



Product Change Notification: MFOL-31SHMS864

Date:

14-Jul-2026

Product Category:

Gate Drivers and Motor Drivers

Notification Subject:

CCB 8110 Final Notice: Qualification of MTAI as an additional assembly site for selected MIC4426, MIC4420, MIC4423, MIC4429, MIC4425, MIC4427, MIC4424, and MIC4428 device families available in 8L SOIC (3.90mm) package.

Affected CPNs:

[MFOL-31SHMS864_Affected_CPN_07142026.pdf](#)

[MFOL-31SHMS864_Affected_CPN_07142026.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 assembly site for selected MIC4426, MIC4420, MIC4423, MIC4429, MIC4425, MIC4427, MIC4424, and MIC4428 device families available in 8L SOIC (3.90mm) package.

Pre and Post Summary Changes:

	Pre Change		Post Change			Change (Yes/No)
Assembly Site	Stars Microelectronics (Thailand)	Unisem (M) Berhad Perak,	Stars Microelectronics (Thailand)	Unisem (M) Berhad Perak,	Microchip Technology Thailand	Yes

	Public Company Limited (STAR)	Malaysia (UNIS)	Public Company Limited (STAR)	Malaysia (UNIS)	(HQ) (MTAI)	
Wire Material	Au	Au	Au	Au	CuPdAu	Yes
Die Attach Material	2200D (PFAS)	8290 (PFAS free)	2200D (PFAS)	8290 (PFAS free)	CRM- 1064L (PFAS free)	Yes
Molding Compound Material	G600	G600KA	G600	G600KA	G634A	Yes
Lead- Frame Material	C194	A194	C194	A194	CDA194	No
Lead- Frame DAP Surface Prep	NiPdAu	NiPdAu	NiPdAu	NiPdAu	Bare Cu	Yes
Lead- Frame Lead Lock	No	No	No	No	Yes	Yes
	See Pre and Post Change Summary attachment for comparison.					Yes
Top Marking	See Pre and Post Change Summary attachment for comparison.					Yes

Note: *C194, A194 or CDA194 Lead frame material are the same, it is just a MCHP internal labelling difference.

Impacts to Datasheet: None

Change Impact: None

Reason for Change: To improve on-time delivery performance by qualifying MTAI as an additional assembly site.

Change Implementation Status: In Progress

Estimated First Ship Date: 10 August 2026 (date code: 2633)

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

Timetable Summary:

	April 2026					>	July 2026					August 2026				
Work Week	14	15	16	17	18		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: April 08, 2026: Issued initial notification.

April 30, 2026: Re-issued initial notification to update LF DAP Surface Prep from "NiPdAu" to "Bare Cu" in Pre and Post Change Summary Attachment.

July 14, 2026: Issued final notification. Attached the qualification report. Provided estimated first ship date to be on August 10, 2026.

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-31SHMS864_Pre and_Post_Change_Summary.pdf](#)

[PCN_MFOL-31SHMS864_Qual_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.

Affected Catalog Part Numbers (CPN):

MIC4426ZM

MIC4426ZM-TR

MIC4420YM

MIC4420YM-TR

MIC4423YM

MIC4423YM-TR

MIC4429ZM

MIC4429ZM-TR

MIC4425YM

MIC4425YM-TR

MIC4427ZM

MIC4427ZM-TR

MIC4424YM

MIC4424YM-TR

MIC4429YM

MIC4429YM-TR

MIC4428YM

MIC4428YM-TR

MIC4420ZM

MIC4420ZM-TR

MIC4426YM

MIC4426YM-TR

MIC4428ZM

MIC4428ZM-TR

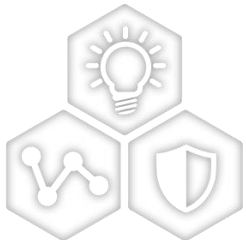
MIC4427YM

MIC4427YM-TR

CCB 8110
Pre and Post Change Summary
PCN ID#: MFOL-31SHMS864

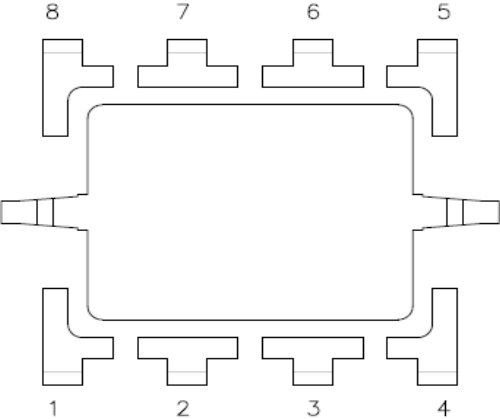
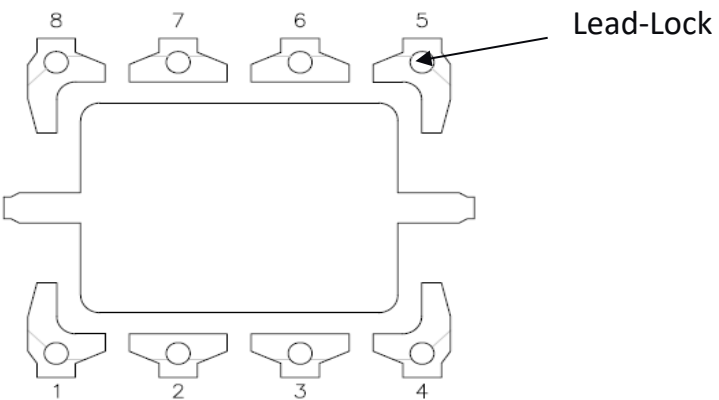


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Pre and Post Summary – Lead Frame Comparison

STAR and UNIS	MTAI												
 Note: Not to scale <table><tr><td>Lead-Frame Material</td><td>C194 / A194*</td></tr><tr><td>Lead-Frame DAP Surface Prep</td><td>NiPdAu</td></tr><tr><td>Lead-Frame Lead Lock</td><td>No</td></tr></table>	Lead-Frame Material	C194 / A194*	Lead-Frame DAP Surface Prep	NiPdAu	Lead-Frame Lead Lock	No	 Note: Not to scale <table><tr><td>Lead-Frame Material</td><td>CDA194*</td></tr><tr><td>Lead-Frame DAP Surface Prep</td><td>Bare Cu</td></tr><tr><td>Lead-Frame Lead Lock</td><td>Yes**</td></tr></table>	Lead-Frame Material	CDA194*	Lead-Frame DAP Surface Prep	Bare Cu	Lead-Frame Lead Lock	Yes**
Lead-Frame Material	C194 / A194*												
Lead-Frame DAP Surface Prep	NiPdAu												
Lead-Frame Lead Lock	No												
Lead-Frame Material	CDA194*												
Lead-Frame DAP Surface Prep	Bare Cu												
Lead-Frame Lead Lock	Yes**												

Note: * C194, A194 or CDA194 Lead frame material are the same, it is just a MCHP internal labelling difference.

Note:** Mold compound materials fills the leadlock hole, which provides improved protection against moisture penetration along the edge of the leads (pins) of the package.

Pre and Post Summary – Top Marking

STAR and UNIS

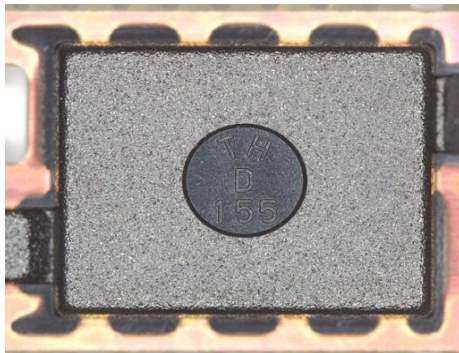
Top Marking : Line 1-3. Back side marking: Line 4 is Country Of Origin (COO)

Marking			
Location	Line	Area	Marking data
FRONT	1	AssemblyMark	<MC>4423
FRONT	2	AssemblyMark	YM
FRONT	3	AssemblyMark	<O>WNNN
BACK	1	AssemblyMark	<COO>

MTAI

Top Marking : Line 1-3. No Back side marking. COO is TH engraved on the backside of the package

Marking			
Location	Line	Area	Marking data
FRONT	1	AssemblyMark	<MC>4423
FRONT	2	AssemblyMark	YM
FRONT	3	AssemblyMark	<O>WNNN





QUALIFICATION SUMMARY REPORT

RELIABILITY LABORATORY

PCN #: MFOL-31SHMS864

Date:
July 13, 2026

Qualification of MTAI as an additional assembly site for selected MIC4426, MIC4420, MIC4423, MIC4429, MIC4425, MIC4427, MIC4424, and MIC4428 device families available in 8L SOIC (3.90mm) package.

PACKAGE QUALIFICATION REPORT

Purpose:

Qualification of MTAI as an additional assembly site for selected MIC4426, MIC4420, MIC4423, MIC4429, MIC4425, MIC4427, MIC4424, and MIC4428 device families available in 8L SOIC (3.90mm) package.

CN: E000303030
QUAL ID: R2600382 Rev. A
MP CODE: 248037C2XAA1
Part No.: MIC4423YM
Bonding No.: BD-004036-01
CCB No.: 8110

Lead Frame

Paddle Size: 95 x 130
Material: CDA194
DAP Surface Prep: Bare Cu
Process: Stamped
Lead Lock: Yes, lead lock hole
Part Number: 101000842
Plating Composition: Matte tin

Bond Wire

Wire: CuPdAu wire

Die Attach Material

Epoxy: CRM-1064L (PFAS-Free)
Conductive: Yes

Mold Compound

Mold Compound: G634A (PFAS-Free)

Package

Type: 8L SOIC
Package Size: 150 mils

PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.
MTAI265000398.000
MTAI264901227.000
MTAI265000394.000

Result: **Pass**

Conclusion:

24803 mask / MIC4423YM product / CuPdAu wire in 8L SOIC 150 mils package at MTAI site is qualified for MSL1 at 260°C as per JEDEC J-STD-020 standard and is passed in accordance to Specified JEDEC and Mil Standards.

PACKAGE QUALIFICATION REPORT

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result
Moisture Soak Precondition Prior to Stresses	MSL1: 150°C 24 hours Bake, 168 hours Moisture Soak at 85°C/85%RH, 3x Reflow at 260°C Electrical Test Tester: TMT_MCRS_NT 85°C	JESD22-A113, JEDEC J-STD-020	231 units each lot / 3 lots	0/231 (R26 00382-1 M TAI265000 398.000), 0/231 (R26 00382-2 M TAI264901 227.000), 0/231 (R26 00382-3 M TAI265000 394.000) Electrical;	Pass

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result
High Temp Storage	175°C / 504 hours Electrical Test Tester: TMT_MCRS_NT 85°C	JESD22-A103	45 units / 3 lots	0/45 (R260 0382-1 MT AI2650003 98.000), 0/45 (R260 0382-2 MT AI2649012 27.000), 0/45 (R260 0382-3 MT AI2650003 94.000)	Pass

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result
Temperature Cycling	-65°C / +150°C Air to Air / 500 Cycles Electrical Test Tester: TMT_MCRS_NT 85°C	JESD22-A104	77 units each lot / 3 lots	Electrical: 0/77 (R260 0382-1 MT AI2650003 98.000), 0/77 (R260 0382-2 MT AI2649012 27.000), 0/77 (R260 0382-3 MT AI2650003 94.000); WBP: 0/5 (R2600382-1),	Pass

PACKAGE QUALIFICATION REPORT

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result
Biased HAST	+130°C / 85%RH / 96 hours / Bias Voltage: 5.5V Electrical Test Tester: TMT_MCRS_NT 85°C	JESD22-A110	77 units each lot / 3 lots	0/77 (R260 0382-1 MT AI2650003 98.000), 0/77 (R260 0382-2 MT AI2649012 27.000), 0/77 (R260 0382-3 MT AI2650003 94.000)	Pass

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result
Unbiased HAST	+130°C / 85%RH / 96 hours Electrical Test Tester: TMT_MCRS_NT 85°C	JESD22-A118	77 units each lot / 3 lots	0/77 (R260 0382-1 MT AI2650003 98.000), 0/77 (R260 0382-2 MT AI2649012 27.000), 0/77 (R260 0382-3 MT AI2650003 94.000)	Pass

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result
Solderability (0 Hr) Method 1: Dip and Look	Pb-free 8 hours Steam age. Dip at 245°C, 100% leads >95% lead coverage	J-STD-002 / JESD22B-102	22 units / 1 lot	0/22	Pass

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result
Physical Dimension (0Hr)	Within package diagram dimension	JESD22 B100 and B108	10 units each lot / 3 lots	0/30	Pass

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result
Wire Pull	Bond Strength Data Assembly	Mil. Std. 883-2011	5 units / 1 lot	0/5	Pass

PACKAGE QUALIFICATION REPORT

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result
Bond Shear	Bond Strength Data Assembly	CDF-AEC-Q100-001	5 units / 1 lot	0/5	Pass