



Product Change Notification: MAAN-24UMMK532

Date:

07-Mar-2025

Product Category:

8-Bit Microcontrollers, Capacitive Touch Sensors, Memory

Notification Subject:

CCB 7291 Final Notice: Qualification of CuPdAu as a new wire material and 8006NS as a new die attach material for selected 24AA014, 24AA025xxx, 24C01C, 24LC014, 24LC025, 24VL014, 24VL025, 25AA010A, 25AA02xx, 25AA040A, 25LC010A, 25LC020A, 25LC040A, 34AA02, 34LC02, 34VL02, MTCH101 and PIC10F2xx device families available in 6L SOT-23 package at MTAI assembly site.

Affected CPNs:

[MAAN-24UMMK532_Affected_CPN_03072025.pdf](#)

[MAAN-24UMMK532_Affected_CPN_03072025.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 CuPdAu as a new wire material and 8006NS as a new die attach material for selected 24AA014, 24AA025xxx, 24C01C, 24LC014, 24LC025, 24VL014, 24VL025, 25AA010A, 25AA02xx, 25AA040A, 25LC010A, 25LC020A, 25LC040A, 34AA02, 34LC02, 34VL02, MTCH101 and PIC10F2xx device families available in 6L SOT-23 package at MTAI assembly site.

Pre and Post Summary Changes:

	Pre Change	Post Change
Assembly Site	Microchip Technology Thailand (HQ) (MTAI)	Microchip Technology Thailand (HQ) (MTAI)

Wire Material	Au	CuPdAu
Die Attach Material	8900NC	8006NS
Molding Compound Material	G600V	G600V
Lead-Frame Material	CDA194	A194
Lead-Frame DAP Surface Prep	Ag Spot Plated	Ag single ring Plated

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 productivity by qualifying CuPdAu as a new wire material at MTAI assembly site.

Change Implementation Status: In Progress

Estimated First Ship Date: 11 April 2025 (date code: 2515)

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

Timetable Summary:

	November 2024					>	March 2025					April 2025			
Work Week	44	45	46	47	48		10	11	12	13	14	15	16	17	18
Initial PCN Issue Date					X										
Qual Report Availability							X								
Final PCN Issue Date							X								

Estimated Implementation Date												X			
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Method to Identify Change: Traceability Code

Qualification Report: Please open the attachments included with this PCN labeled as PCN_#_Qual_Report.

Revision History: November 27, 2024: Issued initial notification.
March 07, 2025: Issued final notification. Revised the notification subject and description of change to reflect the change. Updated the affected parts list to add PIC10F220T-I/OT044 and remove PIC10F222T-I/OT045, PIC10F222T-I/OT053, PIC10F202T-I/OT112, PIC10F202T-E/OT109, PIC10F200-I/OT215, PIC10F200-I/OT220, PIC10F200-I/OT223, PIC10F200T-I/OT071, PIC10F200T-I/OT119, PIC10F200T-I/OT125, PIC10F200T-I/OT128, PIC10F200T-I/OT131, PIC10F200T-I/OT163, PIC10F200T-I/OT190, PIC10F200T-I/OT194, PIC10F200T-I/OT200, PIC10F200T-I/OT215, PIC10F200T-I/OT219, PIC10F200T-I/OT220, PIC10F206T-I/OT041, PIC10F220T-I/OT024 and PIC10F220T-I/OT037 catalog part numbers based on the updated scope. Attached the qualification report. Provided the estimated first ship date to be on April 11, 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_MAAN-24UMMK532_Pre_and_Post_Change_Summary.pdf](#)
[PCN_MAAN-24UMMK532_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.

MAAN-24UMMK532 - CCB 7291 Final Notice: Qualification of CuPdAu as a new wire material and 8006NS as a new die attach material for selected 24AA014, 24AA025xxx, 24C01C, 24LC014, 24LC025, 24VL014, 24VL025, 25AA010A, 25AA02xx, 25AA040A, 25LC010A, 25LC020A, 25LC040A, 34AA02, 34LC02, 34VL02, MTCH101 and PIC10F2xx device families available in 6L SOT-23 package at MTAI assembly site.

Affected Catalog Part Numbers (CPN)

25LC040AT-I/OT

25AA040AT-I/OT

25LC040AT-E/OT

25LC020AT-I/OT

25AA020AT-I/OT

25AA02E48T-I/OT

25AA02E64T-I/OT

25AA02UIDT-I/OT

25LC020AT-E/OT

25LC010AT-I/OT

25AA010AT-I/OT

25LC010AT-E/OT

PIC10F200-E/OT

PIC10F200-I/OT

PIC10F200T-I/OT102

PIC10F200T-I/OT108

PIC10F200T-I/OT151

PIC10F200T-I/OT153

PIC10F200T-I/OT169

PIC10F200T-I/OT177

PIC10F200T-I/OT182

PIC10F200T-I/OT185

PIC10F200T-I/OT192

PIC10F200T-I/OT195

PIC10F200T-I/OT196

PIC10F200T-I/OT202

PIC10F200T-I/OT208

Date: Thursday, March 6, 2025

MAAN-24UMMK532 - CCB 7291 Final Notice: Qualification of CuPdAu as a new wire material and 8006NS as a new die attach material for selected 24AA014, 24AA025xxx, 24C01C, 24LC014, 24LC025, 24VL014, 24VL025, 25AA010A, 25AA02xx, 25AA040A, 25LC010A, 25LC020A, 25LC040A, 34AA02, 34LC02, 34VL02, MTCH101 and PIC10F2xx device families available in 6L SOT-23 package at MTAI assembly site.

PIC10F200T-I/OT209

PIC10F200T-I/OT212

PIC10F200T-I/OT216

PIC10F200T-I/OT217

PIC10F200T-I/OT221

PIC10F200T-I/OT222

PIC10F200T-I/OT223

PIC10F200T-I/OT224

PIC10F200T-I/OT225

PIC10F200T-I/OT226

PIC10F200T-I/OT227

PIC10F200T-I/OT228

PIC10F200T-I/OT

PIC10F200T-E/OT030

PIC10F200T-E/OT147

PIC10F200T-E/OT186

PIC10F200T-E/OT191

PIC10F200T-E/OT198

PIC10F200T-E/OT

PIC10F202-E/OT

PIC10F202-I/OT

PIC10F202T-I/OT065

PIC10F202T-I/OT085

PIC10F202T-I/OT105

PIC10F202T-I/OT108

PIC10F202T-I/OT

PIC10F202T-E/OT081

PIC10F202T-E/OT096

PIC10F202T-E/OT

PIC10F204-E/OT

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PIC10F204-I/OT

PIC10F204T-I/OT043

PIC10F204T-I/OT051

PIC10F204T-I/OT053

PIC10F204T-I/OT054

PIC10F204T-I/OT

PIC10F204T-E/OT028

PIC10F204T-E/OT038

PIC10F204T-E/OT050

PIC10F204T-E/OT

PIC10F206-E/OT

PIC10F206-I/OT

PIC10F206T-I/OT030

PIC10F206T-I/OT031

PIC10F206T-I/OT032

PIC10F206T-I/OT043

PIC10F206T-I/OT

PIC10F206T-E/OT

24VL025T/OT

24LC025T-I/OT

24AA025T-I/OT

24LC025T-E/OT

24C01CT-I/OT

24C01CT-E/OT

24AA025E48T-I/OT

24AA025E64T-I/OT

24AA025UIDT-I/OT

24AA025E48T-E/OT

24AA025E64T-E/OT

34VL02T/OT

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34LC02T-I/OT

34AA02T-I/OT

34LC02T-E/OT

34AA02T-E/OT

PIC10F220-E/OT

PIC10F220-I/OT

PIC10F220T-I/OT027

PIC10F220T-I/OT035

PIC10F220T-I/OT040

PIC10F220T-I/OT

PIC10F220T-E/OT030

PIC10F220T-E/OT

PIC10F220-E/OT043

PIC10F220T-I/OT044

24VL014T/OT

24LC014T-I/OT

24AA014T-I/OT

24LC014T-E/OT

PIC10F222-E/OT

MTCH101-I/OT

PIC10F222-I/OT

PIC10F222T-I/OT020

PIC10F222T-I/OT032

PIC10F222T-I/OT033

PIC10F222T-I/OT039

PIC10F222T-I/OT044

MTCH101T-I/OT

PIC10F222T-I/OT055

PIC10F222T-I/OT056

PIC10F222T-I/OT057

Date: Thursday, March 6, 2025

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PIC10F222T-I/OT058

PIC10F222T-I/OT059

PIC10F222T-I/OT062

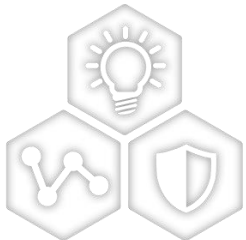
PIC10F222T-I/OT

PIC10F222T-E/OT

CCB 7291
Pre and Post Change Summary
PCN #: MAAN-24UMMK532

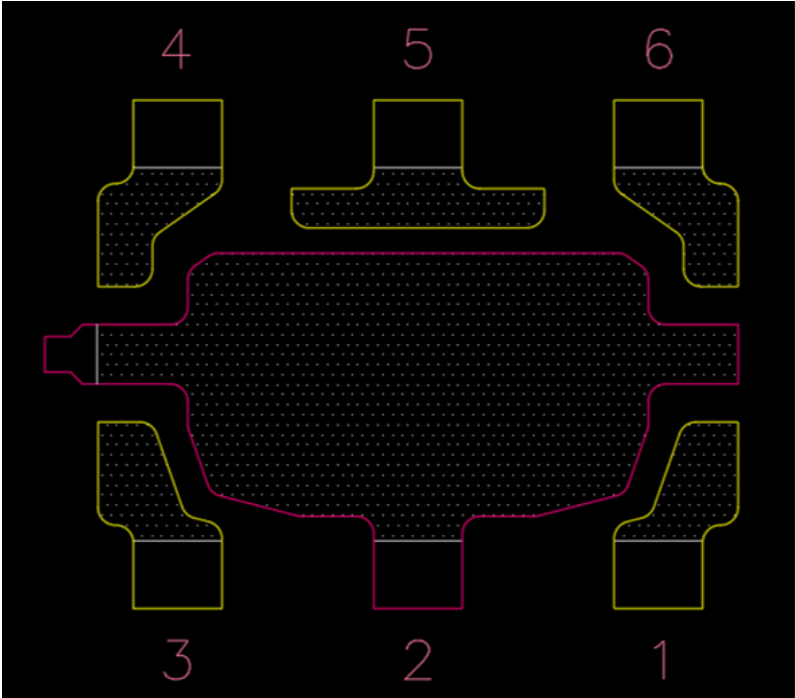
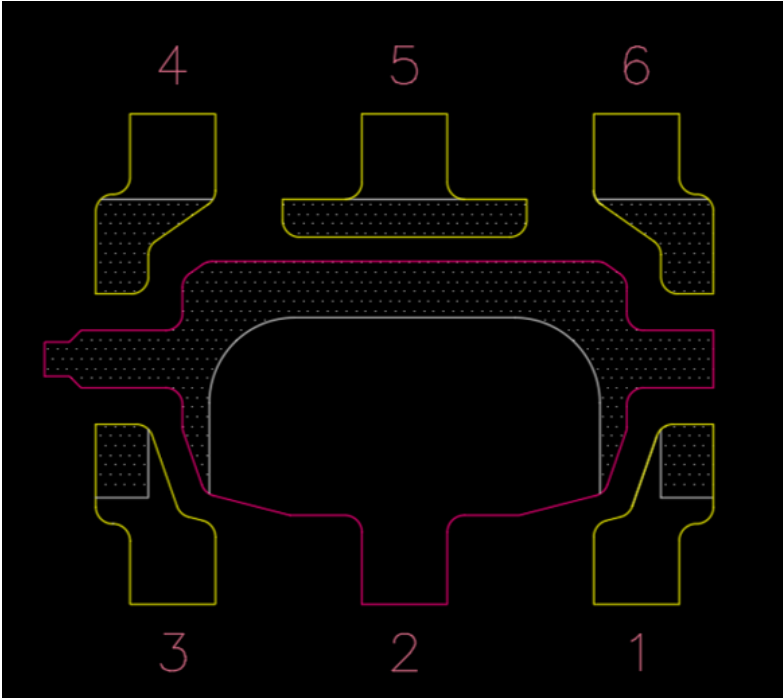


A Leading Provider of Smart, Connected and Secure Embedded Control Solutions



SMART | CONNECTED | SECURE

Lead Frame Comparison

MTAI	MTAI								
									
<table><tr><td>DAP Surface Prep</td><td>Ag Spot Plated</td></tr><tr><td>LF Treatment</td><td>Non-BOT</td></tr></table>	DAP Surface Prep	Ag Spot Plated	LF Treatment	Non-BOT	<table><tr><td>DAP Surface Prep</td><td>Ag single ring Plated</td></tr><tr><td>LF Treatment</td><td>BOT</td></tr></table>	DAP Surface Prep	Ag single ring Plated	LF Treatment	BOT
DAP Surface Prep	Ag Spot Plated								
LF Treatment	Non-BOT								
DAP Surface Prep	Ag single ring Plated								
LF Treatment	BOT								

Note: Not to scale



QUALIFICATION REPORT SUMMARY

RELIABILITY LABORATORY

PCN #: MAAN-24UMMK532

Date:
February 21, 2025

Qualification of CuPdAu as a new wire material and 8006NS as a new die attach material for selected 24AA014, 24AA025xxx, 24C01C, 24LC014, 24LC025, 24VL014, 24VL025, 25AA010A, 25AA02xx, 25AA040A, 25LC010A, 25LC020A, 25LC040A, 34AA02, 34LC02, 34VL02, MTCH101 and PIC10F2xx device families available in 6L SOT-23 package at MTAI assembly site.



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PACKAGE QUALIFICATION REPORT

Purpose Qualification of CuPdAu as a new wire material and 8006NS as a new die attach material for selected 24AA014, 24AA025xxx, 24C01C, 24LC014, 24LC025, 24VL014, 24VL025, 25AA010A, 25AA02xx, 25AA040A, 25LC010A, 25LC020A, 25LC040A, 34AA02, 34LC02, 34VL02, MTCH101 and PIC10F2xx device families available in 6L SOT-23 package at MTAI assembly site.

CN E000252902
QUAL ID R2500020
MP CODE DECA14C8XAXF
Part No. PIC10F220-E/OT
Bonding No. BD-002756 Rev. 01
CCB No. 7291

Package

Type 6L SOT-23

Lead Frame

Paddle size 72 x 41 mils
Material A194
Surface Ag single ring Plated
Process Stamped
Lead Lock No
Part Number 10100607
Treatment BOT

Material

Epoxy 8006NS
Wire CuPdAu wire
Mold Compound G600V
Plating Composition Matte Sn



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PACKAGE QUALIFICATION REPORT

Manufacturing Information:

Assembly Lot No.	Wafer Lot No.	Date Code
MTAI253700623.000	TMPE224189773.420	2450VV1
MTAI253700685.000	TMPE224189773.420	2450W1S
MTAI253800046.000	TMPE224189773.420	2451W2J

Result

☒ X

☐ Pass

☐ Fail

6L SOT-23 assembled by MTAI pass reliability test per QCI-39000. This package was qualified the Moisture/Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020E standard.

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
<u>Precondition</u> <u>Prior Perform</u> <u>Reliability Tests</u> (At MSL Level 1)	Electrical Test: +25°C and 125°C System: J750	JESD22-A113	693(0)	0/693	Pass	Good Devices
	Bake 150°C, 24 hrs. System: CHINEE	JIP/IPC/JEDEC J-STD-020E		693		
	85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH			693		
	3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243			693		
	Electrical Test: +25°C and 125°C System: J750		693(0)	0/693	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	Stress Condition: -65°C to +150°C, 500 Cycles System: TABAI ESPEC TSA-70H	JESD22- A104		231		Parts had been pre-conditioned at 260°C
	Electrical Test: + 125°C System: J750		231(0)	0/231	Pass	77 units / lot
	Bond Strength: Wire Pull (>2.50 grams)		15(0)	0/15	Pass	
UNBIASED-HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X	JESD22- A118		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: J750		231(0)	0/231	Pass	77 units / lot
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 5.5 Volts System: HAST 6000X	JESD22- A110		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C and 125°C System: J750		231(0)	0/231	Pass	77 units / lot

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
High Temperature Storage Life	Stress Condition: Bake 175°C, 504 hrs. System: TPS Bake Oven	JESD22- A103		135		45 units / lot
	Electrical Test: +25°C and 125°C System: J750		135(0)	0/135	Pass	
Bond Strength Data Assembly	Wire Pull (>2.50 grams)	Mil. Std. 883-2011	30(0)	0/30	Pass	
	Bond Shear (>15.00 grams)	CDF-AEC- Q100-001	30(0) Bonds	0/30	Pass	