Product Change Notification: MFOL-14IYNS822

Date:

21-Jul-2025

Product Category:

8-Bit Microcontrollers

Notification Subject:

CCB 7234 Final Notice: Qualification of MTAI as an additional final test site for selected ATMEGA3250, ATMEGA3250P, ATMEGA3290, ATMEGA3290P, ATMEGA6450, and ATMEGA6490 device families available in 100L TQFP (14x14x1mm) package.

Affected CPNs:

MFOL-14IYNS822_Affected_CPN_07212025.pdf
MFOL-14IYNS822_Affected_CPN_07212025.csv

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 final test site for selected ATMEGA3250, ATMEGA3250P, ATMEGA3290, ATMEGA3290P, ATMEGA6450, and ATMEGA6490 device families available in 100L TQFP (14x14x1mm) package.

Pre and Post Summary Changes:

		Pre Change	**Post Change**	
Final Test Site		Orient Semiconductor Electronics, Ltd (OSE)	Orient Semiconductor Electronics, Ltd (OSE)	Microchip Technology Thailand (HQ) (MTAI)
T/R	Pin 1 Orientation	No change.		
	BQM	No change.		

	Carrier Tape	No change.
	Cover Tape	With minor dimensional change. See Pre and Post summary for comparison.
	Reel	With dimensional change. See Pre and Post change for comparison.
Tray	Pin 1 Orientation	No change.
	BQM	No change.
Packing Method		See Pre and Post change summary for comparison.

Impacts to Datasheet: None

Change Impact: None

Reason for Change: To improve manufacturability by qualifying MTAI as an additional final test site.

Change Implementation Status: In Progress

Estimated First Ship Date: 26 August 2025 (date code: 2535)

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

Timetable Summary:

	March 2025					**>**	**July 2025**					**August 2025**				
Work Week	09	10	11	12	13		27	28	29	30	31	32	33	34	35	36
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: March 19, 2025: Issued initial notification.
July 21, 2025: Issued final notification. Attached the Qualification Report. Provided the estimated first ship date to be on August 26, 2025.

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

Attachments:

PCN_MFOL-14IYNS822_Pre and Post_Change_Summary.pdf
PCN_MFOL-14IYNS822_Qual Report.pdf

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

Terms and Conditions:

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

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.

MFOL-14IYNS822 - CCB 7234 Final Notice: Qualification of MTAI as an additional final test site for selected ATMEGA3250, ATMEGA3250P, ATMEGA3290, ATMEGA3290P, ATMEGA6450, and ATMEGA6490 device families available in 100L TQFP (14x14x1mm) package.

Affected Catalog Part Numbers (CPN)

ATMEGA3250V-8AUR

ATMEGA3290V-8AU

ATMEGA6490-16AU

ATMEGA3290P-20AUR

ATMEGA3250-16AUR

ATMEGA3250PV-10AUR

ATMEGA6450V-8AUR

ATMEGA3290PV-10AUR

ATMEGA6450-16AU

ATMEGA3250P-20AU

ATMEGA6490V-8AU

ATMEGA3290-16AU

ATMEGA3290PV-10AU

ATMEGA3290PV-10AUA0

ATMEGA6450-16AUR

ATMEGA3250V-8AU

ATMEGA3290-16AUR

ATMEGA3250-16AU

ATMEGA3250PV-10AU

ATMEGA3290V-8AUR

ATMEGA6490-16AUR

ATMEGA6450V-8AU

ATMEGA3290P-20AU

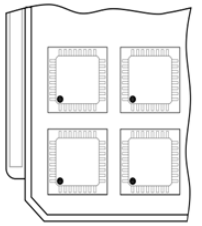
ATMEGA6490V-8AUR

ATMEGA3250P-20AUR

CCB 7234
Pre and Post Change Summary
PCN #: MFOL-14IYNS822

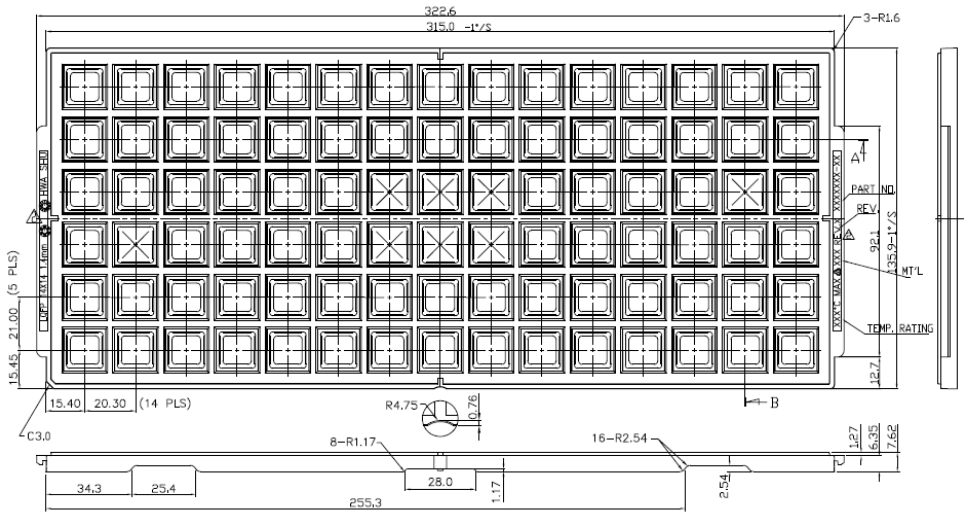
A Leading Provider of Smart, Connected and Secure Embedded Control Solutions

Tray – BQM and Pin 1 Orientation

	OSE	MTAI
Base Quantity Multiple (BQM)	90	90
Pin 1 orientation	 Left lower	 Chamfer Side

Tray - Drawing

OSE



NOTES :

1. (S.R. OHM/SQ.) MEANS SURFACE ELECTRIC RESISTIVITY OF THE TRAY.
2. THE MOLDED TRAY'S MATERIAL SHALL BE RIGID ENOUGH TO AVOID DAMAGE TO THE COMPONENTS DURING HANDLING,LOADING,BACKING,TESTING, SHIPPING AND PLACING.
3. TEMP.°C IS THE MAXIMUM OPERATING TEMPERATURE THE EMPTY TRAY CAN BE SUBJECTED TO FOR 48 CONTINOUS HOURS BAKING WITHOUT VIOLATING THE DIMENSIONAL TOLERANCE OF THE TRAY.
4. TRAYS ARE STACKABLE WITHOUT INTERFERENCE AND WILL NOT STICK TOGETHER DURING UNSTACKING OPERATION.
5. WARPAGE IS WITHIN 0.76 mm.
6. THE CELLS MARKED WITH CROSS SYMBOL ARE FOR VACCUM PICKUP AREA.
7. TOTAL USABLE CELLS 6X15=90.
8. THE TRAY MEETS JEDEC STANDARD.
9. ALL DIMENSIONS ARE IN MILLIMETERS.

Length	Color
322.6 mm	Black

MTAI

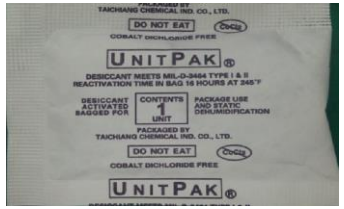
MSL 1

MSL 3

MICROCHIP

Tray - Packing Method

<table>
<tr><th></th><th>OSE</th><th colspan="2">MTAI</th></tr>
<tr><td>Antistatic Shielding Bag / Moisture Barrier Bag</td><td> 

<table><tr><th>Length</th><th>Width</th></tr><tr><td>280 mm</td><td>510 mm</td></tr></table></td><td>MSL 1 
<table><tr><th>Length</th><th>Width</th></tr><tr><td>560 mm</td><td>280 mm</td></tr></table></td><td>MSL 3 
<table><tr><th>Length</th><th>Width</th></tr><tr><td>560 mm</td><td>280 mm</td></tr></table></td></tr>
<tr><td>Desiccant</td><td> 

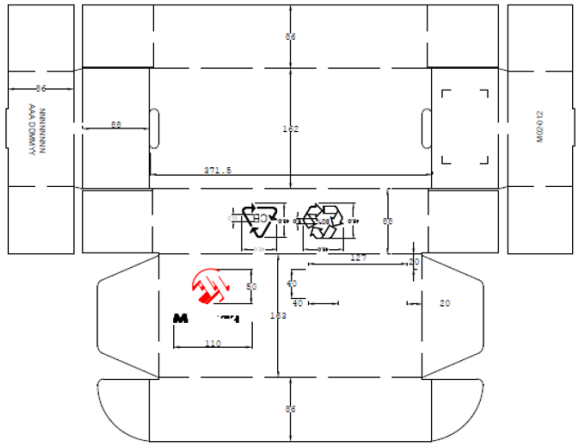
2 units, 33g</td><td>N/A

MSL 1</td><td>MSL 3 

Each unit is 33g</td></tr>
</table>

MICROCHIP

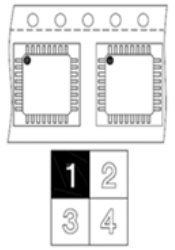
Tray - Packing Method

	OSE	MTAI
Carton Box		

Length	Width	Height
162 mm	371.5 mm	88 mm

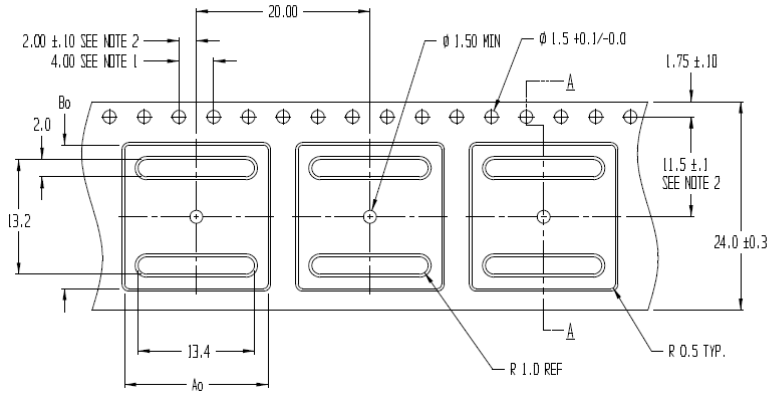
37.0x38.0x11.0 cm (2 inner box per 1 outer box)
37.0x38.0x22.5 cm (4 inner box per 1 outer box)
34.5x39.2x19.5 cm (4 inner box per 1 outer box)
37.0x39.0x39.0 cm (8 inner box per 1 outer box)

Tape and Reel – BQM and Pin-1 Orientation

	OSE	MTAI
Base Quantity Multiple (BQM)	1500	1500
Pin 1 orientation	 Quadrant 1	 Quadrant 1

Tape and Reel – Carrier Tape

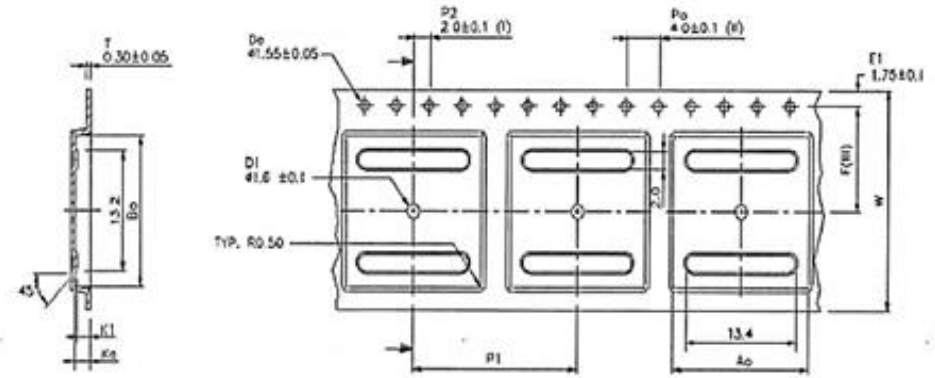
OSE



Ao = 16.50
Bo = 16.50
Ko = 1.90
K1 = 1.55

NOTES:
1. 10 SPROCKET HOLE PITCH CUMULATIVE TOLERANCE ±0.2
2. POCKET POSITION RELATIVE TO SPROCKET HOLE MEASURED AS TRUE POSITION OF POCKET, NOT POCKET HOLE
3. Ao AND Bo ARE CALCULATED ON A PLANE AT A DISTANCE "R" ABOVE THE BOTTOM OF THE POCKET.

MTAI



Plant	W (mm.) ±0.3 or Specific	P (mm.) ±0.1 or Specific	A0 ±0.1 or Specific	B0 ±0.1 or Specific	K0 ±0.1 or Specific	K1 ±0.1 or Specific
OSE	24 mm	20 mm	16.5 mm	16.5 mm	1.90 mm	1.55 mm
MTAI	24 mm	20 mm	16.5 mm	16.5 mm	1.90 mm	1.55 mm

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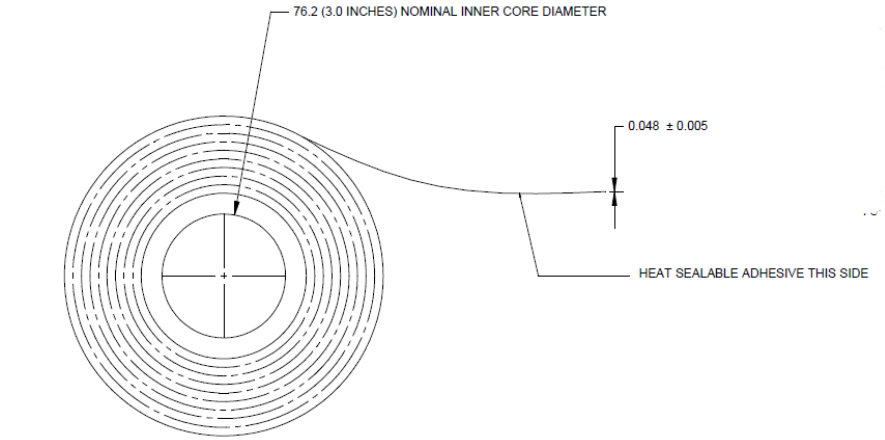
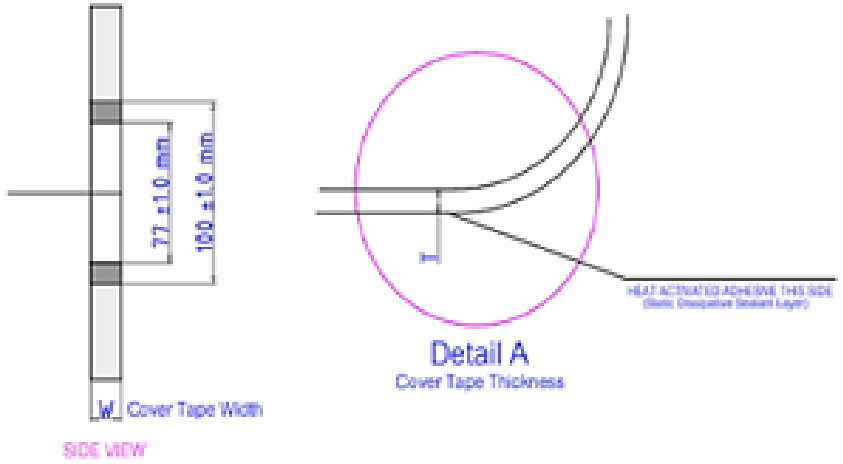
Tape and Reel – Cover Tape

OSE



NOTES:
1. ALL DIMENSIONS IN MM
2. REEL TO CONTAIN 300 METERS OF SPLICE FREE MATERIAL
3. COLOR: TRANSPARENT, NATURAL
4. MATERIAL: POLYESTER FILM WITH ANTISTATIC COATING AND ADHESIVE COATING

MTAI



Plant	Width	Thickness	Sealing Method
OSE	21 mm	0.048 mm	Heat Seal
MTAI	21.0 ± 0.1mm	0.050±0.010mm	Heat Seal

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Tape and Reel – Plastic Reel

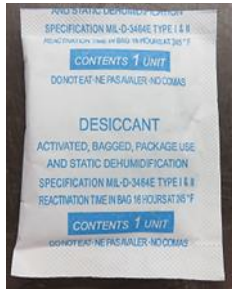
OSE	MTAI
	

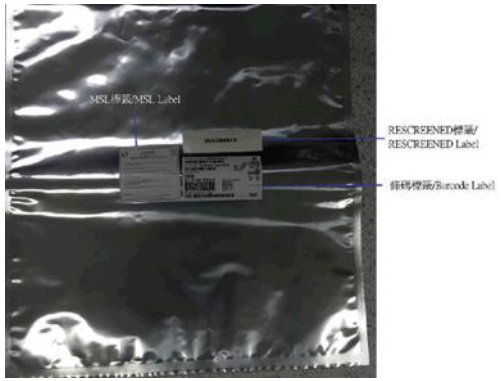
Plant	Diameter	Hub	W1	W2	Color
OSE	330 mm	102 mm	8.4 mm 16.4 mm	11.1 mm 19.1 mm	Blue
MTAI	330 mm	100 mm	24.40 mm	30.40 mm	Dark Blue

Tape and Reel - Packing Method

<table>
<tr><th></th><th>OSE</th><th colspan="2">MTAI</th></tr>
<tr><td>Desiccant</td><td> 

Two units, 33g</td><td>N/A

MSL 1</td><td>MSL 3 

Each desiccant is 33g</td></tr>
<tr><td>Antistatic Shielding Bag / Moisture Barrier Bag</td><td> 

<table>
<tr><th>Length</th><th>Width</th></tr>
<tr><td>455 mm</td><td>430 mm</td></tr>
</table></td><td> 
<table>
<tr><th>Length</th><th>Width</th><th rowspan="2">MSL 1</th></tr>
<tr><td>420 mm</td><td>370 mm</td></tr>
</table></td><td> 
<table>
<tr><th>Length</th><th>Width</th><th rowspan="2">MSL 3</th></tr>
<tr><td>440 mm</td><td>370 mm</td></tr>
</table></td></tr>
</table>

MICROCHIP

Tape and Reel - Packing Method

	OSE	MTAI
Carton Box		

Length	Width	Height
35.6 cm	34.0 cm	88 mm

37.0x38.0x11.0 cm (2 inner box per 1 outer box)
37.0x38.0x22.5 cm (4 inner box per 1 outer box)
34.5x39.2x19.5 cm (4 inner box per 1 outer box)
37.0x39.0x39.0 cm (8 inner box per 1 outer box)

QUALIFICATION REPORT SUMMARY

PCN #: MFOL-14IYNS822

Date:
July 07, 2025

Qualification of MTAI as an additional final test site for selected ATMEGA3250, ATMEGA3250P, ATMEGA3290, ATMEGA3290P, ATMEGA6450, and ATMEGA6490 device families available in 100L TQFP (14x14x1mm) package.

Purpose: **Qualification of MTAI as an additional final test site for selected ATMEGA3250, ATMEGA3250P, ATMEGA3290, ATMEGA3290P, ATMEGA6450, and ATMEGA6490 device families available in 100L TQFP (14x14x1mm) package.**

CCB No.: **7234**

Test / Evaluation	Test Condition / Parameters	Result
Datalog Bin Comparison	• Compare test numbers, test names, test sequence bin assignments & pass/fail results • Accept if all match or justify the differences	Passed
Site by Site Verification	• Verifies the channel map has the correct site assignments and tester/handler communications work correctly	Passed
Correlation Lot Report	• Yield comparison between systems and test sites. • Accept on yield match within 0.1%	Passed
Test Stability	• 50 loop test performed with no datalog delays - Accept on 0 fails	Passed
Parametric Test Stability Verification	• Use Real Time Statistics software	Passed
Unit to unit parametric correlation	• A full assembly strip characterized on both systems and graphed vs each other & the data sheet limits	Passed