



Product Change Notification: CAAN-17RD0D336

Date:

08-Aug-2025

Product Category:

Memory

Notification Subject:

CCB 7590 Final Notice: Qualification of CuPdAu as a new wire material for selected 24AA01x, 24AA02x, 24AA04x, 24AA08x, 24AA16x, 24FC01, 24FC02, 24FC04x, 24FC08, 24FC16x, 24LC01Bx, 24LC02Bx, 24LC04Bx, 24LC08Bx, 24LC16Bx, AT24C01D, AT24C02D, AT24C04D, AT24C08D, AT24C16D and AT24C32E device families available in 5L SOT-23 package.

Affected CPNs:

[CAAN-17RD0D336_Affected_CPN_08082025.pdf](#)

[CAAN-17RD0D336_Affected_CPN_08082025.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 for selected 24AA01x, 24AA02x, 24AA04x, 24AA08x, 24AA16x, 24FC01, 24FC02, 24FC04x, 24FC08, 24FC16x, 24LC01Bx, 24LC02Bx, 24LC04Bx, 24LC08Bx, 24LC16Bx, AT24C01D, AT24C02D, AT24C04D, AT24C08D, AT24C16D and AT24C32E device families available in 5L SOT-23 package.

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	8390A	8390A
Molding Compound Material	G600V	G600V
Lead-Frame Material	A194	A194

Impacts to Datasheet: None

Change Impact: None

Reason for Change: To improved manufacturability by qualifying CuPdAu as a new wire material.

Change Implementation Status: In Progress

Estimated First Ship Date: 31 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:

	June 2025					>	August 2025				
Work Week	23	24	25	26	27		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: June 20, 2025: Issued initial notification.

August 08, 2025: Issued final notification. Attached the Qualification Report. Provided the estimated first ship date to be on August 31, 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_CAAN-17RDOD336_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.

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Affected Catalog Part Numbers (CPN)

24AA01HT-I/OT

24AA01T-I/OT

24AA02HT-I/OT

24AA02T-I/OT

24AA04HT-I/OT

24AA04T-I/OT

24AA08HT-I/OT

24AA08T-I/OT

24AA16HT-I/OT

24AA16T-E/OT

24AA16T-I/OT

24FC01T-E/OT

24FC01T-I/OT

24FC02T-E/OT

24FC02T-I/OT

24FC04HT-E/OT

24FC04HT-I/OT

24FC04T-E/OT

24FC04T-I/OT

24FC08T-E/OT

24FC08T-I/OT

24FC16HT-E/OT

24FC16HT-I/OT

24FC16T-E/OT

24FC16T-I/OT

24LC01BHT-E/OT

24LC01BHT-I/OT

Date: Thursday, August 7, 2025

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24LC01BT/OT

24LC01BT-E/OT

24LC01BT-I/OT

24LC02BHT-E/OT

24LC02BHT-I/OT

24LC02BT-E/OT

24LC02BT-I/OT

24LC04BHT-E/OT

24LC04BHT-I/OT

24LC04BT-E/OT

24LC04BT-I/OT

24LC08BHT-E/OT

24LC08BHT-I/OT

24LC08BT-E/OT

24LC08BT-I/OT

24LC16BHT-E/OT

24LC16BHT-I/OT

24LC16BT-E/OT

24LC16BT-I/OT

AT24C01D-STUM-T

AT24C02D-STUM-T

AT24C04D-STUM-T

AT24C08D-STUM-T

AT24C16D-STUM-T

AT24C32E-STUM-T



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QUALIFICATION REPORT
RELIABILITY LABORATORY

PCN#: CAAN-17RDOD336

Date:
July 31, 2025

Qualification of CuPdAu as a new wire material for selected 24AA01x, 24AA02x, 24AA04x, 24AA08x, 24AA16x, 24FC01, 24FC02, 24FC04x, 24FC08, 24FC16x, 24LC01Bx, 24LC02Bx, 24LC04Bx, 24LC08Bx, 24LC16Bx, AT24C01D, AT24C02D, AT24C04D, AT24C08D, AT24C16D and AT24C32E device families available in 5L SOT-23 package.



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PACKAGE QUALIFICATION REPORT

Purpose	Qualification of CuPdAu as a new wire material for selected 24AA01x, 24AA02x, 24AA04x, 24AA08x, 24AA16x, 24FC01, 24FC02, 24FC04x, 24FC08, 24FC16x, 24LC01Bx, 24LC02Bx, 24LC04Bx, 24LC08Bx, 24LC16Bx, AT24C01D, AT24C02D, AT24C04D, AT24C08D, AT24C16D and AT24C32E device families available in 5L SOT-23 package.
CN	E000275281
QUAL ID	R2500711 Rev. A
Bonding No.	BD-003404 Rev 01
MP CODE	363V2YC7XA00
Part No.	24LC01BT-E/OT
CCB No.	7590
<u>Lead Frame</u>	
Paddle size	66 x 48 mils
Material	A194
Surface	Ag spot Plated
Process	Stamped
Lead lock	No
Part number	10100502
Plating composition	Matte Tin
<u>Bond Wire</u>	
Wire	CuPdAu wire
<u>Die Attach Material</u>	
Epoxy	8390A
<u>Mold Compound</u>	
Mold compound	G600V
<u>Package</u>	
Type	5L SOT-23



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PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MTAI261201052.000	MCSO524118736.110	252542R
MTAI261201433.000	MCSO524118736.110	2525589
MTAI261201465.000	MCSO524118736.110	25255BQ

Result

☒

Pass

☐

Fail

☐

5L 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
Precondition Prior Perform Reliability Tests (At MSL Level 1)	Electrical Test: +25°C System: NEXTEST_PT Bake 150°C, 24 hrs. System: CHINEE 85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH 3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243	JESD22-A113 JIP/ IPC/JEDEC J-STD-020E	693(0)	0/693	Pass	Good Devices
	Electrical Test: +25°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 Electrical Test: +25°C System: NEXTEST_PT Bond Strength: Wire Pull (>2.50 grams)	JESD22-A104	231(0)	231 0/231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot
UNBIASED-HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X Electrical Test: +25°C System: NEXTEST_PT	JESD22-A118	231(0)	231 0/231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 5.0 Volts System: HAST 6000X Electrical Test: +25°C System: NEXTEST_PT	JESD22-A110	231(0)	231 0/231	Pass	Parts had been pre-conditioned at 260°C 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 System: NEXTEST_PT		135(0)	0/135	Pass	
Bond Strength Data Assembly	Wire Pull (>3.00 grams)	Mil. Std. 883-2011	30(0) Wires	0/30	Pass	
	Bond Shear (>12.60 grams)	CDF-AEC- Q100-001	30(0) Bonds	0/30	Pass	