



Product Change Notification: CENO-26IRKP103

Date:

09-Jun-2025

Product Category:

8-Bit Microcontrollers, Memory

Notification Subject:

CCB 6079.001 Final Notice: Qualification of palladium coated copper with gold flash (CuPdAu) as a new bond wire material and QMI519 as a new die attach material for selected AT24C04C, AT24C02C, AT24C01C, AT24C32D, AT24C256C, ATtiny25, ATtiny13A, ATtiny13, 25LC256, 25AA256, 25LC128 and 25AA128 device families available in 8L SOIC (.150in).

Affected CPNs:

[CENO-26IRKP103_Affected_CPN_06092025.pdf](#)

[CENO-26IRKP103_Affected_CPN_06092025.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 palladium coated copper with gold flash (CuPdAu) as a new bond wire material and QMI519 as a new die attach material for selected AT24C04C, AT24C02C, AT24C01C, AT24C32D, AT24C256C, ATtiny25, ATtiny13A, ATtiny13, 25LC256, 25AA256, 25LC128 and 25AA128 device families available in 8L SOIC (.150in).

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	CuPdAu
Die Attach Material	8390A		QMI519
Molding Compound Material	G600V		G600V
Lead-Frame Material	CDA194		CDA194

Impacts to Datasheet: None

Change Impact: None

Reason for Change: To improve productivity by qualifying palladium coated copper with gold flash (CuPdAu) as a new bond wire material and QMI519 as a new die attach material.

Change Implementation Status: In Progress

Estimated First Ship Date: 22 July 2025 (date code: 2530)

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

Timetable Summary:

	June 2025				July 2025				
Work Week	23	24	25	26	27	28	29	30	31
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:

June 09, 2025: Issued final notification.

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_CEN0-26IRKP103 Qual-Report.pdf](#)

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

Terms and Conditions:

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Affected Catalog Part Numbers (CPN)

AT24C04C-SSHM-B

AT24C04C-SSHM-T

AT24C02C-SSHM-B

AT24C02C-SSHM-T

AT24C01C-SSHM-B

AT24C01C-SSHM-T

AT24C32D-SSHM-B

AT24C256C-SSHL-T-358

ATTINY25-20SSU

ATTINY25V-10SSU

ATTINY25V-10SSN

ATTINY25-20SSN

ATTINY25V-10SSNR

ATTINY25-20SSNR

ATTINY25-20SSUR

ATTINY25V-10SSUR

ATTINY13A-SSU

ATTINY13A-SS7

ATTINY13A-SS7R

ATTINY13A-SSUR

ATTINY13-20SSU

ATTINY13V-10SSU

ATTINY13-20SSUR

ATTINY13V-10SSUR

25LC256-E/SN

25LC256-I/SN

25AA256-I/SN

Date: Monday, June 9, 2025

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25LC256T-I/SN

25AA256T-I/SN

25LC256T-E/SN

25LC128-E/SN

25LC128-I/SN

25AA128-I/SN

25LC128T-I/SN

25AA128T-I/SN

25LC128T-E/SN



QUALIFICATION REPORT SUMMARY

RELIABILITY LABORATORY

PCN #: CENO-26IRKP103

Date:
December 21, 2023

Qualification of MTAI as an additional assembly site for selected AT24C512C-SSHxx, AT24CM01-SSHxx and AT24CM02-SSHxx device families available in 8L SOIC (3.90mm(.150in)) package. The qualification of palladium coated copper with gold flash (CuPdAu) as a new bond wire material and QMI519 as a new die attach material for selected AT24C04C, AT24C02C, AT24C01C, AT24C32D, AT24C256C, ATtiny25, ATtiny13A, ATtiny13, 25LC256, 25AA256, 25LC128 and 25AA128 device families available in 8L SOIC (.150in) will qualify by similarity (QBS).



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PACKAGE QUALIFICATION REPORT

Purpose

Qualification of MTAI as an additional assembly site for selected AT24C512C-SSHxx, AT24CM01-SSHxx and AT24CM02-SSHxx device families available in 8L SOIC (3.90mm(.150in)) package. The qualification of palladium coated copper with gold flash (CuPdAu) as a new bond wire material and QMI519 as a new die attach material for selected AT24C04C, AT24C02C, AT24C01C, AT24C32D, AT24C256C, ATtiny25, ATtiny13A, ATtiny13, 25LC256, 25AA256, 25LC128 and 25AA128 device families available in 8L SOIC (.150in) will qualify by similarity (QBS).

CN	E000197753
QUAL ID	R2301547 Rev. A
MP CODE	35838TC2XC04
Part No.	AT24CM02-SSHD-T
Bonding No.	BD-001172 Rev. 04
CCB No.	6079 and 6079.001

Package

Type	8L SOIC
Package size	150 mils

Lead Frame

Paddle size	104 x 153 mils
Material	CDA194
Surface	Bare Cu
Process	Etched
Lead Lock	No
Part Number	10100866
Treatment	BOT

Material

Epoxy	QMI-519
Wire	CuPdAu
Mold Compound	G600V
Plating Composition	Matte Sn



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PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MTAI242601346.000	MCSO523370943.000	2339JV5
MTAI242602050.000	MCSO523370943.000	2339RM9
MTAI242701742.000	MCSO523370943.000	2340WC8

Result

☒ Pass ☐ Fail ☐ _____

8L SOIC (150 mils) 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
Precondition Prior Perform Reliability Tests (At MSL Level 1)	Electrical Test: +25°C and 85°C System: NEXTEST_PT	JESD22-A113	693(0)	0/693		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 85°C System: NEXTEST_PT		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		0/231		Parts had been pre-conditioned at 260°C
	Electrical Test: +85°C System: NEXTEST_PT		231(0)	0/231	Pass	77 units / lot
	Bond Strength: Wire Pull (>3.00 grams)		15(0)	0/15	Pass	
UNBIASED-HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X	JESD22-A118		0/231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: NEXTEST_PT		231(0)	0/231	Pass	77 units / lot
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 5.0 Volts System: HAST 6000X	JESD22-A110		0/231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C and 85°C System: NEXTEST_PT		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: CHINEE	JESD22- A103		0/135		45 units / lot
	Electrical Test: +25°C and 85°C System: NEXTEST_PT		135(0)	0/135	Pass	
Solderability Temp 215°C	Steam Aging: Temp 93°C, 8Hrs System: SAS-3000 Solder Dipping: Solder Temp. 215°C Solder material: SnPb Sn63, Pb37 System: ERS RA 2200D Visual Inspection: External Visual Inspection	J-STD-002	22(0)	0/22		
				0/22		
				0/22	Pass	
Solderability Temp 245°C	Steam Aging: Temp 93°C, 8Hrs System: SAS-3000 Solder Dipping: Solder Temp. 245°C Solder material: Pb Free Sn 95.5Ag3.9 Cu0.6 System: ERS RA 2200D Visual Inspection: External Visual Inspection	J-STD-002	22(0)	0/22		
				0/22		
				0/22	Pass	
Physical Dimensions	Physical Dimension, 10 units / 1 lot	JESD22- B100/B108	30(0) Units	0/30	Pass	
Bond Strength Data Assembly	Wire Pull (>3.00 grams)	Mil. Std. 883-2011	30(0) Wires	0/30	Pass	
	Bond Shear (>8.00 grams)	CDF-AEC- Q100-001	30(0) bonds	0/30	Pass	