



Product Change Notification / CAAN-10CRUJ529

Date:

13-Oct-2022

Product Category:

Ethernet PHYs, USB Hubs

PCN Type:

Manufacturing Change

Notification Subject:

CCB 4568.002 Final Notice: Qualification of SIGH as an additional final test site for selected KSZ9031RNxx, USB7206xx, USB7216xx and USB7252xx device families available in 48L and 100L VQFN (12x12mm and 7x7mm) package

Affected CPNs:

[CAAN-10CRUJ529_Affected_CPN_10132022.pdf](#)

[CAAN-10CRUJ529_Affected_CPN_10132022.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 SIGH as an additional final test site for selected KSZ9031RNxx, USB7206xx, USB7216xx and USB7252xx device families available in 48L and 100L VQFN (12x12mm and 7x7mm) package.

Pre and Post Change Summary:

For 100L VQFN (12x12mm) package:

		Pre Change	Post Change	
Final Test Site		Microchip Technology Thailand (HQ) (MTAI)	Microchip Technology Thailand (HQ) (MTAI)	Sigurd (Hukuo) – Taiwan (TEST) (SIGH)
Tape and Reel	Base Quantity Multiple (BQM)	2500	2500	2500
	Pin 1 Orientation	Quadrant 2 (See attached Pre and Post Comparison)		
Carrier Tape		No dimensional changes (See attached Pre and Post Comparison)		
Cover Tape		With minor dimensional changes (See attached Pre and Post Comparison)		
Plastic Reel	Dimension	With minor dimensional changes (See attached Pre and Post Comparison)		
	Color	Dark Blue	Dark Blue	Blue
Tray	Base Quantity Multiple (BQM)	168	168	168
	Pin 1 Orientation	Chamfer Side (See attached Pre and Post Comparison)		
	Dimension	No dimensional changes (See attached Pre and Post Comparison)		
	Color	Black		
Desiccant		See attached Pre and Post Comparison		
HIC		See attached Pre and Post Comparison		
Boxes		See attached Pre and Post Comparison		
Bag(s)		See attached Pre and Post Comparison		
Packing Material/Method		See attached Pre and Post Comparison		

For 48L VQFN (7x7mm) package:

		Pre Change	Post Change	
Final Test Site		Microchip Technology Thailand (HQ) (MTAI)	Microchip Technology Thailand (HQ) (MTAI)	Sigurd (Hukuo) – Taiwan (TEST) (SIGH)
Tape and Reel	Base Quantity Multiple (BQM)	1000	1000	1000
	Pin 1 Orientation	Quadrant 1 (See attached Pre and Post Comparison)		
Carrier Tape		No dimensional changes (See attached Pre and Post Comparison)		
Cover Tape		With minor dimensional changes (See attached Pre and Post Comparison)		
Plastic Reel	Dimension	With minor dimensional changes (See attached Pre and Post Comparison)		
	Color	Dark Blue	Dark Blue	Blue
Tray	Base Quantity Multiple (BQM)	260	260	260
	Pin 1 Orientation	Chamfer Side (See attached Pre and Post Comparison)		
	Dimension	No dimensional changes (See attached Pre and Post Comparison)		
	Color	Black		
Desiccant		See attached Pre and Post Comparison		
HIC		See attached Pre and Post Comparison		
Boxes		See attached Pre and Post Comparison		
Bag(s)		See attached Pre and Post Comparison		
Packing Material/Method		See attached Pre and Post Comparison		

Impacts to Data Sheet:None

Change Impact:None

Reason for Change:To improve manufacturability and on-time delivery performance by qualifying SIGH as an additional final test site.

Change Implementation Status:In Progress

Estimated First Ship Date:November 7, 2022 (date code: 2246)

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

Time Table Summary:

	October 2022					November 2022				
Workweek	40	41	42	43	44	45	46	47	48	49
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:October 13, 2022: Issued final notification. Attached the Qualification Report. Provided estimated first ship date to be on November 7, 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_CAAAN-10CRUJ529_Pre and Post Change Summary \(1\).pdf](#)

[PCN_CAAAN-10CRUJ529_Pre and Post Change Summary \(2\).pdf](#)

[PCN_CAAAN-10CRUJ529_Qualification Report.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.



MICROCHIP

QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN #: CAAN-10CRUJ529

Date
October 04, 2022

Qualification of SIGH as an additional final test site for MEC1515H-D0-I/NB catalog part number (CPN) available in 132L DQFN (11x11x0.9 mm) package. The qualification of SIGH as an additional final test site for selected KSZ9031RNxx, USB7206xx, USB7216xx and USB7252xx device families available in 48L and 100L VQFN (12x12mm and 7x7mm) package will qualify by similarity (QBS).

Purpose: Qualification of SIGH as an additional final test site for MEC1515H-D0-I/NB catalog part number (CPN) available in 132L DQFN (11x11x0.9 mm) package. The qualification of SIGH as an additional final test site for selected KSZ9031RNxx, USB7206xx, USB7216xx and USB7252xx device families available in 48L and 100L VQFN (12x12mm and 7x7mm) package will qualify by similarity (QBS).

CCB#: 4568.002

Test / Evaluation	Test Conditions / Parameters	Results
50 KGU test comparison	Select 50 good sample - test using the original platform and retest using destination platform.	Pass
Yield correlation Fresh lot run	Lot Validation, Good vs. rejects comparison. Lot quantity is 3,000 units. Test using the new test location platform. Then cross correlate with original test location platform.	Pass

CCB 4568.002
Pre and Post Change Summary
PCN #:CAAN-10CRUJ529

48L VQFN (7x7mm) package

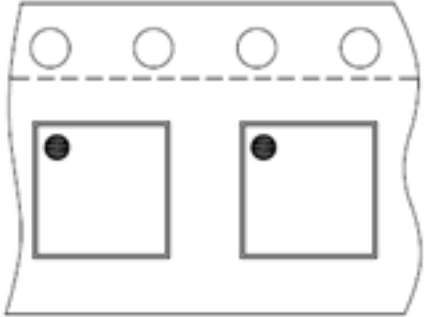
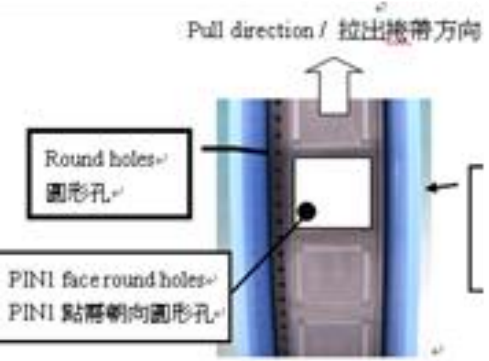


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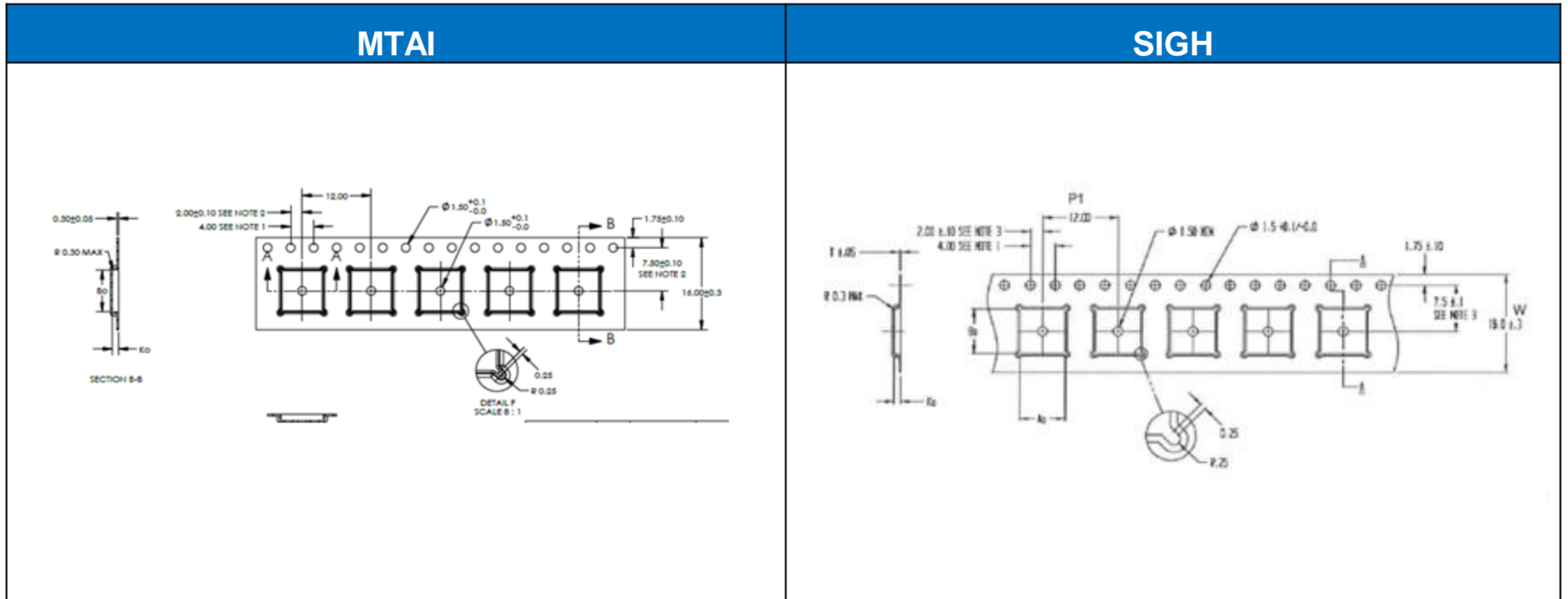


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Tape and Reel

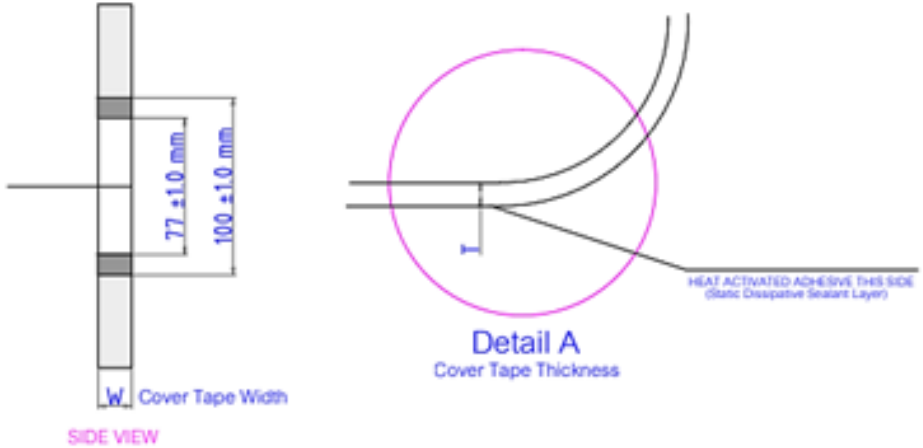
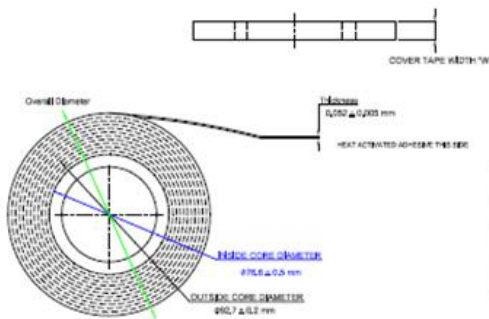
	MTAI	SIGH
Base Quantity Multiple (BQM)	1000	1000
Pin 1 orientation	 <p>Quadrant 1</p>	 <p>Quadrant 1</p>

Tape and Reel - Carrier Tape



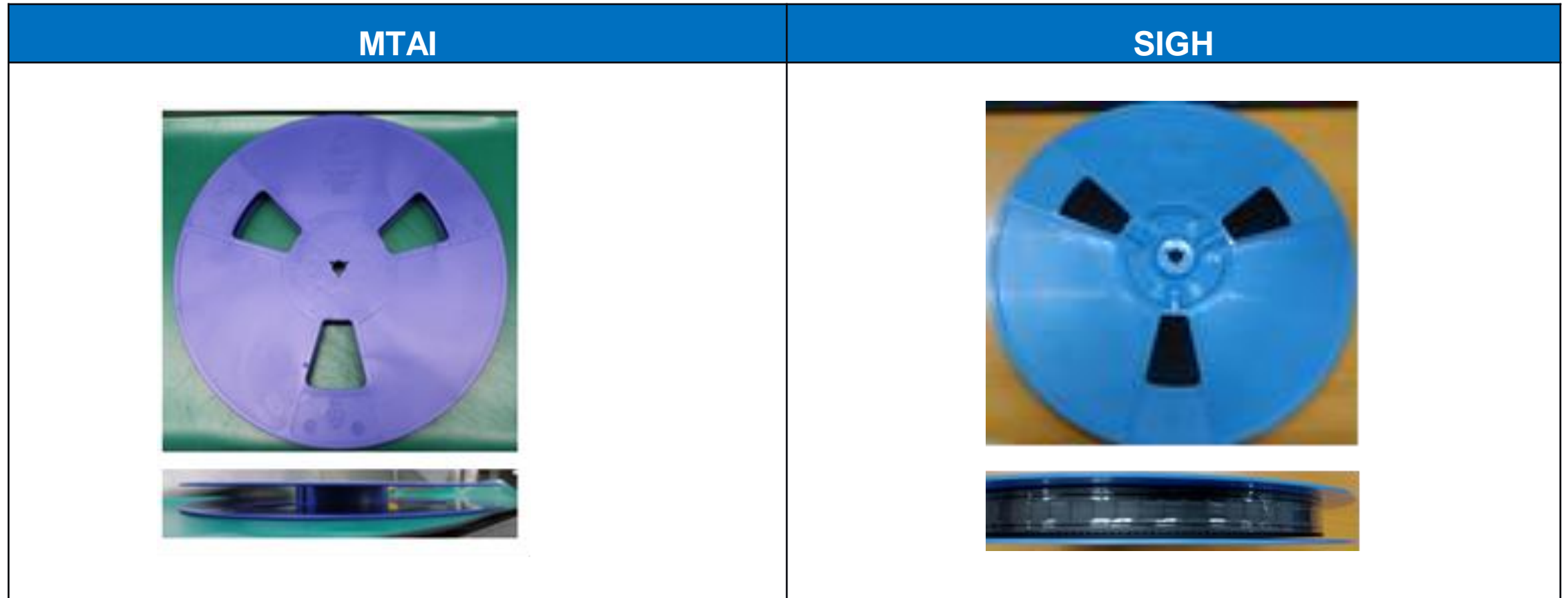
Plant	W (mm.)	P (mm.)	A0 (mm.)	B0 (mm.)	K0 (mm.)	Thickness (mm.)	Color
MTAI	16.00 +/-0.3 mm	12.00 +/-0.1 mm	7.25 +/- 0.1 mm	7.25 +/- 0.1 mm	1.10 +/- 0.1 mm	0.30 +/- 0.05 mm	Black
SIGH	16.00 +/-0.3 mm	12.00 +/-0.1 mm	7.25 +/- 0.1 mm	7.25 +/- 0.1 mm	1.10 +/- 0.1 mm	0.30 +/- 0.05 mm	Black

Tape and Reel - Cover Tape

MTAI	SIGH																
 <p>The MTAI diagrams show a side view of the cover tape with a width of 77 ± 1.0 mm and a total length of 100 ± 1.0 mm. A detail view, labeled 'Detail A', shows the cover tape thickness T and the heat-activated adhesive layer on the side, which is a static dissipative sealant layer.</p>	 <p>The SIGH diagrams show a side view of the cover tape with a width W and a thickness T of 0.052 ± 0.005 mm. A top view of the reel shows the overall diameter, inner core diameter ($\phi 76.6 \pm 0.5$ mm), and outer core diameter ($\phi 90.7 \pm 0.2$ mm). A table lists the part numbers, widths, and lengths for various SIGH models.</p> <table border="1" data-bbox="1923 621 2204 749"> <thead> <tr> <th>Part Number</th> <th>Width (mm)</th> <th>Length (M)</th> </tr> </thead> <tbody> <tr> <td>HU20204-xxxx-xxxx</td> <td>5.4</td> <td rowspan="6">300</td> </tr> <tr> <td>HU20203-xxxx-xxxx</td> <td>6.3</td> </tr> <tr> <td>HU20213-xxxx-xxxx</td> <td>13.3</td> </tr> <tr> <td>HU20219-xxxx-xxxx</td> <td>21.3</td> </tr> <tr> <td>HU20239-xxxx-xxxx</td> <td>35.3</td> </tr> <tr> <td>HU20485-xxxx-xxxx</td> <td>48.3</td> </tr> </tbody> </table> <p>NOTE: 1. Width tolerance ± 0.10 mm 2. Please refer to Tech Bulletins for related properties 3. Core width dimension refer to below table</p>	Part Number	Width (mm)	Length (M)	HU20204-xxxx-xxxx	5.4	300	HU20203-xxxx-xxxx	6.3	HU20213-xxxx-xxxx	13.3	HU20219-xxxx-xxxx	21.3	HU20239-xxxx-xxxx	35.3	HU20485-xxxx-xxxx	48.3
Part Number	Width (mm)	Length (M)															
HU20204-xxxx-xxxx	5.4	300															
HU20203-xxxx-xxxx	6.3																
HU20213-xxxx-xxxx	13.3																
HU20219-xxxx-xxxx	21.3																
HU20239-xxxx-xxxx	35.3																
HU20485-xxxx-xxxx	48.3																

Plant	Width W (mm.)	Thickness T (mm.)	Color
MTAI	13.3 ± 0.1 mm	0.050 ± 0.010 mm	Clear
SIGH	13.3 ± 0.1 mm	0.052 ± 0.005 mm	Clear

Plastic Reel



Plant	Reel Diameter (mm.)	Reel Hub Size (mm)	W1	W2 (Max)	Color
MTAI	330mm	100mm	16.40mm	22.40mm	Dark Blue
SIGH	330mm	100mm	16.8mm	22.2mm	Blue

Tape and Reel - Desiccant

MTAI

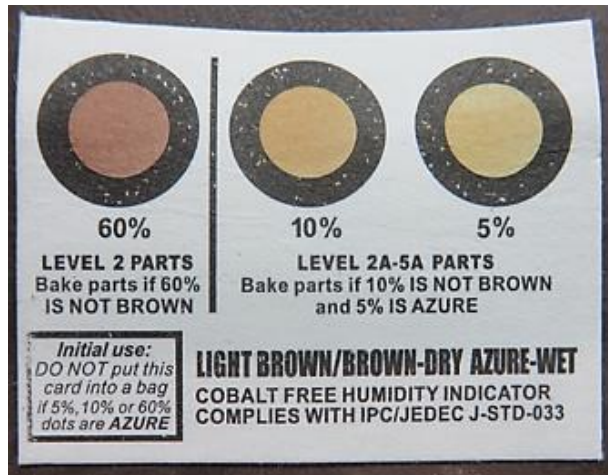


SIGH



Tape and Reel - HIC

MTAI

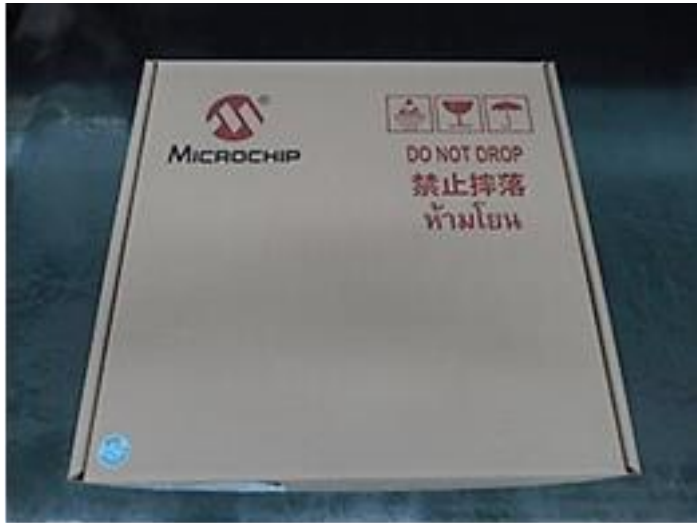


SIGH



Tape and Reel - Boxes

MTAI



SIGH



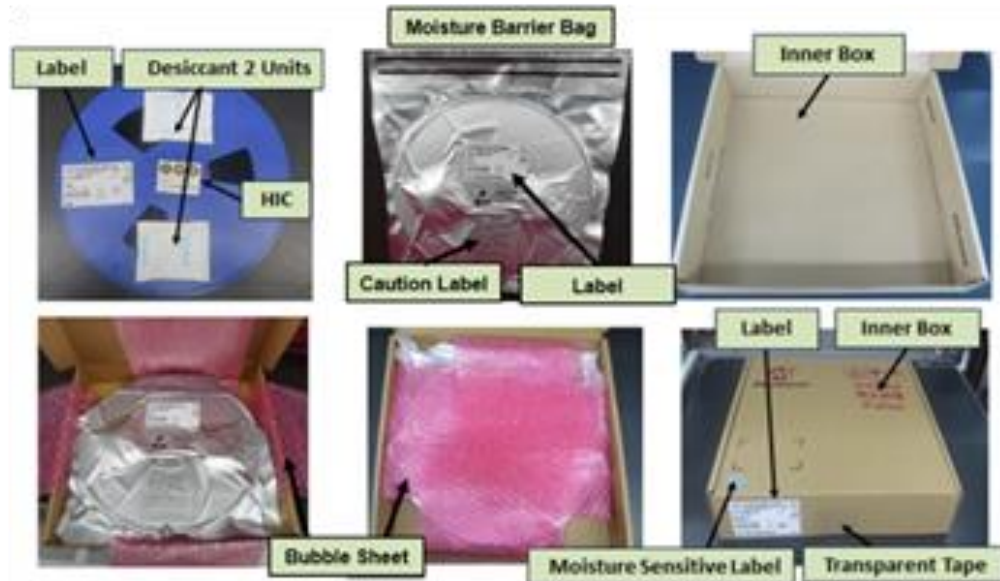
Tape and Reel - Bag(s)

MTAI	SIGH
 A white, rectangular, moisture barrier bag (MTAI) with a clear window at the top. It features a large, detailed label in the center with a biohazard symbol and various technical specifications and handling instructions.	  A white, rectangular, moisture barrier bag (SIGH) with a clear window at the top. It features a smaller label in the center with a biohazard symbol and technical specifications. To the right of the bag is a separate, larger label with the heading "CAUTION" and "This bag contains MOISTURE SENSITIVE DEVICES". The label includes a list of instructions for handling and storage, a biohazard symbol, and a quantity of "3" units.

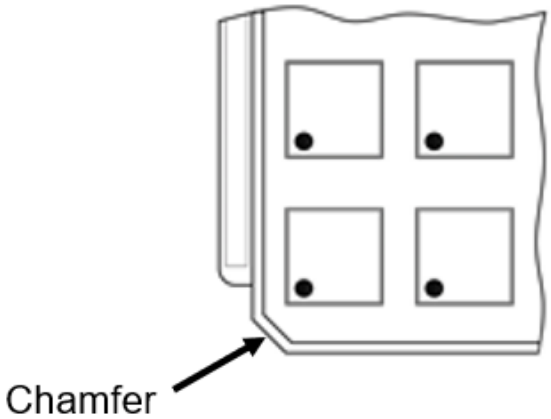
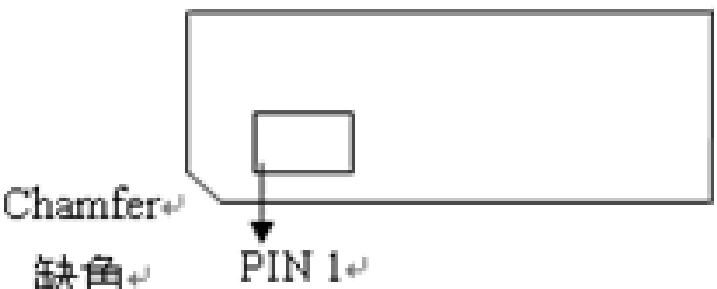
Tape & Reel - Packing Material/Method

MTAI

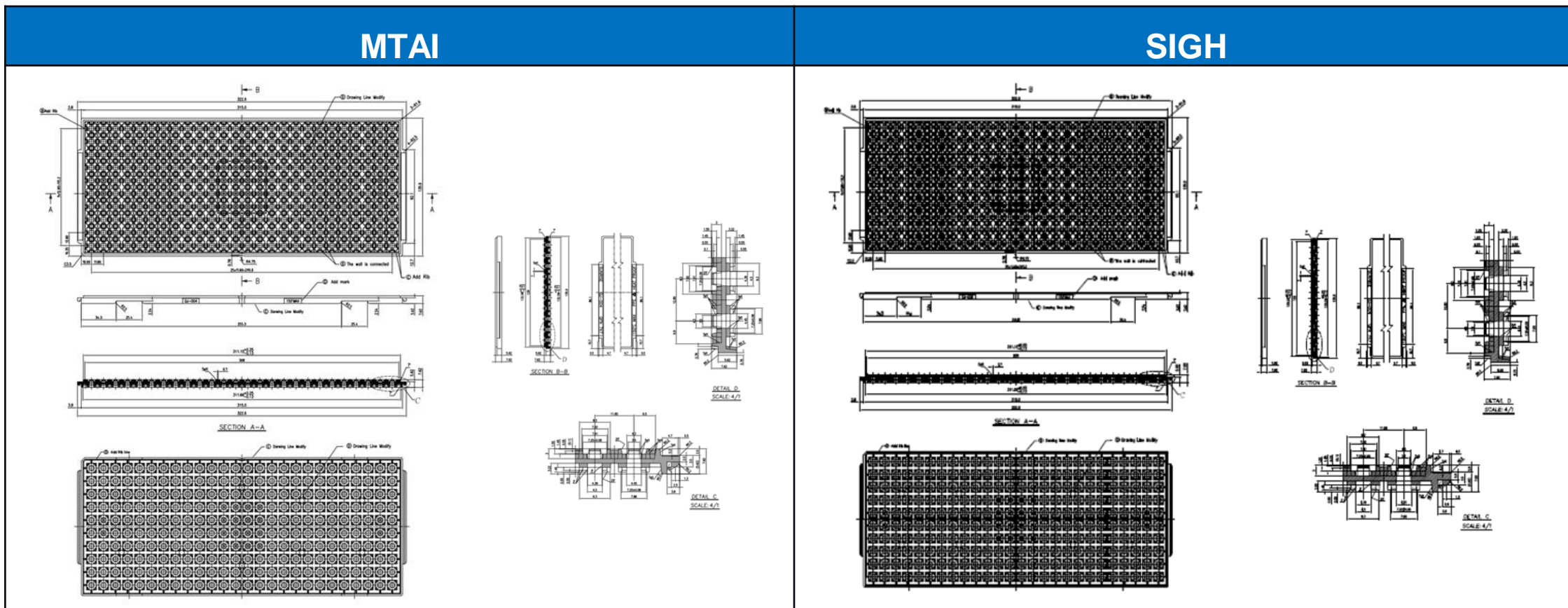
SIGH



Tray

	MTAI	SIGH
Base Quantity Multiple (BQM)	260	260
Pin 1 orientation	 <p>Chamfer</p>	 <p>Chamfer 缺角 PIN 1</p>

Tray



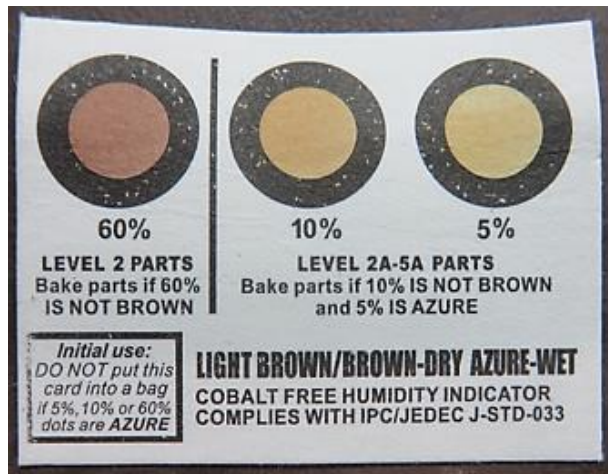
Plant	Row	Col	Pocket per Tray	Color
MTAI	10	26	260	Black
SIGH	10	26	260	Black

Tray- Desiccant

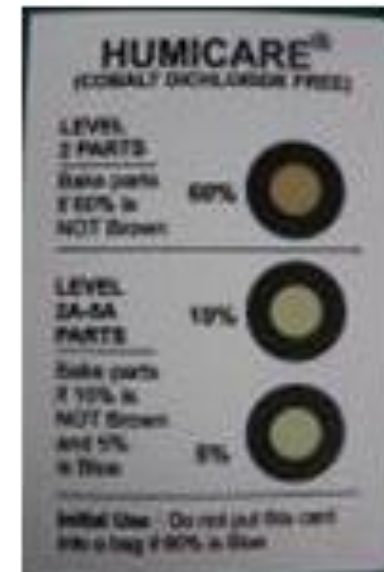
MTAI	SIGH
 <p>A white rectangular desiccant bag with black text. At the top, it reads 'SPECIFICATION MIL-D-3464 TYPE I & II'. Below that, a blue box contains the text 'CONTENTS 1 UNIT'. Underneath, it says 'DO NOT EAT - NO RESAULTS - NO COBALT'. The word 'DESICCANT' is printed in large letters. Below that, it says 'ACTIVATED, BAGGED, PACKAGE USE AND STATIC DEHUMIDIFICATION'. Another 'SPECIFICATION MIL-D-3464 TYPE I & II' is printed. Below that, 'REACTIVATION TIME IN BAG 16 HOURS AT 245 °F'. A second blue box contains 'CONTENTS 1 UNIT'. At the bottom, it says 'DO NOT EAT - NO RESAULTS - NO COBALT'.</p>	 <p>A white rectangular desiccant bag with black text. At the top, it reads 'PACKAGED BY TAICHIANG CHEMICAL IND. CO., LTD.'. Below that, 'CLARIANT' is printed in large letters. The main text reads 'DESI PAK' followed by 'DESICCANT MEETS MIL-D-3464 TYPE I & II REACTIVATION TIME IN BAG 16 HOURS AT 245 °F'. Below this, it says 'CONTENTS 1 UNIT' and 'DO NOT EAT'. To the right, it says 'PACKAGE USE AND STATIC DEHUMIDIFICATION'. Below that, it says 'COBALT DICHLORIDE FREE' and 'PACKAGED BY TAICHIANG CHEMICAL IND. CO., LTD.'. At the bottom, 'DESI PAK' and 'CLARIANT' are printed again.</p>

Tray- HIC

MTAI



SIGH



Tray- Boxes

MTAI



SIGH



Tray- Bag(s)

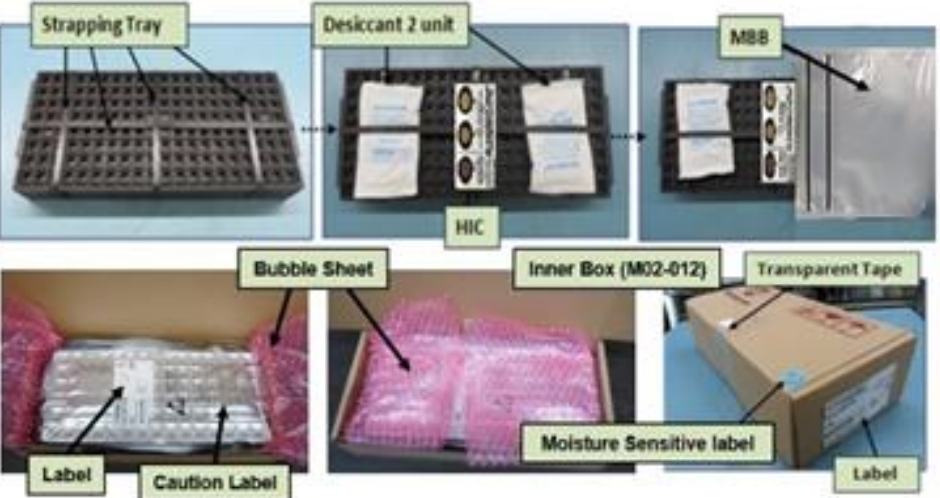

MTAI



SIGH



Tray - Packing Material/Method

MTAI	SIGH
 <p>The MTAI packing process involves several steps: starting with a strapping tray, adding two units of desiccant and an HIC label, then adding an MBB label. The tray is then wrapped in a bubble sheet, placed inside an inner box (M02-012) with a moisture sensitive label, and finally sealed with transparent tape and labeled.</p>	 <p>The SIGH packing method shows a tray wrapped in pink bubble wrap, placed inside an open cardboard box.</p>

CCB 4568.002
Pre and Post Change Summary
PCN #:CAAN-10CRUJ529

100L VQFN (12x12mm) package

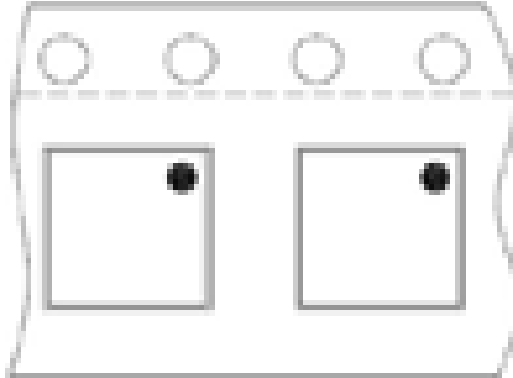
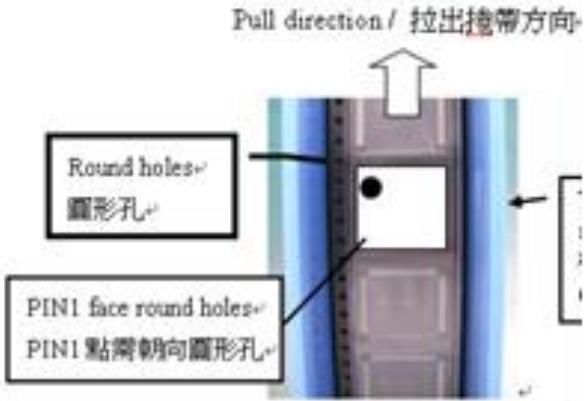


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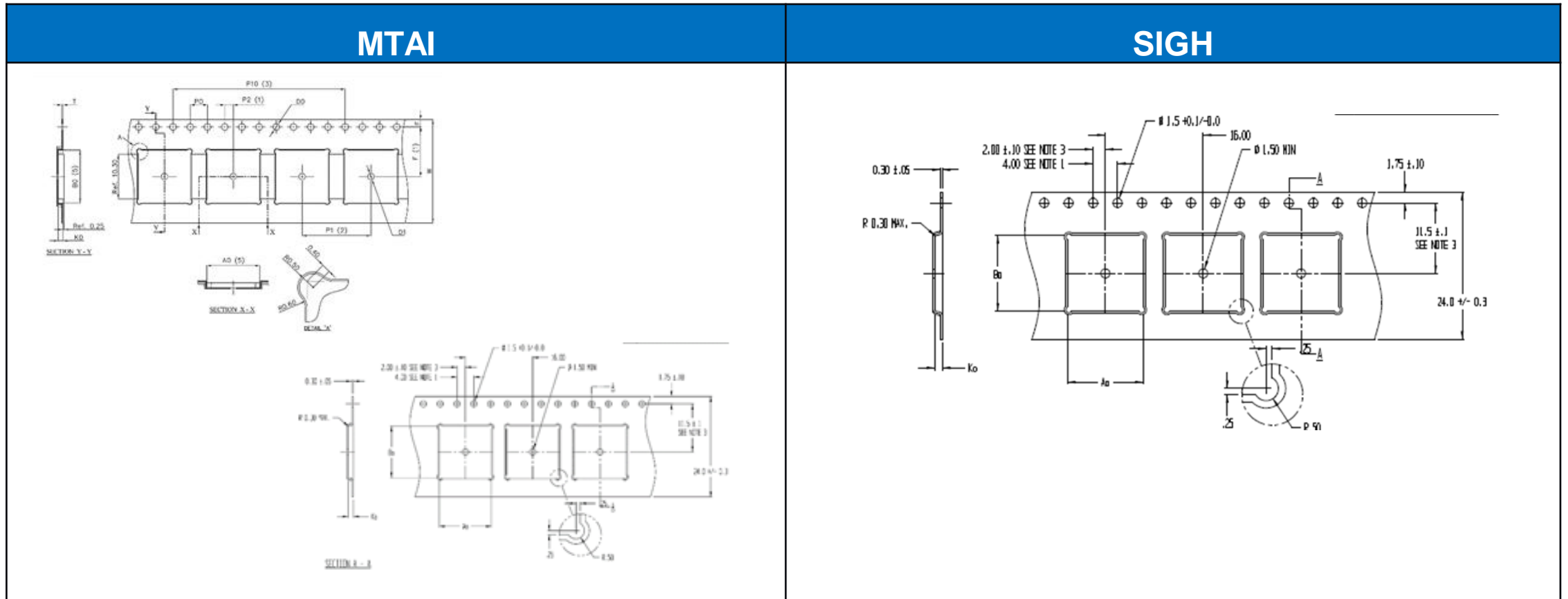


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Tape and Reel

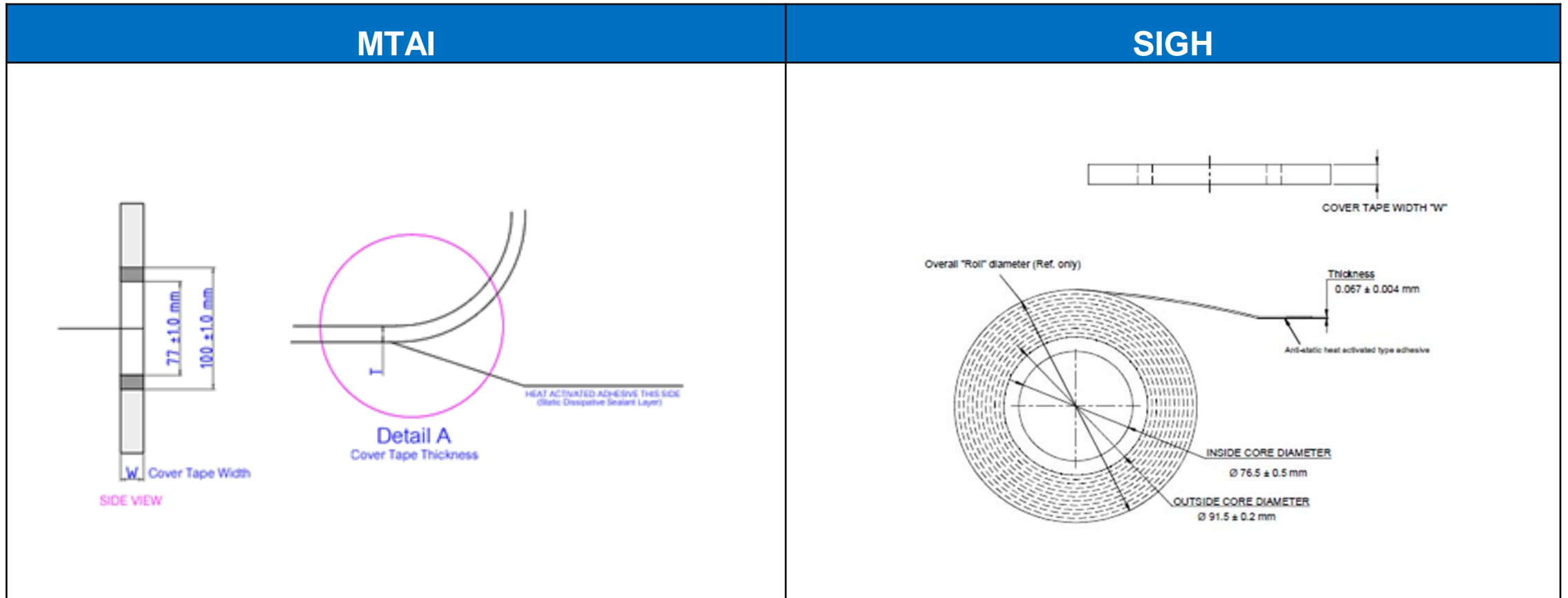
	MTAI	SIGH
Base Quantity Multiple (BQM)	2500	2500
Pin 1 orientation	 <p>Quadrant 2</p>	 <p>Quadrant 2</p>

Tape and Reel - Carrier Tape





Plant	W (mm.)	P (mm.)	A0 (mm.)	B0 (mm.)	K0 (mm.)	Thickness (mm.)	Color
MTAI	24.00 +/- 0.3 mm	16.00 +/- 0.1 mm	12.40 +/- 0.1 mm	12.40 +/- 0.1 mm	1.20 +/- 0.1 mm	0.30 +/- 0.05 mm	Black
SIGH	24.00 +/- 0.3 mm	16.00 +/- 0.1 mm	12.40 +/- 0.1 mm	12.40 +/- 0.1 mm	1.20 +/- 0.1 mm	0.30 +/- 0.05 mm	Black

Tape and Reel - Cover Tape



Plant	Width W (mm.)	Thickness T (mm.)	Color
MTAI	21.0+/-0.1 mm	0.050 +/- 0.010 mm	Clear
SIGH	21.3+/-0.1 mm	0.067 +/- 0.004 mm	Clear

Plastic Reel

MTAI	SIGH
 A dark blue plastic reel with a central hub and three large, triangular-shaped cutouts. The reel is shown from a top-down perspective, resting on a silver metal base.	 A light blue plastic reel with a central hub and three large, triangular-shaped cutouts. The reel is shown from a top-down perspective, resting on a yellow surface.

Plant	Reel Diameter (mm.)	Reel Hub Size (mm)	W1	W2 (Max)	Color
MTAI	330mm	100mm	24.40mm	30.40mm	Dark Blue
SIGH	330mm	100mm	24.8mm	30.2mm	Blue

Tape and Reel - Desiccant

MTAI

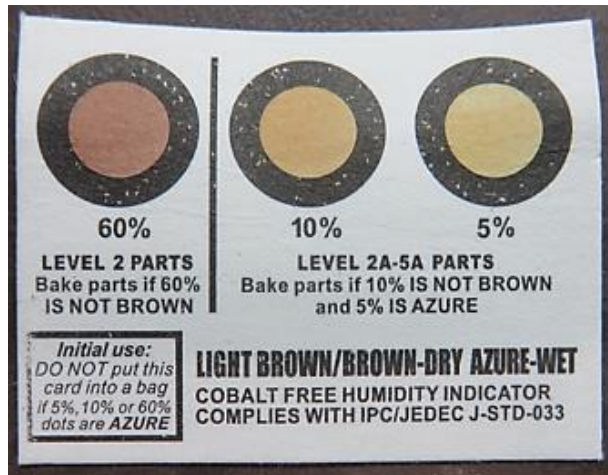


SIGH



Tape and Reel - HIC

MTAI



SIGH



Tape and Reel - Boxes

MTAI



SIGH



Tape and Reel - Bag(s)

MTAI



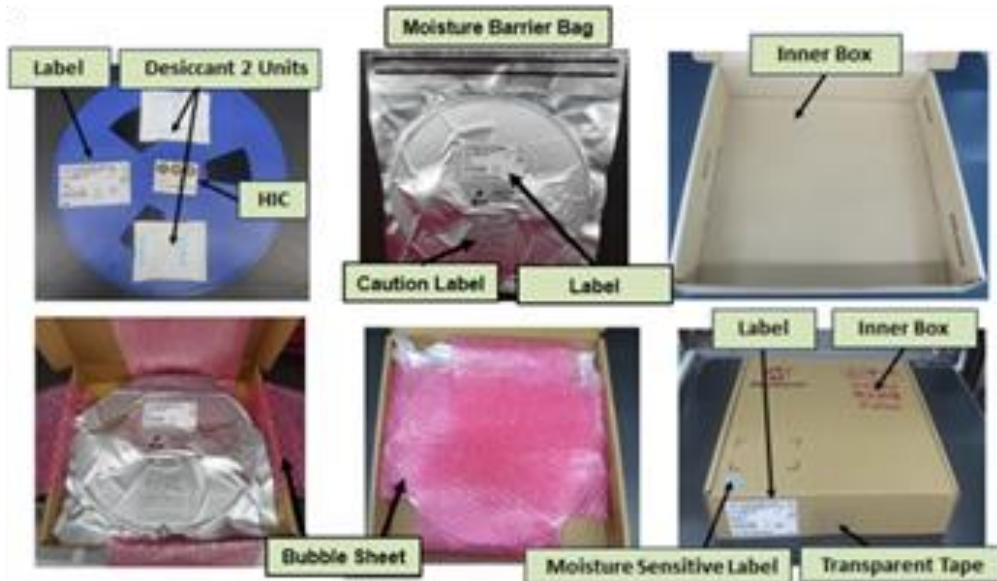
SIGH



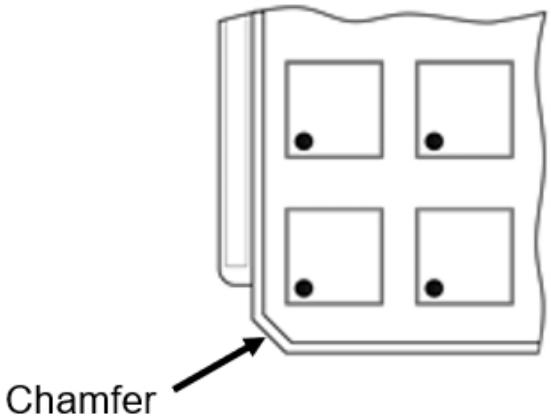
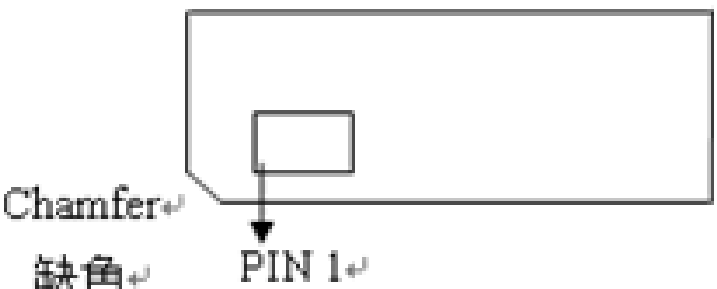
Tape & Reel - Packing Material/Method

MTAI

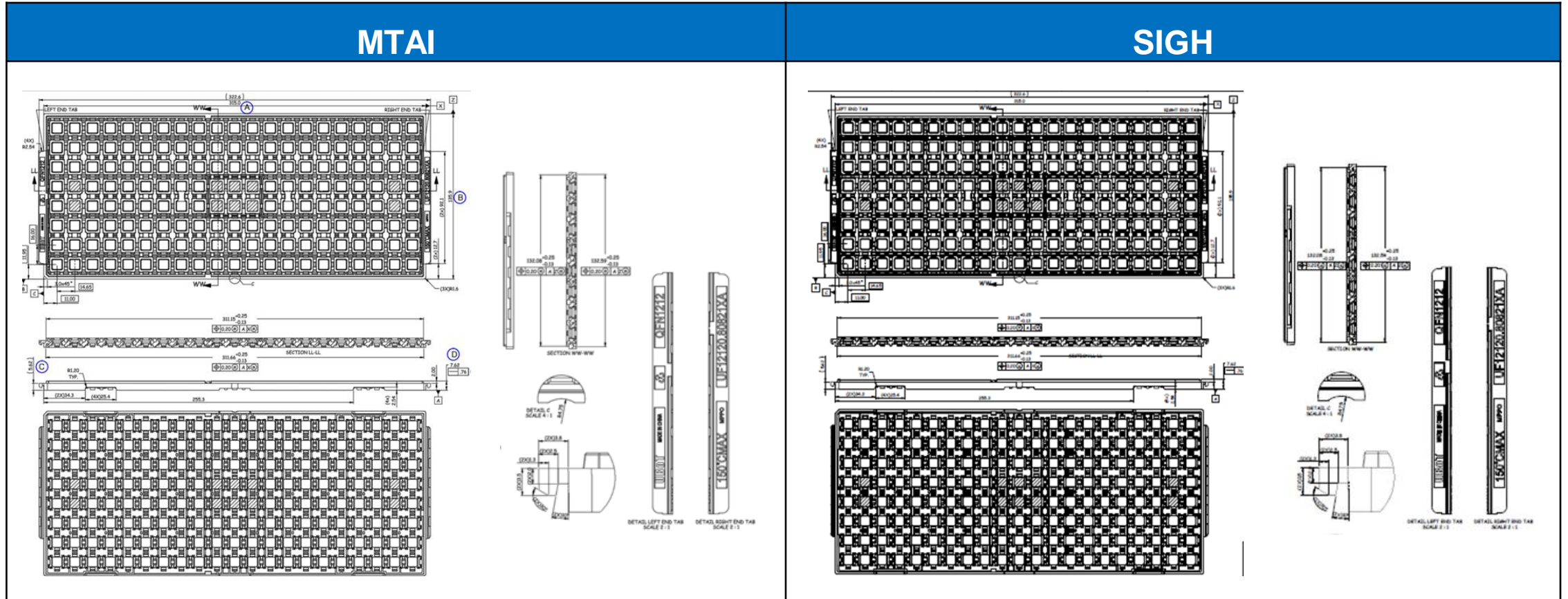
SIGH



Tray

	MTAI	SIGH
Base Quantity Multiple (BQM)	168	168
Pin 1 orientation	 <p>Chamfer</p>	 <p>Chamfer 缺角 PIN 1</p>

Tray



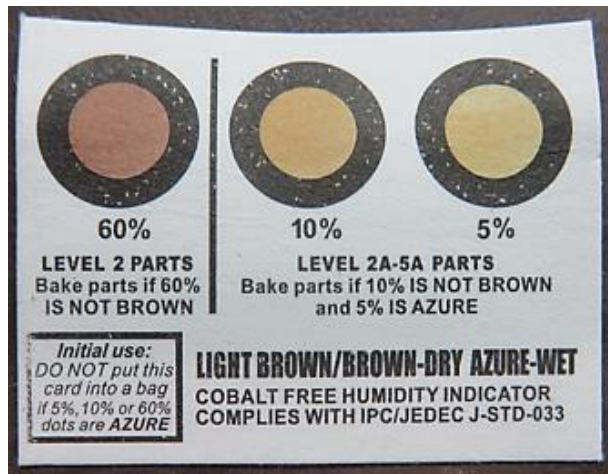
Plant	Row	Col	Pocket per Tray	Color
MTAI	8	21	168	Black
SIGH	8	21	168	Black

Tray- Desiccant

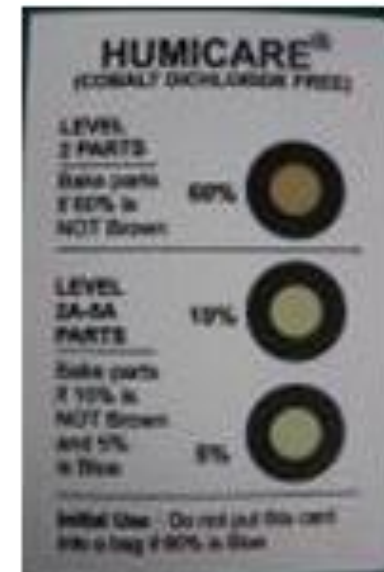
MTAI	SIGH
 <p>A white rectangular desiccant bag with black text. At the top, it reads 'SPECIFICATION MIL-D-3464 TYPE I & II'. Below that, a blue box contains the text 'CONTENTS 1 UNIT'. Underneath, it says 'DO NOT EAT - NO RESAULTS - NO COBALT'. The word 'DESICCANT' is printed in large letters. Below that, it says 'ACTIVATED, BAGGED, PACKAGE USE AND STATIC DEHUMIDIFICATION'. Another 'SPECIFICATION MIL-D-3464 TYPE I & II' is printed. Below that, it says 'REACTIVATION TIME IN BAG 16 HOURS AT 245 °F'. A second blue box contains 'CONTENTS 1 UNIT'. At the bottom, it says 'DO NOT EAT - NO RESAULTS - NO COBALT'.</p>	 <p>A white rectangular desiccant bag with black text. At the top, it reads 'PACKAGED BY TAICHIANG CHEMICAL IND. CO., LTD.'. Below that, 'CLARIANT' is printed in large letters. The main text reads 'DESI PAK' followed by 'DESICCANT MEETS MIL-D-3464 TYPE I & II' and 'REACTIVATION TIME IN BAG 16 HOURS AT 245 °F'. Below this, it says 'CONTENTS 1 UNIT' and 'DO NOT EAT'. To the right, it says 'PACKAGE USE AND STATIC DEHUMIDIFICATION'. Below that, it says 'COBALT DICHLORIDE FREE' and 'PACKAGED BY TAICHIANG CHEMICAL IND. CO., LTD.'. At the bottom, 'DESI PAK' and 'CLARIANT' are printed again.</p>

Tray- HIC

MTAI



SIGH



Tray- Boxes

MTAI



SIGH



Tray- Bag(s)

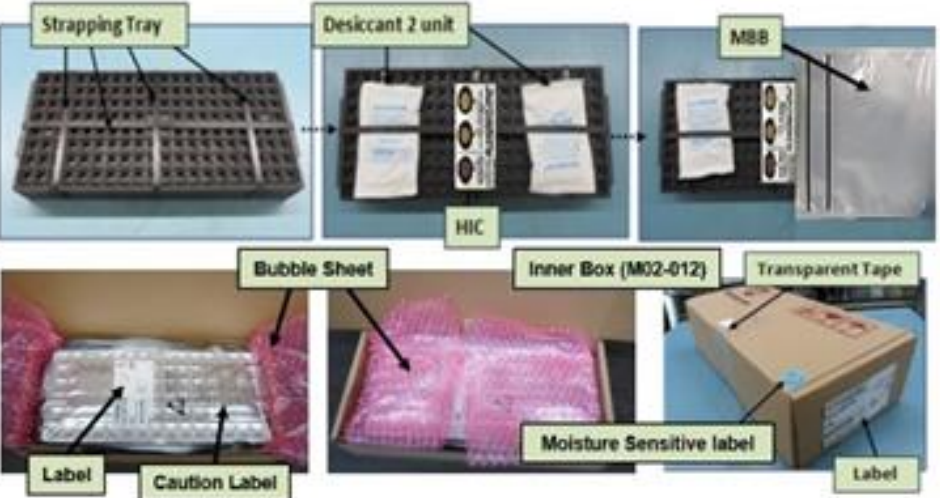

MTAI



SIGH



Tray - Packing Material/Method

MTAI	SIGH
 <p>The MTAI packing process involves the following steps and components:</p> <ul style="list-style-type: none">Strapping TrayDesiccant 2 unitHICMBBBubble SheetInner Box (M02-012)Transparent TapeLabelCaution LabelMoisture Sensitive labelLabel	 <p>The SIGH packing method shows the final product: a tray wrapped in pink bubble wrap, placed inside an open cardboard box.</p>

CAAN-10CRUJ529 - CCB USB7206x; USB7216xx and USB7252xx device families available in 48L and 100L

Affected Catalog Part Numbers(CPN)

KSZ9031RNXCC
KSZ9031RNXCA
KSZ9031RNXIC
KSZ9031RNXIA
KSZ9031RNXCC-TR
KSZ9031RNXCA-TR
KSZ9031RNXIC-TR
KSZ9031RNXIA-TR
USB7206C/KDX
USB7216C/KDX
USB7252C/KDX
USB7206/KDX
USB7216/KDX
USB7252/KDX
USB7206C-I/KDX
USB7216C-I/KDX
USB7252C-I/KDX
USB7206-I/KDX
USB7206CT/KDX
USB7216CT/KDX
USB7252CT/KDX
USB7206T/KDX
USB7216T/KDX
USB7252T/KDX
USB7216T/KDXD01
USB7216CT/KDXD01
USB7206T/KDXD01
USB7206CT/KDXD01
USB7206CT-I/KDX
USB7216CT-I/KDX
USB7252CT-I/KDX
USB7206T-I/KDX