

Product Change Notification / ALAN-11ACPB068

Date:

25-May-2022

Product Category:

Memory

PCN Type:

Manufacturing Change

Notification Subject:

CCB 5056 Initial 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 CPNs:

ALAN-11ACPB068_Affected_CPN_05252022.pdf ALAN-11ACPB068_Affected_CPN_05252022.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 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.

Pre and Post Change Summary:

| | | Pre Change | Post Change |
|--|--|------------|-------------|
|--|--|------------|-------------|

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

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 Qualification Completion Date: June 2022

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:

| | I | May | 2022 | 2 | | | June | | |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Workweek | 1 9 | 2 0 | 2 1 | 2 2 | 2 3 | 2 4 | 2 5 | 2 6 | 2 7 |
| Initial PCN Issue Date | | | | Х | | | | | |
| Qual Report Availability | | | | | | | | | Х |
| Final PCN Issue Date | | | | | | | | | Х |

Method to Identify Change: Traceability code

Qualification Plan:Please open the attachments included with this PCN labeled as PCN_#_Qual_Plan.

Revision History: May 25, 2022: 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_ALAN-11ACPB068_Pre and Post Change_Summary.pdf PCN_ALAN-11ACPB068 Qualification Plan.pdf

Please contact your local Microchip sales office with questions or concerns regarding this notification.

Terms and Conditions:

If you wish to <u>receive Microchip PCNs via email</u> please register for our PCN email service at our <u>PCN</u> home page select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the <u>PCN FAQ</u> section.

If you wish to <u>change your PCN profile</u>, including opt out, please go to the <u>PCN home page</u> select login

and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.



QUALIFICATION PLAN SUMMARY

PCN# ALAN-11ACPB068

Date: May 9, 2022

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. **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

| | Good Units Correlation: |
|------------------|---|
| | Take the 500 units from finish good inventory and run at MTAI only with following flow |
| | 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 |
| Correlation Plan | 100% QC@-40C. Acceptance: Zero failure. Any rejects require reasonable EFA data or approve by TE/PE base on verification result |
| | Fresh Unit Correlation: |
| | Build new lot ~5 K units and run at MTAI only with following flow |
| | 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 |

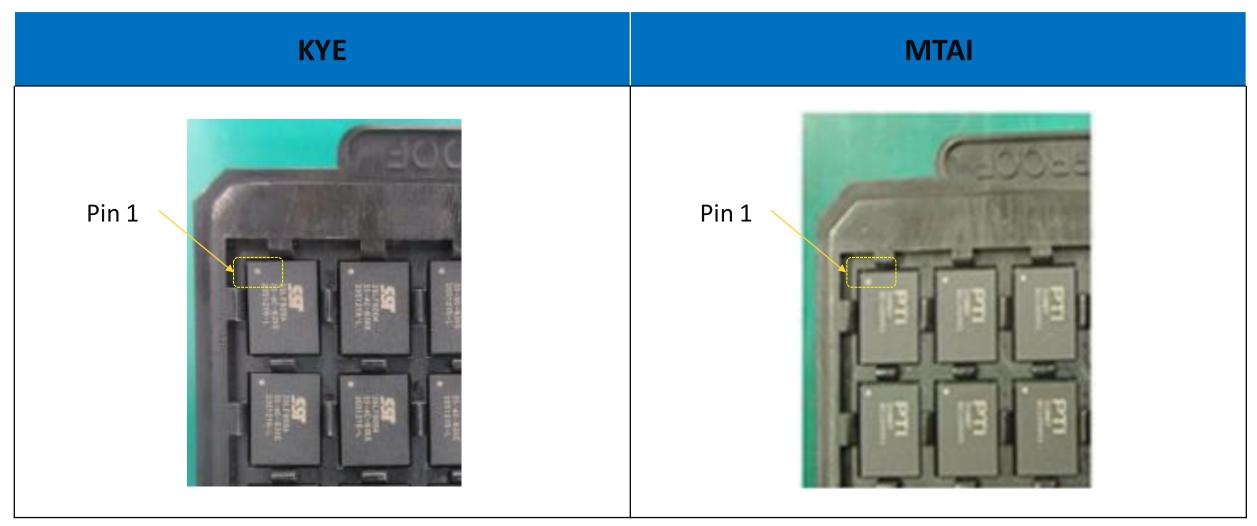
CCB 5056 Pre and Post Change Summary PCN# ALAN-11ACPB068



MICROCHIP

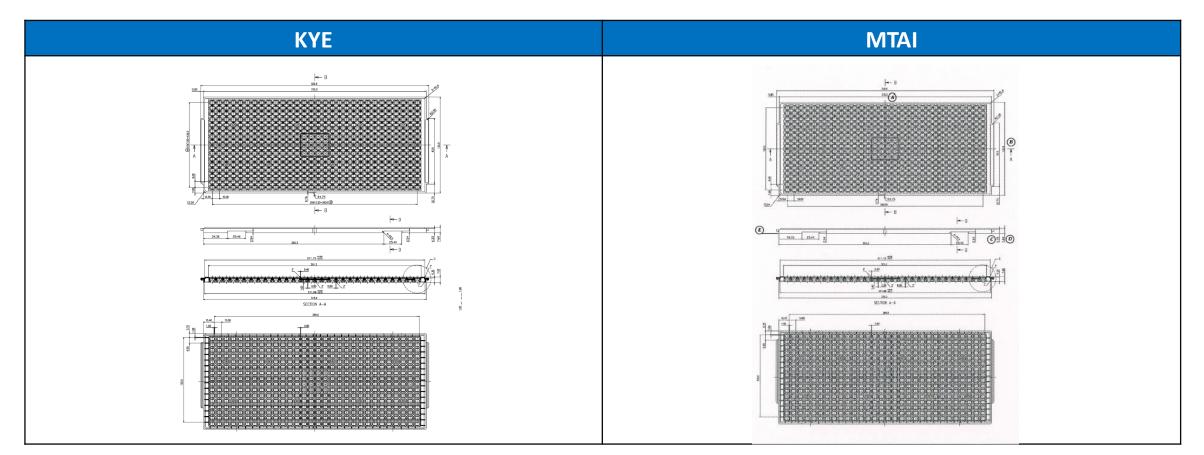


Tray Pin Orientation (8TX 48L TFBGA 6x8x1.2 mm)



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

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



| 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)



| 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)

12.00±0.10

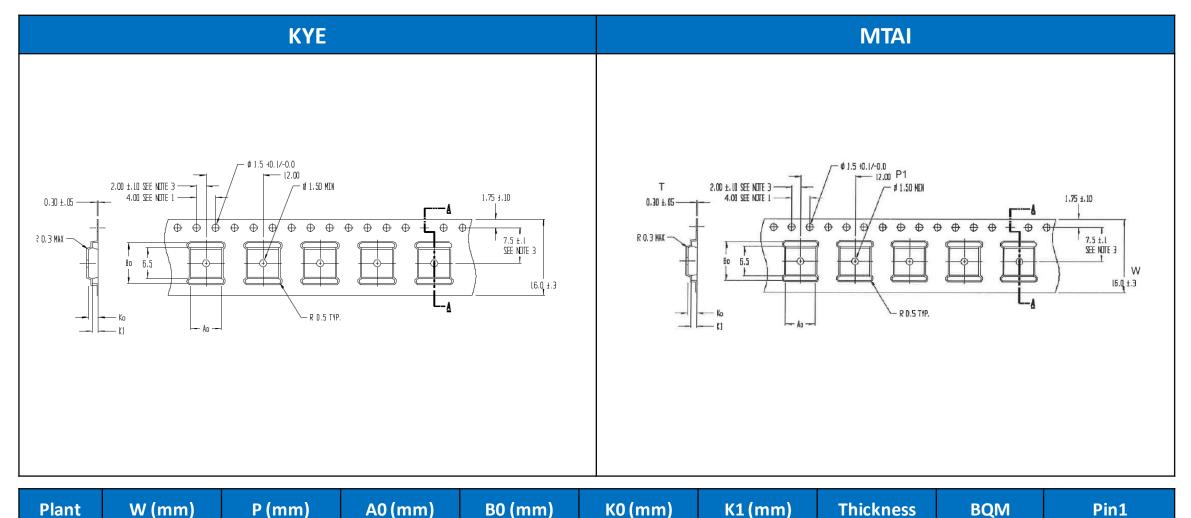
12.00±0.10

6.50±0.10

6.50±0.10

8.50±0.10

8.50±0.10



2.10±0.10

2.10±0.10

 1.30 ± 0.10

 1.30 ± 0.10

0.30±0.05

0.30±0.05

2500

2500

| | MICROCHIP |
|--|-----------|
|--|-----------|

Quadrant 1

Quadrant 1

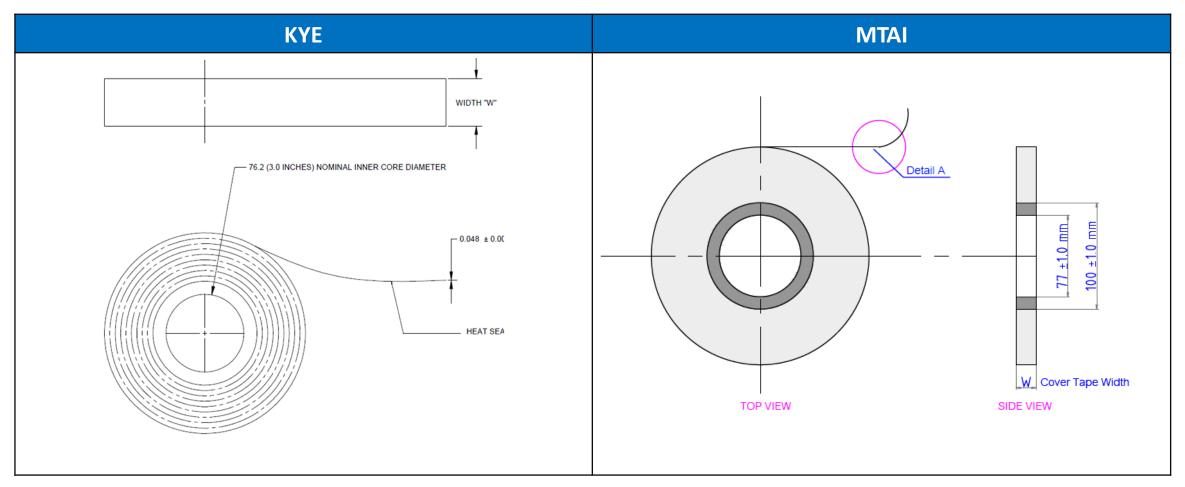
KYE

MTAI

16.00±0.30

16.00±0.30

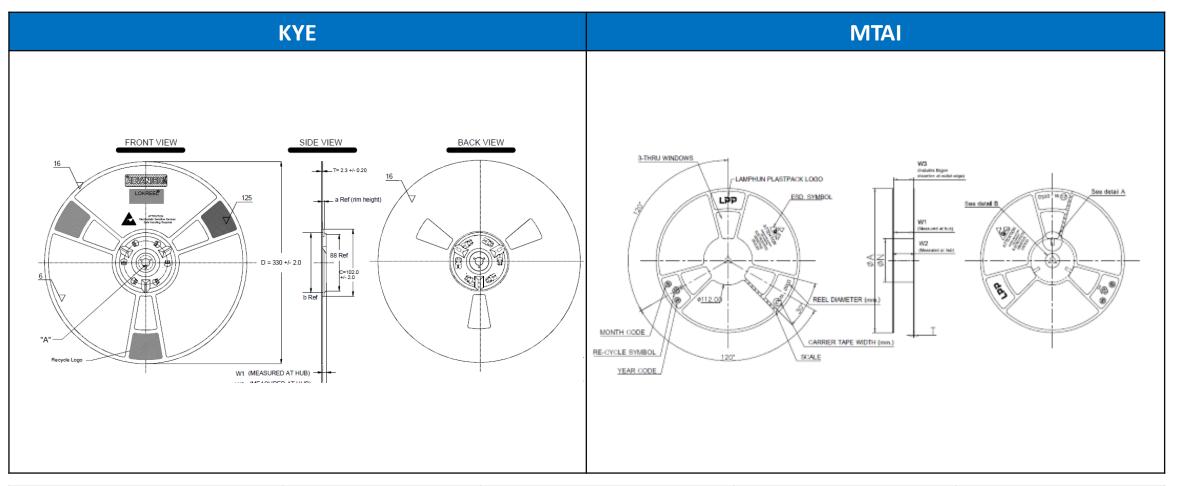
Cover Tape (8TX 48L TFBGA 6x8x1.2 mm)



| Plant | Package | Width W (mm.) | Thickness T (mm.) | Color | Sealing Methodology |
|-------|-----------------|---------------|-------------------|-------------|---------------------|
| КҮЕ | 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

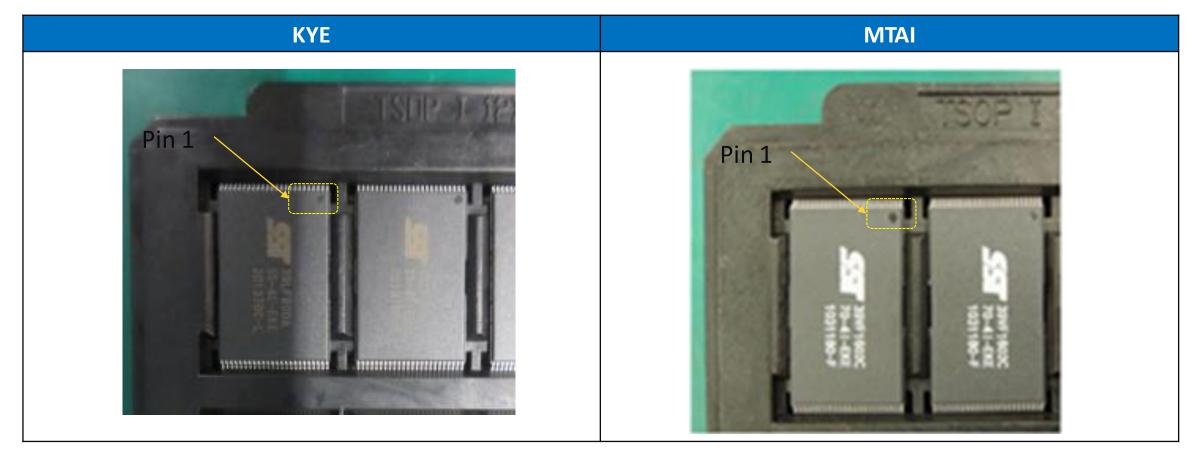
MTAI



| 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 |



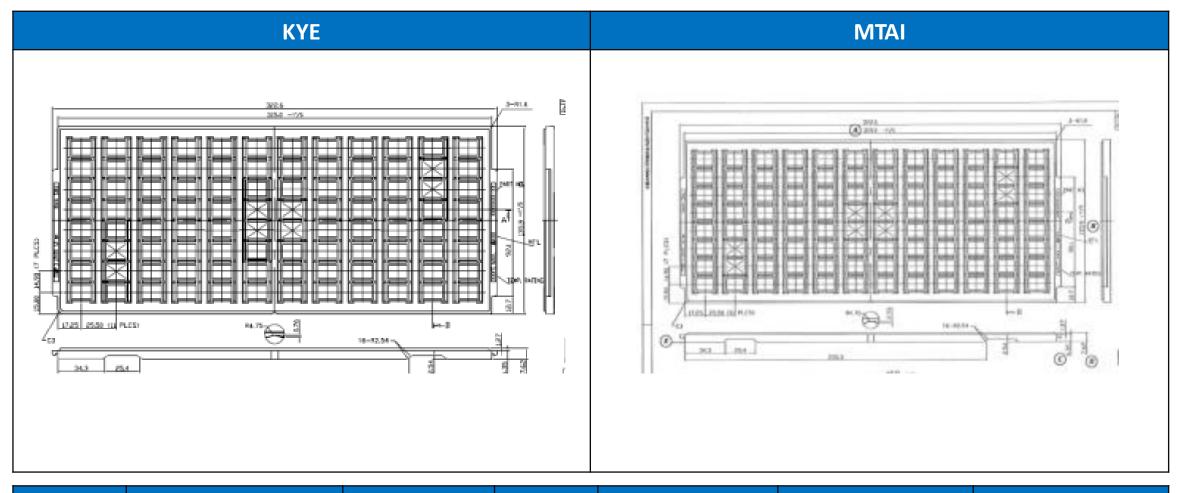
Tray Pin Orientation (W9X 48L TSOP 12x80mm)



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



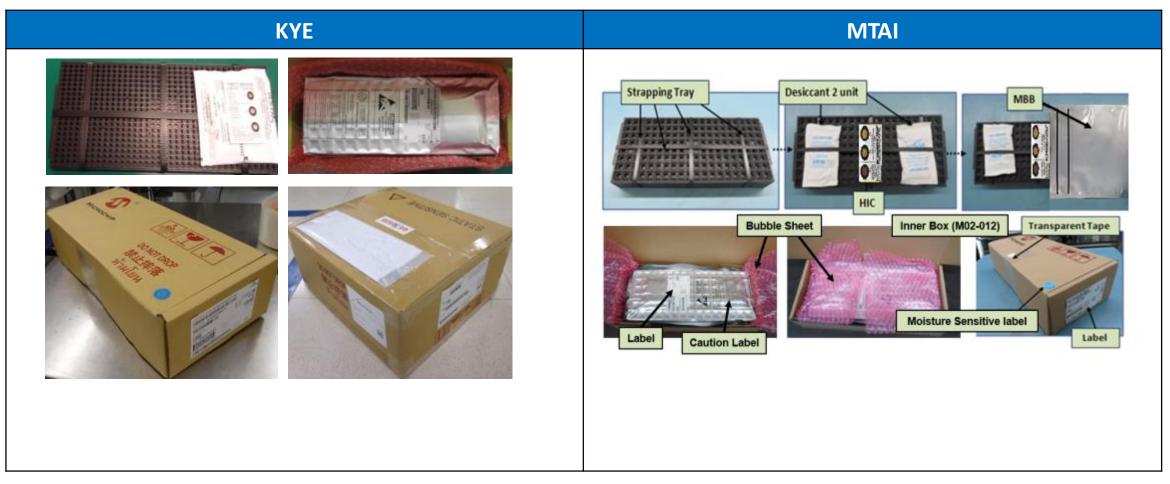
Tray MSL-3 (W9X 48L TSOP 12x80mm)



| 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 |



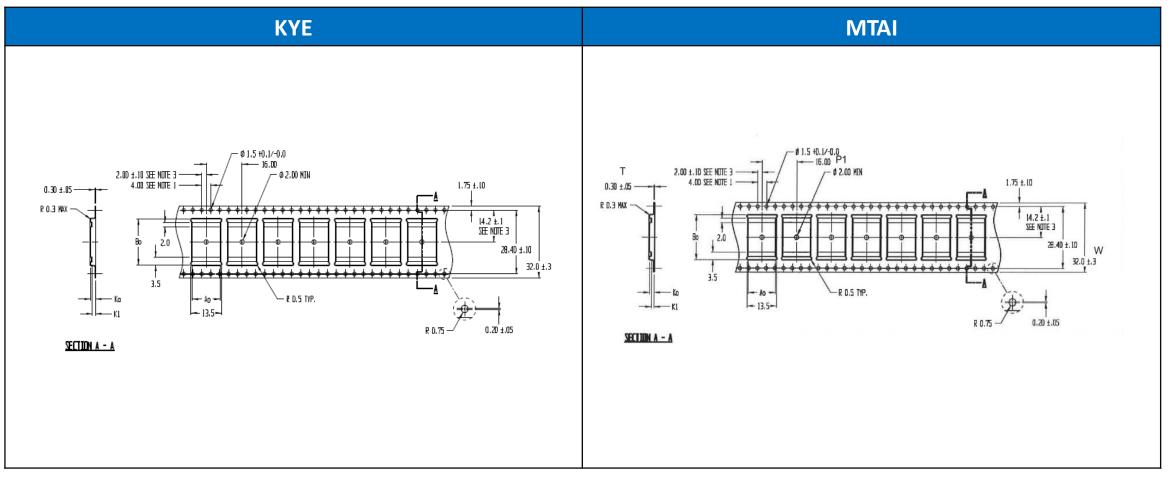
TRAY Packing Method for MSL-3 (W9X 48L TSOP 12x80mm)



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



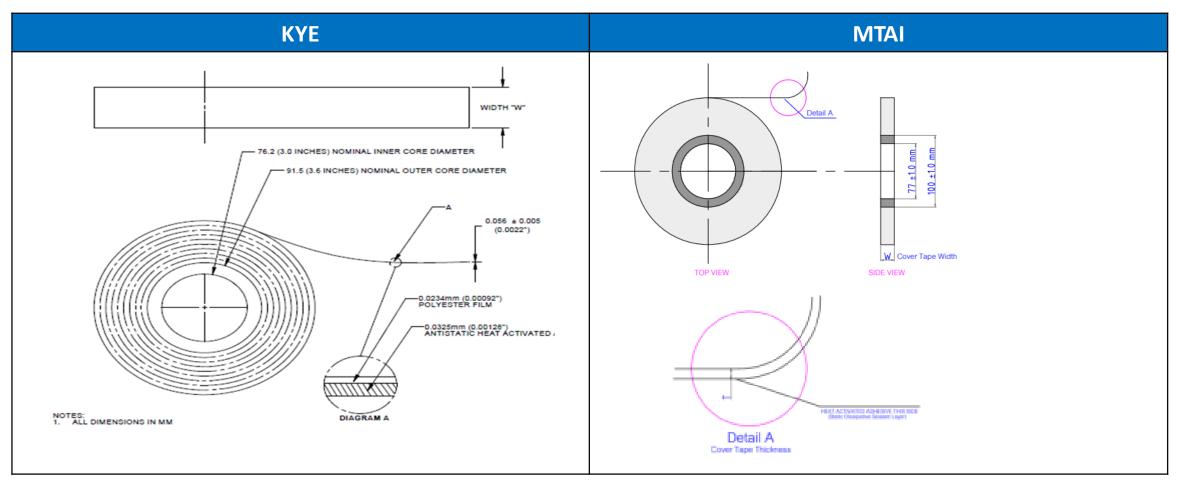
Carrier Tape MSL-3 (W9X 48L TSOP 12x80mm)



| 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 |



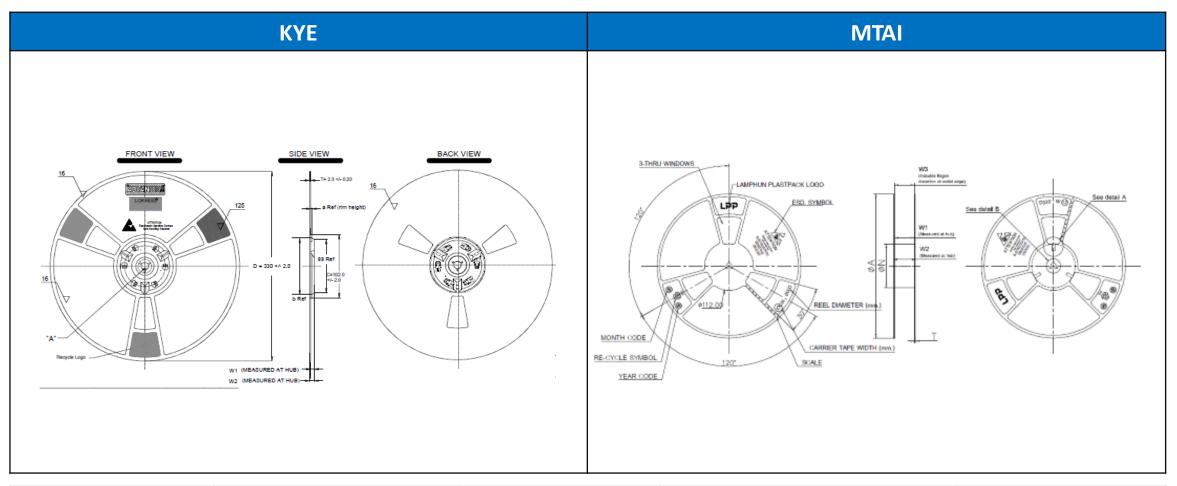
Cover Tape (W9X 48L TSOP 12x80mm)



| 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 ±2.0 | 102 ±2.0 | 38.2 | Regrind Blue |
| MTAI | 330 ±2.0 | 100 ±2.0 | 38.4 | Dark Blue |



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