



Product Change Notification / ALAN-11ACPB068

Date:

01-Aug-2022

Product Category:

Memory

PCN Type:

Manufacturing Change

Notification Subject:

CCB 5056 Final Notice: Qualification of MTAI as an additional Test site location for selected SST39VF400A-70-4Cxx and SST39VF400A-70-4lxx device families available in 48L TFBGA (6x8x1.2mm) and 48L TSOP (12x20mm) packages.

Affected CPNs:

[ALAN-11ACPB068_Affected_CPN_08012022.pdf](#)

[ALAN-11ACPB068_Affected_CPN_08012022.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 Test site location for selected SST39VF400A-70-4Cxx and SST39VF400A-70-4lxx device families available in 48L TFBGA (6x8x1.2mm) and 48L TSOP (12x20mm) packages.

Pre and Post Change Summary:

| | | | Pre Change | Post Change | |
|--------------------|------------------------------|----------------------|---|--|---|
| Test Site Location | | | King Yuan Electronics Company, Limited (KYE) | King Yuan Electronics Company, Limited (KYE) | Microchip Technology Thailand (HQ) (MTAI) |
| Packaging | 48L TFBGA 6x8x1.2 mm | TnR Pin Orientation | Quadrant 1 | Quadrant 1 | Quadrant 1 |
| | | Tray Pin Orientation | Upper Left | Upper Left | Upper Left |
| | | TnR BQM | 2500 | 2500 | 2500 |
| | | Tray BQM | 480 | 480 | 480 |
| | 48L TSOP 12x80mm | TnR Pin Orientation | Quadrant 2 | Quadrant 2 | Quadrant 2 |
| | | Tray Pin Orientation | Upper Right | Upper Right | Upper Right |
| | | TnR BQM | 1000 | 1000 | 1000 |
| | | Tray BQM | 96 | 96 | 96 |
| | Tray | | See Pre and Post change comparison | | |
| | Tray Packaging Method | | See Pre and Post change comparison | | |
| | Carrier Tape | | No dimensional change. See Pre and Postchange comparison | | |
| | Cove Tape | | Minor dimensional change. See Pre and Postchange comparison | | |
| | Plastic Reel | | Minor dimensional change. See Pre and Postchange comparison | | |
| | Tape and Reel Packing Method | | See Pre and Post change comparison | | |

Impacts to Data Sheet:None

Change ImpactNone

Reason for Change:To improve manufacturability by qualifying MTAI as an additional fab location.

Change Implementation Status:In Progress

Estimated First Ship Date:September 1, 2022 (date code: 2236)

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

Time Table Summary:

| | May 2022 | | | | | > | August 2022 | | | | September 2022 | | | | |
|-------------------------------|----------|--------|--------|--------|--------|---|-------------|--------|--------|--------|----------------|--------|--------|--------|--------|
| Workweek | 1 9 | 2 0 | 2 1 | 2 2 | 2 3 | | 3 2 | 3 3 | 3 4 | 3 5 | 3 6 | 3 7 | 3 8 | 3 9 | 4 0 |
| 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:May 25, 2022: Issued initial notification.

August 1, 2022: Issued final notification. Attached the Qualification Report. Provided estimated first ship date to be on September 1, 2022.

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

Attachments:

[PCN_ALAN-11ACPB068 Qualification Report.pdf](#)

[PCN_ALAN-11ACPB068_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.

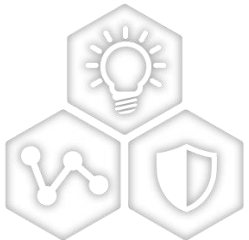
CCB 5056

Pre and Post Change Summary

PCN# ALAN-11ACPB068

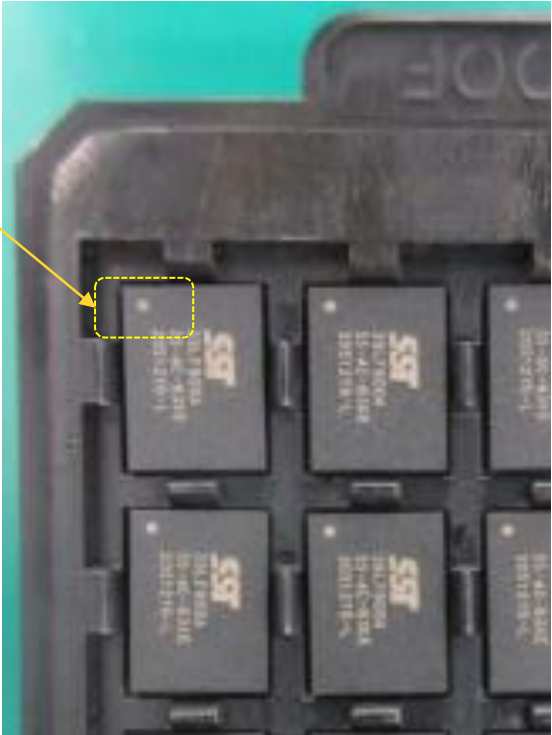



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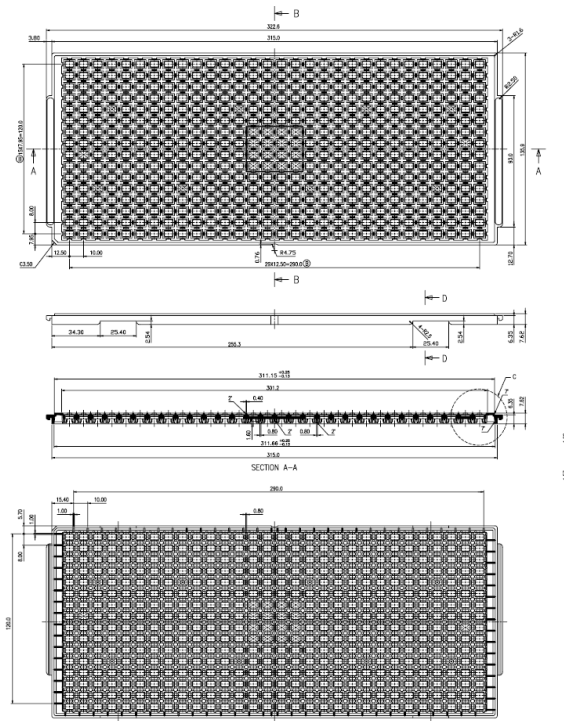
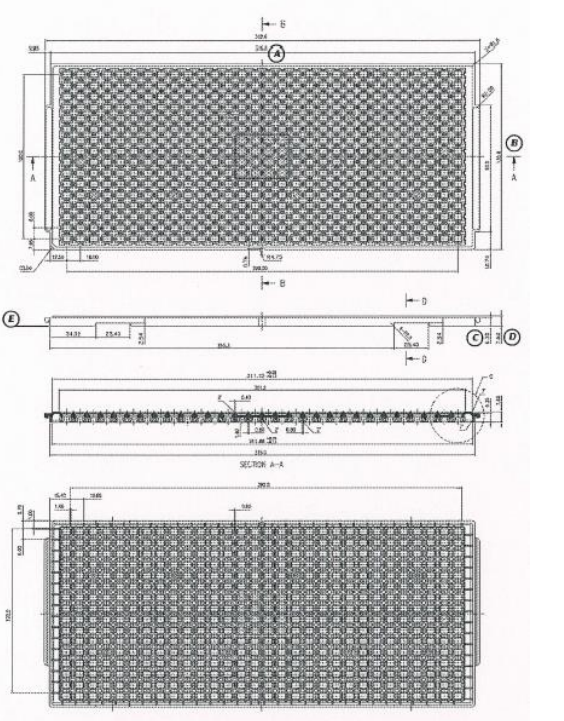
SMART | CONNECTED | SECURE

Tray Pin Orientation (8TX 48L TFBGA 6x8x1.2 mm)

| KYE | MTAI |
|--|--|
|  |  |


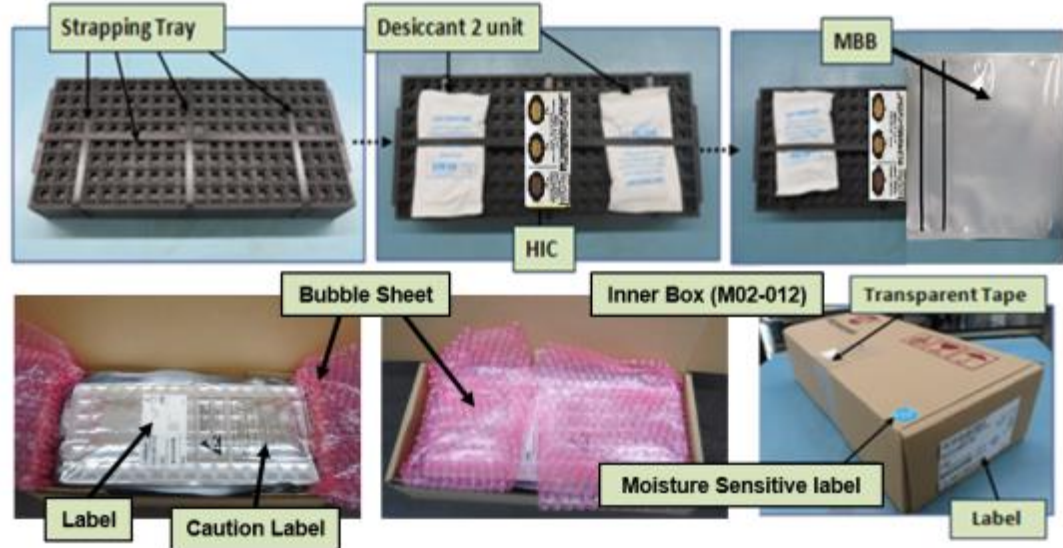
| Plant | Orientation |
|-------|-------------|
| KYE | Upper Left |
| MTAI | Upper Left |

Tray (8TX TFBGA 48L 6x8x1.2mm MSL-3)

| KYE | MTAI |
|--|---|
|  <p>Technical drawing of the KYE tray. The top view shows a rectangular grid of components with dimensions: 32.0 (width), 31.0 (height), and 30.0 (depth). The side view shows a depth of 30.0. The section view A-A shows a cross-section of the tray with dimensions: 31.0 (width), 30.0 (height), and 30.0 (depth). The section view also shows a 1.0mm gap between the tray and the component.</p> |  <p>Technical drawing of the MTAI tray. The top view shows a rectangular grid of components with dimensions: 32.0 (width), 31.0 (height), and 30.0 (depth). The side view shows a depth of 30.0. The section view A-A shows a cross-section of the tray with dimensions: 31.0 (width), 30.0 (height), and 30.0 (depth). The section view also shows a 1.0mm gap between the tray and the component.</p> |

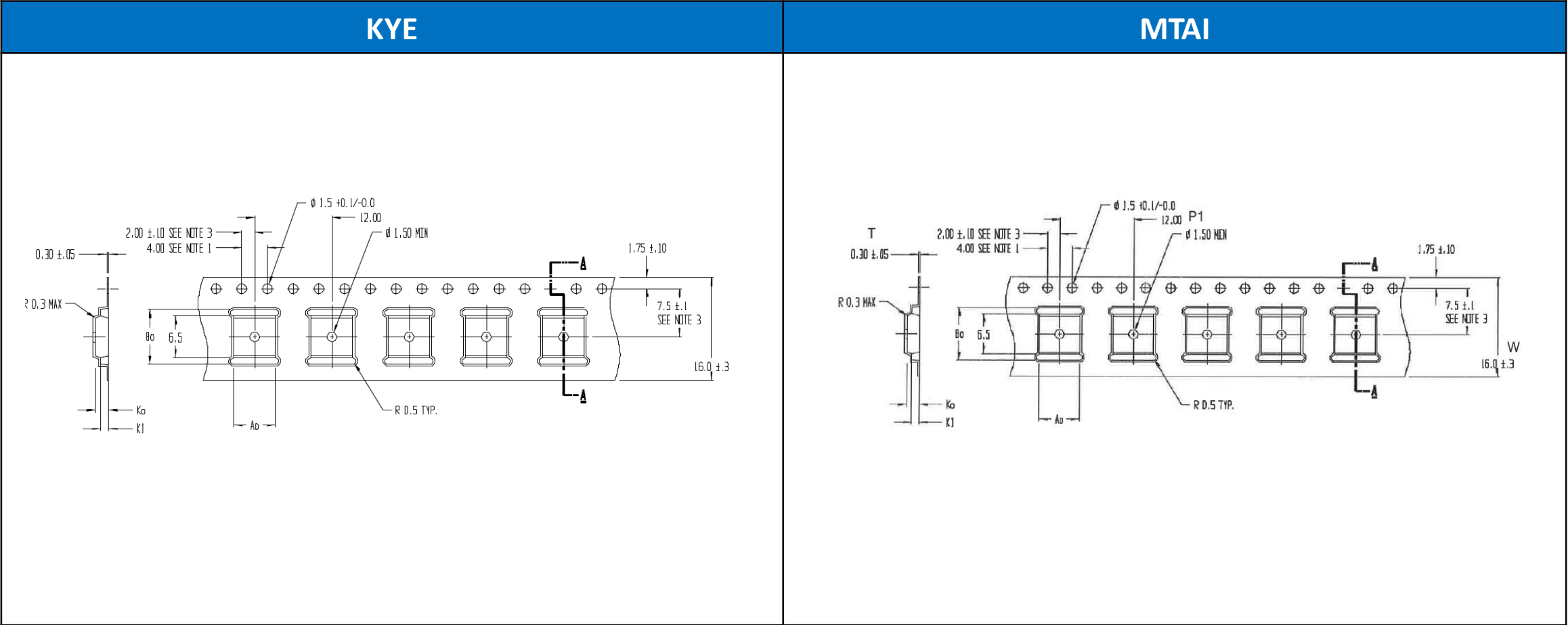
| Plant | Bakeable Temp | Row | Col | Unit per Tray | Color | Tray Stack |
|-------|---------------|-----|-----|---------------|-------|------------|
| KYE | 150C | 16 | 30 | 480 | Black | 10+1 |
| MTAI | 150C | 16 | 30 | 480 | Black | 10+1 |

TRAY Packing Method for MSL-3 (8TX 48L TFBGA 6x8x1.2 mm)

| KYE | MTAI |
|--|---|
|  |  |

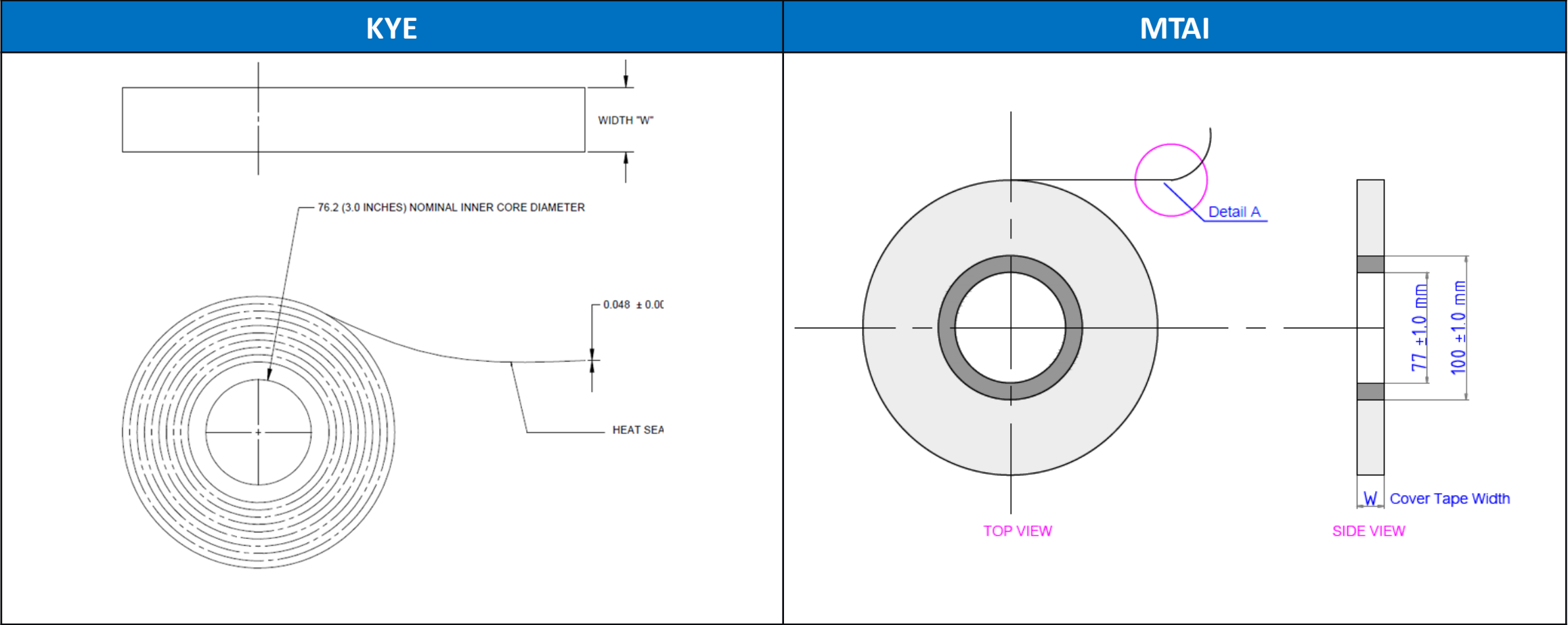
| Plant | MSL Level | Desiccant | Humidity Indicator Card | Baking Condition |
|-------|-----------|-----------|-------------------------|------------------|
| KYE | MSL-3 | 2 units | 1 pcs | 2 hours @125C |
| MTAI | MSL-3 | 2 units | 1 pcs | 2 Hours @125C |

Carrier Tape (8TX TFBGA 48L 6x8x1.2mm MSL-3)



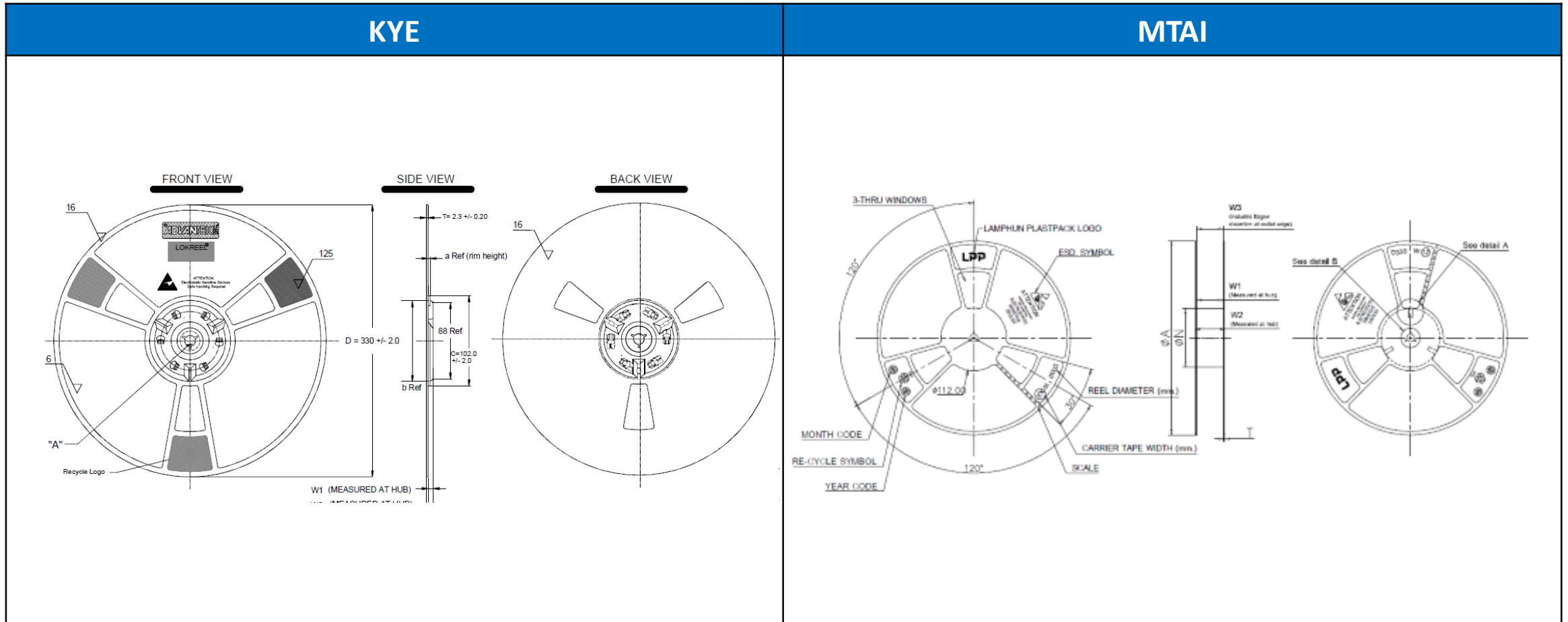
| Plant | W (mm) | P (mm) | A0 (mm) | B0 (mm) | K0 (mm) | K1 (mm) | Thickness | BQM | Pin1 |
|-------|------------|------------|-----------|-----------|-----------|-----------|-----------|------|------------|
| KYE | 16.00±0.30 | 12.00±0.10 | 6.50±0.10 | 8.50±0.10 | 2.10±0.10 | 1.30±0.10 | 0.30±0.05 | 2500 | Quadrant 1 |
| MTAI | 16.00±0.30 | 12.00±0.10 | 6.50±0.10 | 8.50±0.10 | 2.10±0.10 | 1.30±0.10 | 0.30±0.05 | 2500 | Quadrant 1 |

Cover Tape (8TX 48L TFBGA 6x8x1.2 mm)



| Plant | Package | Width W (mm.) | Thickness T (mm.) | Color | Sealing Methodology |
|-------|-----------------|---------------|-------------------|-------------|---------------------|
| KYE | TFBGA 6x8x1.2mm | 13.3 ±0.1 | 0.048 ±0.005 | Transparent | Heat Seal |
| MTAI | TFBGA 6x8x1.2mm | 13.3 ± 0.1 | 0.050 ±0.010 | Clear | Heat Seal |

Plastic Reel (8TX 48L TFBGA 6x8x1.2 mm)



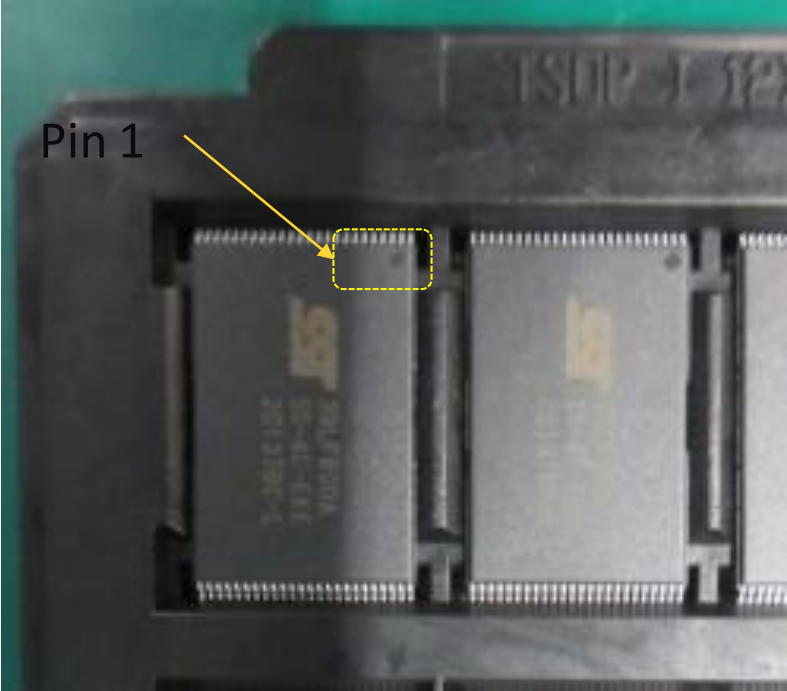
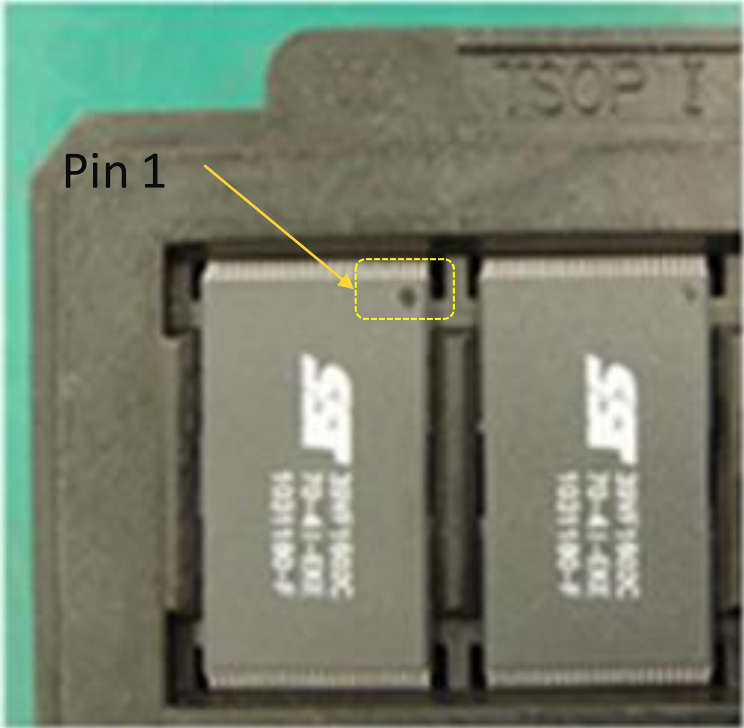
| Plant | Reel Diameter (mm.) | Reel Hub Size (mm) | Reel Width Max (mm) | Color |
|-------|---------------------|--------------------|---------------------|--------------|
| KYE | 330 ±2.0 | 102 ±2.0 | 22.2 | Regrind Blue |
| MTAI | 330 ±2.0 | 100 ±2.0 | 22.4 | Dark Blue |

Tape and Reel Packing Method for MSL-3 (8TX 48L TFBGA 6x8x1.2 mm and W9X 48L TSOP 12x80mm)

| KYE | MTAI |
|--|---|
|  |  |

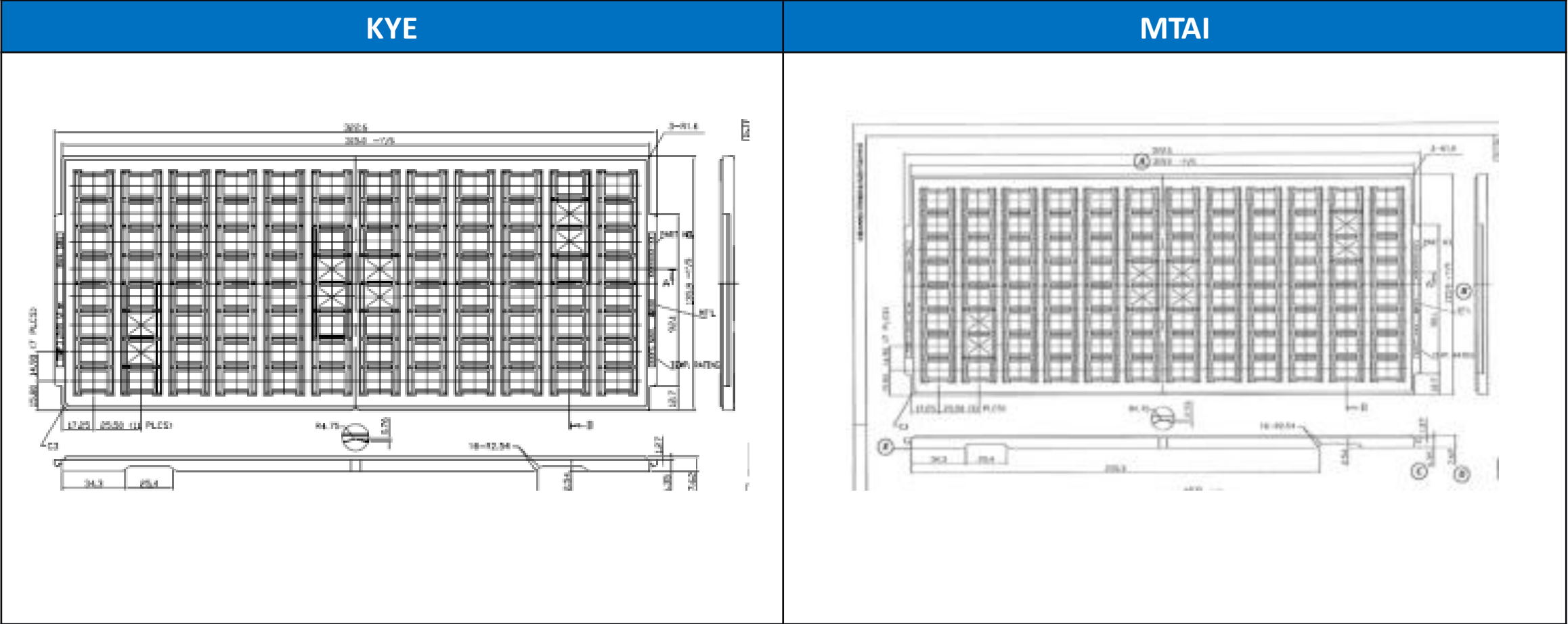
| Plant | MSL Level | Desiccant | Humidity Indicator Card | Baking Condition |
|-------|-----------|-----------|-------------------------|------------------|
| KYE | MSL-3 | 2 units | 1 pcs | 2 hours @125C |
| MTAI | MSL-3 | 2 units | 1 pcs | 2 Hours @125C |

Tray Pin Orientation (W9X 48L TSOP 12x80mm)

| KYE | MTAI |
|--|---|
|  |  |

| Plant | Orientation |
|-------|-------------|
| KYE | Upper Right |
| MTAI | Upper Right |

Tray MSL-3 (W9X 48L TSOP 12x80mm)



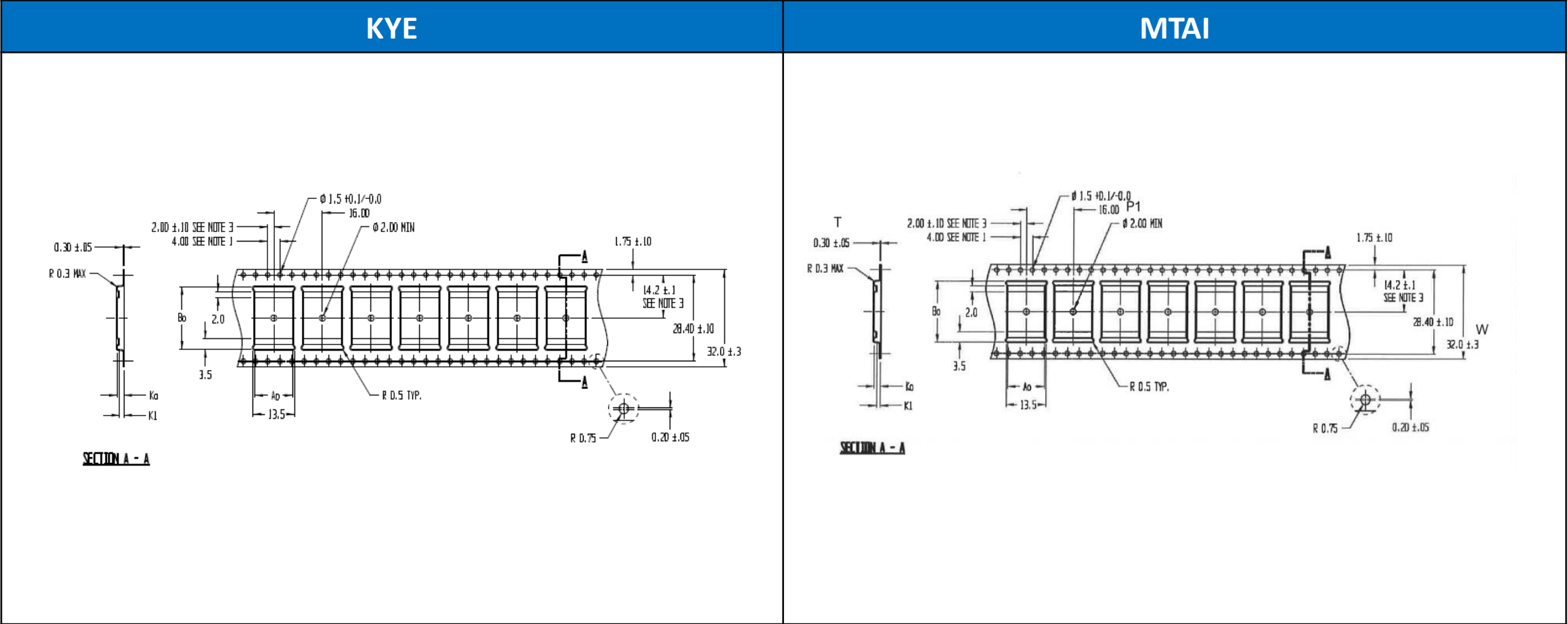
| Plant | Bakeable Temp | Row | Col | Unit per Tray | Color | Tray Stack |
|-------|---------------|-----|-----|---------------|-------|------------|
| KYE | 150C | 8 | 12 | 96 | Black | 10+1 |
| MTAI | 150C | 8 | 12 | 96 | Black | 10+1 |

TRAY Packing Method for MSL-3 (W9X 48L TSOP 12x80mm)

| KYE | MTAI |
|--|---|
|  |  |

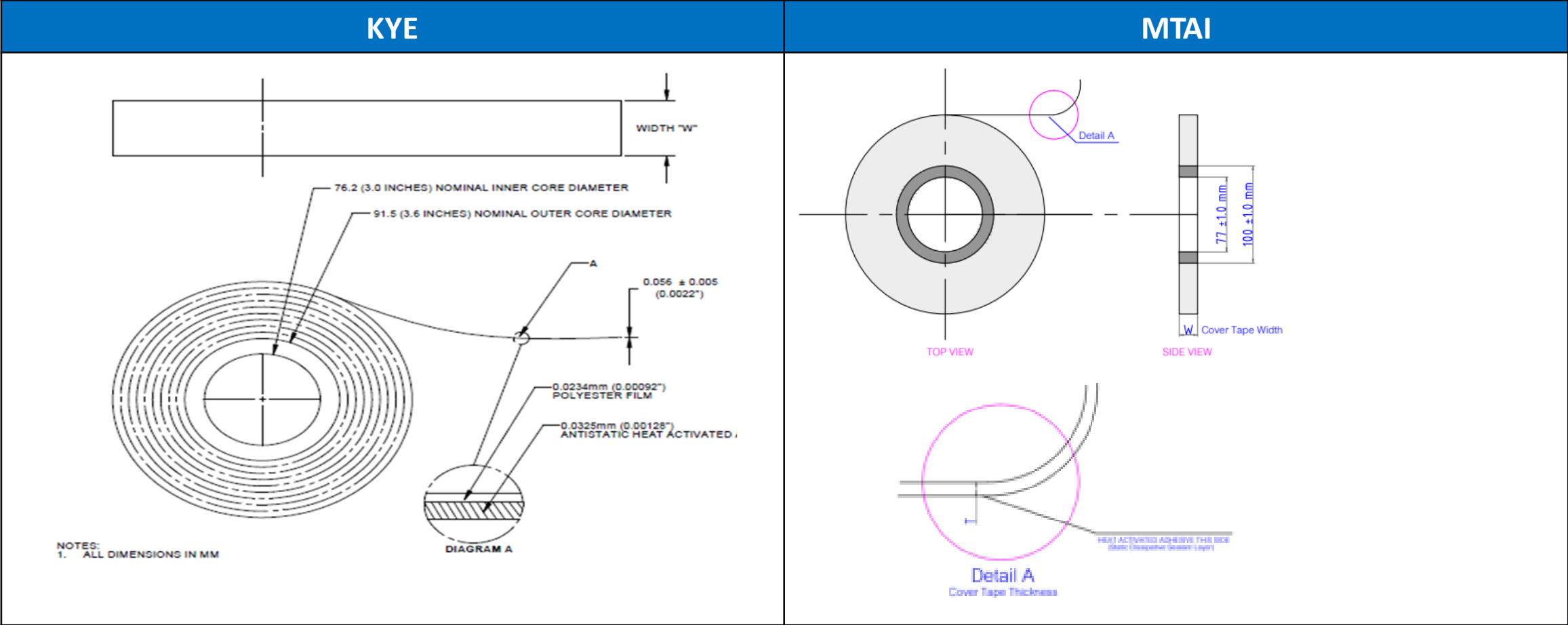
| Plant | MSL Level | Desiccant | Humidity Indicator Card | Baking Condition |
|-------|-----------|-----------|-------------------------|------------------|
| KYE | MSL-3 | 2 units | 1 pcs | 2 hours @125C |
| MTAI | MSL-3 | 2 units | 1 pcs | 2 Hours @125C |

Carrier Tape MSL-3 (W9X 48L TSOP 12x80mm)



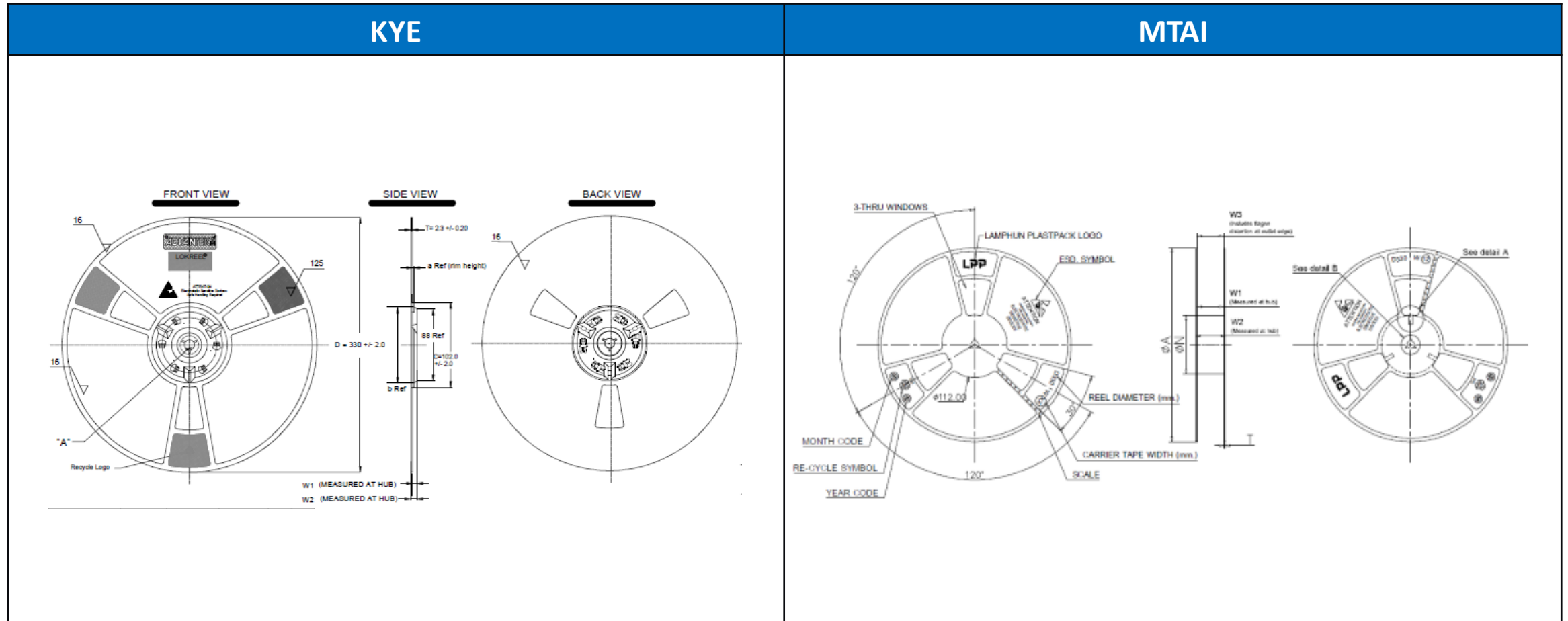
| Plant | W (mm) | P (mm) | A0 (mm) | B0 (mm) | K0 (mm) | K1 (mm) | Thickness | BQM | Pin1 |
|-------|------------|------------|------------|------------|-----------|-----------|-----------|------|------------|
| KYE | 32.00±0.30 | 16.00±0.10 | 12.50±0.10 | 20.60±0.10 | 2.10±0.10 | 1.30±0.10 | 0.30±0.05 | 1000 | Quadrant 2 |
| MTAI | 32.00±0.30 | 16.00±0.10 | 12.50±0.10 | 20.60±0.10 | 2.10±0.10 | 1.30±0.10 | 0.30±0.05 | 1000 | Quadrant 2 |

Cover Tape (W9X 48L TSOP 12x80mm)



| Plant | Width W (mm.) | Thickness T (mm.) | Color | Sealing Methodology |
|-------|---------------|-------------------|-------------|---------------------|
| KYE | 25.5±0.1 | 0.056 ±0.005 | Transparent | Heat Seal |
| MTAI | 25.5 ± 0.1 | 0.050 ±0.010 | Clear | Heat Seal |

Plastic Reel (W9X 48L TSOP 12x80mm)



| Plant | Reel Diameter (mm.) | Reel Hub Size (mm) | Reel Width Max (mm) | Color |
|-------|---------------------|--------------------|---------------------|--------------|
| KYE | 330 \pm 2.0 | 102 \pm 2.0 | 38.2 | Regrind Blue |
| MTAI | 330 \pm 2.0 | 100 \pm 2.0 | 38.4 | Dark Blue |



QUALIFICATION REPORT SUMMARY

PCN# ALAN-11ACPB068

**Date:
July 20, 2022**

Qualification of MTAI as an additional Test site location for selected SST39VF400A-70-4Cxx and SST39VF400A-70-4lxx device families available in 48L TFBGA (6x8x1.2mm) and 48L TSOP (12x20mm) packages.

Purpose: Qualification of MTAI as an additional Test site location for selected SST39VF400A-70-4Cxx and SST39VF400A-70-4Ixx device families available in 48L TFBGA (6x8x1.2mm) and 48L TSOP (12x20mm) packages.

CCB: 5056

| Test / Evaluation | Test Condition / Parameters | Results |
|------------------------|---|---------|
| Good Units Correlation | <ul style="list-style-type: none"> Take the 500 units from finish good inventory and run at MTAI only with following flow: <ul style="list-style-type: none"> 100% FT@95C. Acceptance: Zero failure. Any rejects require reasonable EFA data or approve by TE/PE base on verification result 100% QC@95C. Acceptance: Zero failure. Any rejects require reasonable EFA data or approve by TE/PE base on verification result 100% FT@-40C. Acceptance: Zero failure. Any rejects require reasonable EFA data or approve by TE/PE base on verification result 100% QC@-40C. Acceptance: Zero failure. Any rejects require reasonable EFA data or approve by TE/PE base on verification result | PASSED |
| Fresh Unit Correlation | <ul style="list-style-type: none"> Build new lot ~5 K units and run at MTAI only with following flow <ul style="list-style-type: none"> 100% FT@95C. Acceptance: Yield variant < 1% compare with KYE tested data Sampling QC@95C. Acceptance: Zero failure or reasonable EFA data 100% FT@-40C. Acceptance: Yield variant < 1% compare with KYE tested data Sampling QC@-40C. Acceptance: Zero failure or reasonable EFA data | PASSED |

ALAN-11ACPB068 - CCB 5056 Final Notice: Qualification of MTAI as an additional Test site location for selected SST39VF400A-70-4Cxx and SST39VF400A-70-4Ixx device families available in 48L TFBGA (6x8x1.2mm) and 48L TSOP (12x20mm) packages.

Affected Catalog Part Numbers (CPN)

SST39VF400A-70-4C-B3KE
SST39VF400A-70-4C-EKE
SST39VF400A-70-4I-B3KE
SST39VF400A-70-4I-EKE
SST39VF400A-70-4C-B3KE-T
SST39VF400A-70-4C-EKE-T
SST39VF400A-70-4I-B3KE-T
SST39VF400A-70-4I-EKE-T