)<br>Corporation<br>(MPHL)                 | (MMT)                                |
|---------------------------------|------------------------------------|---|--------------------------------------|
| Packing Media:<br>Tape and Reel | Base Quantity<br>Multiple (BQM)    | Various. No BQM change.   |                                      |
|                                 | Pin 1<br>Orientation               | Quadrant 1  | Quadrant 1                           |
|                                 | With Desiccant<br>and HIC?         | Yes   | Yes                                  |
|                                 | Carrier Tape<br>Dimension          | See pre and post change comparison.                               |                                      |
|                                 | Cover Tape<br>Dimension            | Minor dimensional changes.<br>See pre and post change comparison. |                                      |
|                                 | Reel Dimension                     | Minor dimensional changes.<br>See pre and post change comparison. |                                      |
|                                 | Packaging<br>Process               | See pre and post change comparison.                               |                                      |
| Packing Media:<br>Tube          | Base Quantity<br>Multiple<br>(BQM) | Various. No BQM change.   |                                      |
|                                 | Pin 1<br>Orientation               | Pin 1 Toward White Pin  | Pin 1 Toward Black/Blue/Green<br>Pin |
|                                 | Tube<br>Dimensions                 | No dimensional changes  |                                      |
|                                 | Plug Color                         | Clear   | Clear                                |
|                                 | Packaging<br>Process               | See pre and post change comparison.                               |                                      |

**Impacts to Data Sheet:**None

**Change Impact:**None

**Reason for Change:**To improve manufacturability by qualifying MMT as a new final test site.

**Change Implementation Status:**In Progress

**Estimated First Ship Date:**August 17, 2020 (date code: 2034)

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

**Time Table Summary:**

|                             | June 2020 |   |   |   |   | July 2020 |   |   |   | August 2020 |   |   |   |   |
|-----------------------------|-----------|---|---|---|---|-----------|---|---|---|-------------|---|---|---|---|
| Workweek                    | 2         | 2 | 2 | 2 | 2 | 2         | 2 | 3 | 3 | 3           | 3 | 3 | 3 | 3 |
|                             | 3         | 4 | 5 | 6 | 7 | 8         | 9 | 0 | 1 | 2           | 3 | 4 | 5 | 6 |
| Initial PCN Issue Date      |           |   |   | X |   |           |   |   |   |             |   |   |   |   |
| Qual Report<br>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:****June 25, 2020:** Issued initial notification.**July 14, 2020:** Issued final notification. Attached the qualification report. Provided estimated first ship date to be on August 17, 2020.

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-23WWAI681\\_Qual\\_Report.pdf](#)

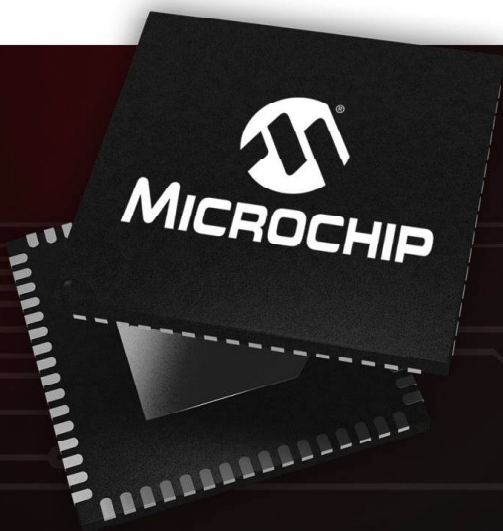
[PCN ASER-23WWAI681\\_Pre and Post Change Summary.pdf](#)

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.



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**PCN # ASER-23WWAI681**  
**CCB 4235\_Pre and Post Change Summary**



## Affected Parts List

### Packing Media: Tube

| CPN                | Lead Count | Pkg Type | Base Quantity Multiple | Packing Media |
|--------------------|------------|----------|------------------------|---------------|
| AT27BV256-70JU     | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27LV256A-90JU    | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27LV512A-90JU    | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27BV010-90JU     | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27LV010A-70JU    | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27LV020A-12JU    | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C256R-45JU     | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C256R-70JU     | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C256R-70JU-306 | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C256R-45PU     | 28.00      | PDIP     | 14.00                  | Tube          |
| AT27C256R-70PU     | 28.00      | PDIP     | 14.00                  | Tube          |
| AT27C512R-45JU     | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C512R-70JU     | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C512R-45PU     | 28.00      | PDIP     | 14.00                  | Tube          |
| AT27C512R-70PU     | 28.00      | PDIP     | 14.00                  | Tube          |
| AT27C1024-45PU     | 40.00      | PDIP     | 10.00                  | Tube          |
| AT27C1024-70PU     | 40.00      | PDIP     | 10.00                  | Tube          |
| AT27C2048-90PU     | 40.00      | PDIP     | 10.00                  | Tube          |

| CPN             | Lead Count | Pkg Type | Base Quantity Multiple | Packing Media |
|-----------------|------------|----------|------------------------|---------------|
| AT27C020-55PU   | 32.00      | PDIP     | 12.00                  | Tube          |
| AT27C020-90PU   | 32.00      | PDIP     | 12.00                  | Tube          |
| AT27C020-55JU   | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C020-90JU   | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C4096-90PU  | 40.00      | PDIP     | 10.00                  | Tube          |
| AT27C4096-55PU  | 40.00      | PDIP     | 10.00                  | Tube          |
| AT27C040-70PU   | 32.00      | PDIP     | 12.00                  | Tube          |
| AT27C040-90PU   | 32.00      | PDIP     | 12.00                  | Tube          |
| AT27C040-70JU   | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C040-90JU   | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C080-90PU   | 32.00      | PDIP     | 12.00                  | Tube          |
| AT27C080-90PU   | 32.00      | PDIP     | 12.00                  | Tube          |
| AT27C080-90JU   | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C080-90JU   | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C010-70PU   | 32.00      | PDIP     | 12.00                  | Tube          |
| AT27C010-45JU   | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27C010-70JU   | 32.00      | PLCC     | 32.00                  | Tube          |
| AT27LV040A-90JU | 32.00      | PLCC     | 32.00                  | Tube          |

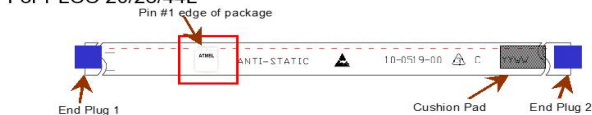


# TUBE PACKING: PLCC Package

## 32L PLCC Tube Packing: MPHL

### 1. Pin 1 Orientation

For PLCC 20/28/44L



For PLCC 32L

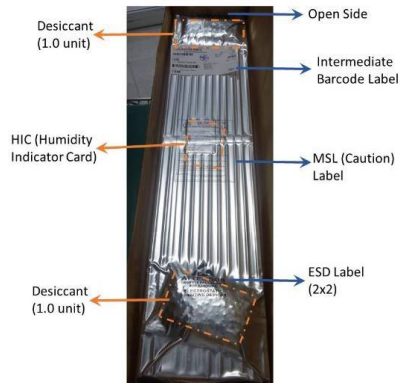


### 2. Tube Bundling

**PLCC 32 – 30 tubes per bag**  
**PLCC 44 – 20 tubes per bag**



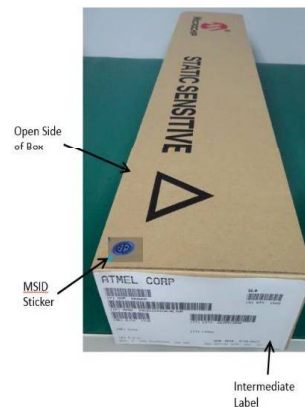
### 3. Moisture Barrier Bag Labels



### 4. Wrap bag with bubble pack



### 5. Tube Box Packing

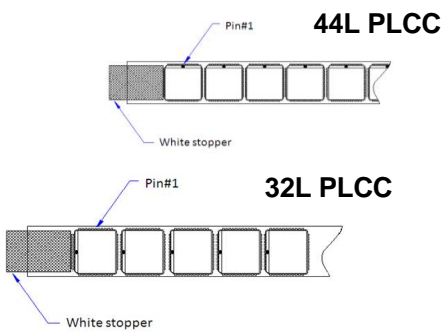




# TUBE PACKING: PLCC Package

## 32L PLCC Tube Packing : MMT

### 1. Pin 1 Orientation



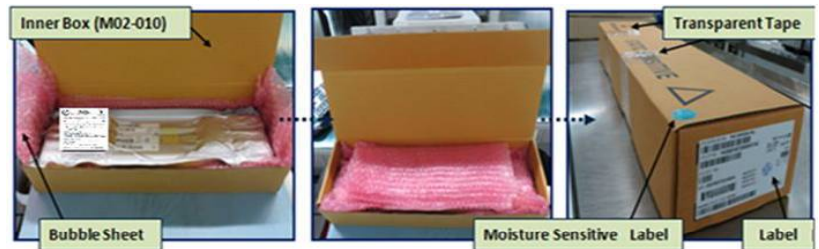
### 2. Tube Bundling

PLCC 32 – 30 tubes per bag  
PLCC 44 – 20 tubes per bag

### 3. Moisture Barrier Bag Labels



### 4. Tube Box Packing



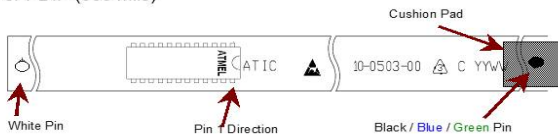


# TUBE PACKING: PDIP Package

28L/32L/40L PDIP Tube Packing: MPHL

## 1. Pin 1 Orientation

For PDIP (600 mils)



## 4. Wrap bag with bubble pack



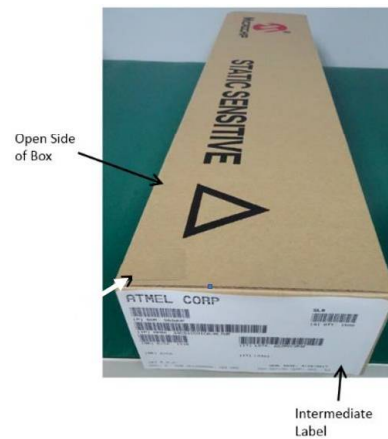
## 2. Tube Bundling

**PDIP 32 – 40 Tubes/Bag**  
**PDIP 40 – 24 Tubes/Bag**

## 3. Shielding Bag Labels



## 5. Tube Box Packing



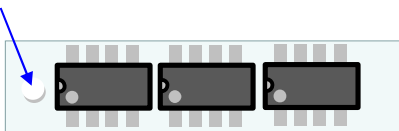


# TUBE PACKING: PDIP Package

## 32L PDIP Tube Packing: MMT

### 1. Pin 1 Orientation

Pin 1 Side  
White End Pin



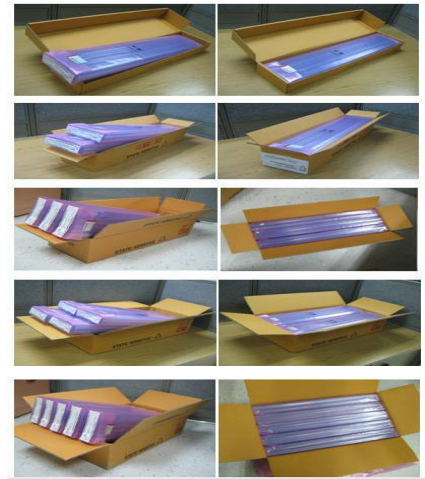
### 2. Tube Bundling

**PDIP 28 – 24 Tubes/Bag**  
**PDIP 32 – 40 Tubes/Bag**  
**PDIP 40 – 24 Tubes/Bag**

### 3. Antistatic Pink bag



### 4. Tube Outer Box Packing Packing for PDIP tubes (Sample)





## Affected Parts List

### Packing Media: T/R

| CPN               | Lead Count | Pkg Type | Base Quantity Multiple | Packing Media |
|-------------------|------------|----------|------------------------|---------------|
| AT27BV256-70JU-T  | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27LV256A-90JU-T | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27LV512A-90JU-T | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27BV010-90JU-T  | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27LV010A-70JU-T | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27LV020A-12JU-T | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27C256R-45JU-T  | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27C256R-70JU-T  | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27C512R-45JU-T  | 32.00      | PLCC     | 750.00                 | T/R           |

| CPN               | Lead Count | Pkg Type | Base Quantity Multiple | Packing Media |
|-------------------|------------|----------|------------------------|---------------|
| AT27C512R-70JU-T  | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27C020-55JU-T   | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27C020-90JU-T   | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27C040-70JU-T   | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27C040-90JU-T   | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27C080-90JU-T   | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27C010-45JU-T   | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27C010-70JU-T   | 32.00      | PLCC     | 750.00                 | T/R           |
| AT27LV040A-90JU-T | 32.00      | PLCC     | 750.00                 | T/R           |



| DIM | 2          |
|-----|------------|
| A0  | 13.10 0.10 |
| B0  | 15.20 0.10 |
| K0  | 3.90 0.10  |

SCALE 1:1

NOTES:  
 1. 13 POCKET HOLE PITCH CUMULATIVE TOLERANCE  $\pm 0.2$   
 2. POCKET POSITION RELATIVE TO 13POCKET HOLE MEASURED AS TRUE POSITION OF POCKET; NOT POCKET HOLE.  
 3. A0 AND B0 ARE MEASURED ON A PLANE AT A DISTANCE "R" ABOVE THE BOTTOM OF THE POCKET.

| REV | DESCRIPTION           | DATE    | APPROVED |
|-----|-----------------------|---------|----------|
| 1   | Drawing format change | 3/18/03 | BNB      |
| 2   | Add material table    | 2/15/07 | VAN      |

| PART #   | T    | MATERIAL | DWG #        |
|----------|------|----------|--------------|
| PLCC44-M | 0.35 | PSC      | AL100-94-113 |
| PLCC44-N | 0.30 | PSC      | AG310-94-121 |

NOTES:

1. 10 SPROCKET HOLE PITCH CUMULATIVE TOLERANCE ±0.2
2. CAMER IN COMPLIANCE WITH EIA-481
3. POCKET POSITION RELATIVE TO SPROCKET HOLE MEASURED AS TRUE POSITION OF POCKET, NOT POCKET HOLE

Ao = 18.00  
 Bo = 18.00  
 Ko = 4.90

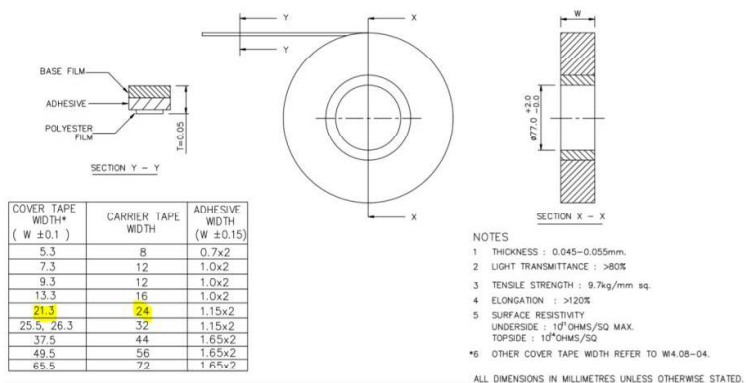
TITLE ADVANTEK PART DRAWING NUMBER PLCC44-A  
 (MOTHER TAPE)  
 TOLERANCES - UNLESS MATERIAL PSC  
 NOTED JPL ± 2.2, JPL ± 1.0 ALL DIMENSIONS IN MILLIMETERS DWG SIZE B  
 DRAWN BY: BLD/BNB DATE: 11/28/90 SCALE: 3:2 SHEET 1 OF 1  
 REFERENCE NO. DWG NO. TAP NO. REV





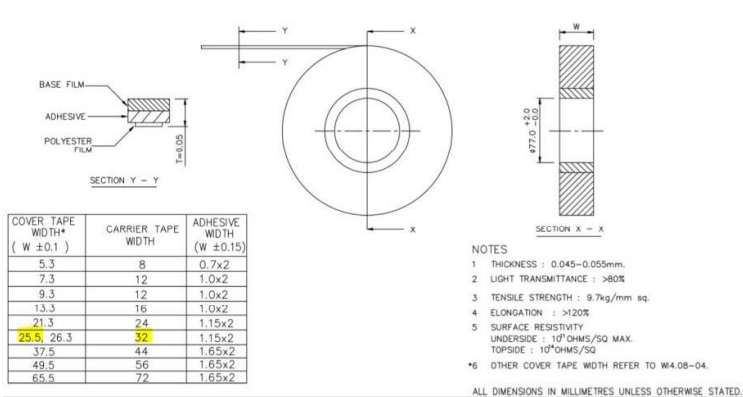
# MPHL COVER TAPE

## PLCC 32 COVER TAPE (Width: 24mm)



| Carrier Width | Supplier | MCHP P/N | Supplier Part | Width "W" (mm) | Thickness (mm) | Sealing Mythology |
|---------------|----------|----------|---------------|----------------|----------------|-------------------|
| 24mm          | CPak     | 211894   | CP58 PSA      | 21.3 +/-0.1    | 0.050 ±0.010   | Pressure Seal     |

## PLCC 44 COVER TAPE (Width: 32mm)

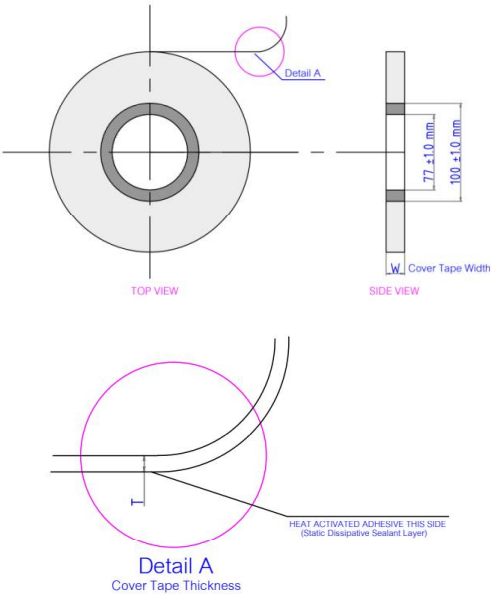


| Carrier Width | Supplier | MCHP P/N | Supplier Part | Width "W" (mm) | Thickness (mm) | Sealing Mythology |
|---------------|----------|----------|---------------|----------------|----------------|-------------------|
| 32mm          | CPak     | 211887   | CP58 PSA      | 25.5 +/-0.1    | 0.050 ±0.010   | Pressure Seal     |



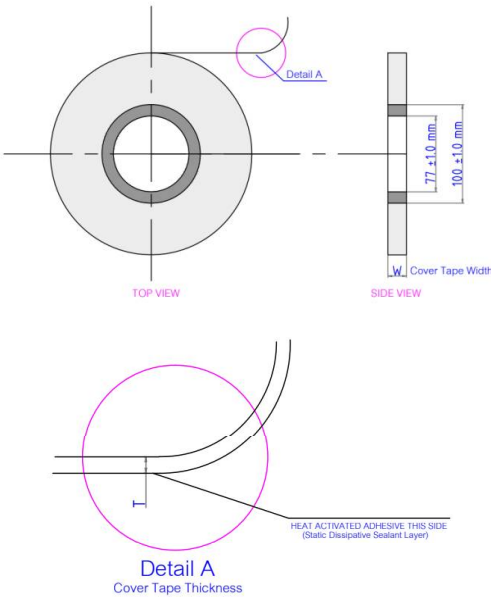
# MMT COVER TAPE

PLCC 32 COVER TAPE (Width: 24mm)



| Carrier Width | Supplier | MCHP P/N | Supplier Part | Width "W" (mm) | Thickness (mm) | Sealing Mythology |
|---------------|----------|----------|---------------|----------------|----------------|-------------------|
| 24mm          | Sumitomo | 22102002 | CSL-Z7302     | 21.0 +/- 0.1   | 0.050 ±0.010   | Heat Sealing      |

PLCC 44 COVER TAPE (Width: 32mm)



| Carrier Width | Supplier | MCHP P/N | Supplier Part | Width "W" (mm) | Thickness (mm) | Sealing Mythology |
|---------------|----------|----------|---------------|----------------|----------------|-------------------|
| 32mm          | Sumitomo | 22104401 | CSL-Z7302     | 25.5 +/- 0.1   | 0.050 ±0.010   | Heat Sealing      |

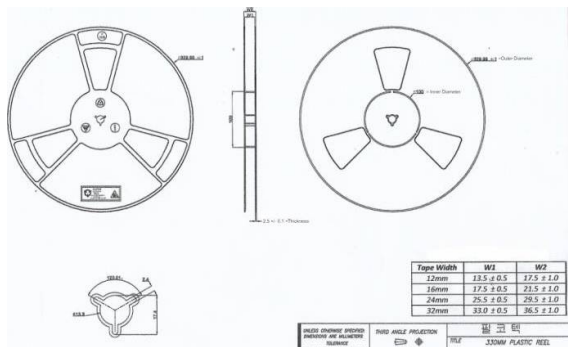
Added by Satsawat



# MPHL PLASTIC REEL

## PLASTIC REEL: WIDTH 24mm

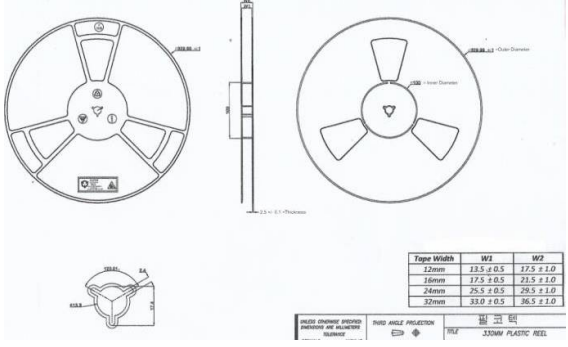
### PLCC 32L



| Width | MCHP P/N | Supplier Part | Hub           | Color |
|-------|----------|---------------|---------------|-------|
| 24mm  | 211696   | N/A           | 4inch (100mm) | White |

## PLASTIC REEL: WIDTH 32mm

### PLCC 44L



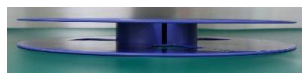
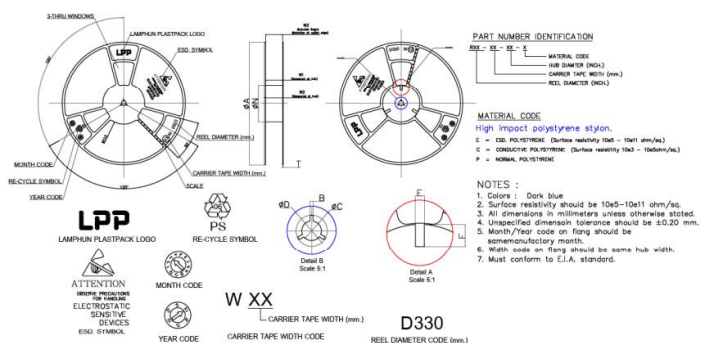
| Width | MCHP P/N | Supplier Part | Hub           | Color |
|-------|----------|---------------|---------------|-------|
| 32mm  | 211697   | N/A           | 4inch (100mm) | White |



# MMT MPHL PLASTIC REEL

## PLASTIC REEL: WIDTH 24mm

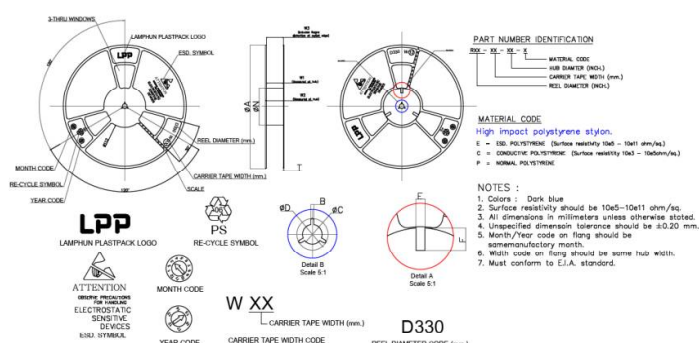
### PLCC 32L



| Width | MCHP P/N | Supplier Part | Hub              | Color     |
|-------|----------|---------------|------------------|-----------|
| 24mm  | 23000024 | R13-24-04-E   | 4inch<br>(100mm) | Dark Blue |

## PLASTIC REEL: WIDTH 32mm

### PLCC 44L



| Width | MCHP P/N | Supplier Part | Hub              | Color     |
|-------|----------|---------------|------------------|-----------|
| 32mm  | 23000023 | R13-32-04-E   | 4inch<br>(100mm) | Dark Blue |



## Plastic Reel (Width 24 mm)

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| Description | MPHIL          | MMT          |
|-------------|----------------|--------------|
| Color       | White          | Dark blue    |
| Diameter    | 329.99 +/- 1.0 | 330 +/- 2.0  |
| Hub         | 100            | 100 +/- 2.0  |
| Width       | 25.5 +/- 0.5   | 24.4 +/- 0.2 |



## Plastic Reel (Width 32 mm)

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| Description | MPHIL          | MMT          |
|-------------|----------------|--------------|
| Color       | White          | Dark blue    |
| Diameter    | 329.99 +/- 1.0 | 330 +/- 2.0  |
| Hub         | 100            | 100 +/- 2.0  |
| Width       | 33 +/- 0.5     | 32.4 +/- 2.0 |

Added by Panisara

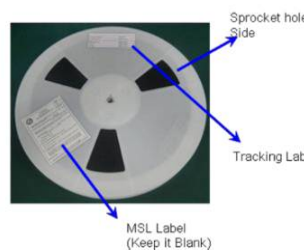
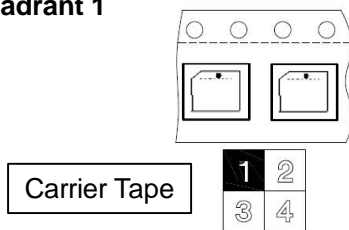
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# TAPE AND REEL PACKING PROCEDURE MPHL

MSL 2 – T/R REEL DRY PACK PROCEDURE (Ref Spec# PI-35015)

## Pin 1 Orientation Quadrant 1



## Label Placement at Box



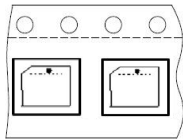


# TAPE AND REEL PACKING PROCEDURE MMT

MSL 2 – T/R REEL DRY PACK PROCEDURE (Ref Spec# PI-24069)

## Pin 1 Orientation

### Quadrant 1



Carrier Tape



13" Reel for New MBB with Caution printing

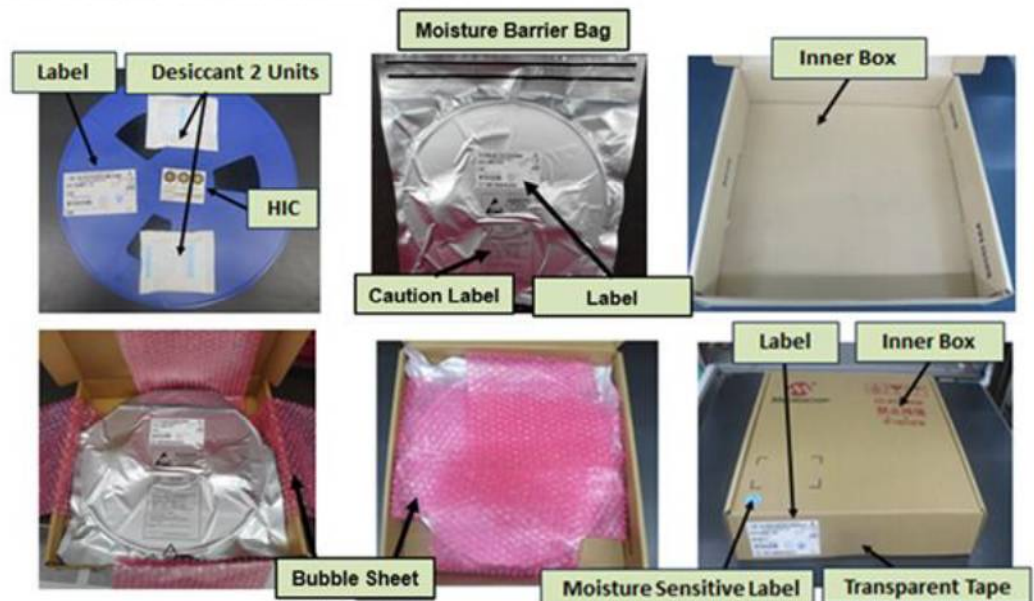


Figure 8.6.1B Dry pack for tape and reel



**MICROCHIP**

## **QUALIFICATION REPORT SUMMARY**

**PCN#: ASER-23WWAI681**

**Date:  
July 10, 2020**

**Qualification of MMT as a new final test site for selected  
Atmel AT27C/BV/LVxxxPU/JUxxx products.**

**Purpose:**     **Qualification of MMT as a new final test site for selected  
Atmel AT27C/BV/LVxxxPU/JUxxx products.**

**CCB No.:**    **4235**

| Test / Evaluation      | Test Conditions / Parameters  | Results |
|------------------------|---|---------|
| Datalog/Bin Comparison | <ul style="list-style-type: none"><li>• Compare overall yield, speed distribution, test bin pass/fail results.</li><li>• Accept if all match or justify the differences</li></ul>   | Passed  |
| Correlation Lot Report | <ul style="list-style-type: none"><li>• Yield at each step and reject analysis between systems. Min 3K units are tested for each program/density conversion we perform.</li><li>• Accept on yield match within 1%</li></ul> | Passed  |

ASER-23WWAI681 - CCB 4235 Final Notice: Qualification of MMT as a new final test site for selected Ati

Affected Catalog Part Numbers(CPN)

AT27BV256-70JU  
AT27LV256A-90JU  
AT27BV256-70JU-T  
AT27LV256A-90JU-T  
AT27LV512A-90JU  
AT27LV512A-90JU-T  
AT27BV010-90JU  
AT27LV010A-70JU  
AT27BV010-90JU-T  
AT27LV010A-70JU-T  
AT27LV020A-12JU  
AT27LV020A-12JU-T  
AT27C256R-45JU  
AT27C256R-70JU  
AT27C256R-70JU-306  
AT27C256R-45PU  
AT27C256R-70PU  
AT27C256R-45JU-T  
AT27C256R-70JU-T  
AT27C512R-45JU  
AT27C512R-70JU  
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AT27C512R-70PU  
AT27C512R-45JU-T  
AT27C512R-70JU-T  
AT27C1024-45PU  
AT27C1024-70PU  
AT27C2048-90PU  
AT27C020-55PU  
AT27C020-90PU  
AT27C020-55JU  
AT27C020-90JU  
AT27C020-55JU-T  
AT27C020-90JU-T  
AT27C4096-90PU  
AT27C4096-55PU  
AT27C040-70PU  
AT27C040-90PU  
AT27C040-70JU  
AT27C040-90JU  
AT27C040-70JU-T  
AT27C040-90JU-T

AT27C080-90PU  
AT27C080-90JU  
AT27C080-90JU-T  
AT27C010-70PU  
AT27C010-45JU  
AT27C010-70JU  
AT27C010-45JU-T  
AT27C010-70JU-T  
AT27LV040A-90JU  
AT27LV040A-90JU-T