Product Change Notification: MAAN-24KAAI171

Date:

29-Jun-2026

Product Category:

Memory, Real-Time Clock/Calendar

Notification Subject:

CCB 8372 Final Notice: Qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material for selected 11AA010T, 11LC010T, 11LC020T, 11AA020T, 11AA040T, 11LC040T, 11AA080T, 11LC080T, 11AA160T, 11LC160T, 11LC161T, 11AA161T, 24LC01BT, 24AA0xx, 24LC02BT, 24AA01HT, 24LC01BHT, 24AA02HT, 24LC02BHT, 24AA52T, 24LCS52T, 24VL02xx, 24LC02xx, 24AA02xx, 24LC014T, 24AA014T, 24VL014T, 24C02CT, 24C01CT, 34AA02T, 34LC02T, 34VL02T, MCP7941xx and MCP7940xx device families available in 8L TDFN (2x3x0.8mm) package.

Affected CPNs:

MAAN-24KAAI171_Affected_CPN_06292026.pdf
MAAN-24KAAI171_Affected_CPN_06292026.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 wire material for selected 11AA010T, 11LC010T, 11LC020T, 11AA020T, 11AA040T, 11LC040T, 11AA080T, 11LC080T, 11AA160T, 11LC160T, 11LC161T, 11AA161T, 24LC01BT, 24AA0xx, 24LC02BT, 24AA01HT, 24LC01BHT, 24AA02HT, 24LC02BHT, 24AA52T, 24LCS52T, 24VL02xx, 24LC02xx, 24AA02xx, 24LC014T, 24AA014T, 24VL014T, 24C02CT, 24C01CT, 34AA02T, 34LC02T, 34VL02T, MCP7941xx and MCP7940xx device families available in 8L TDFN (2x3x0.8mm) package.

Pre and Post Summary Changes:

	Pre Change	Post Change	Change

			(Yes/No)
Assembly Site	Microchip Technology Thailand (Branch) (MMT)	Microchip Technology Thailand (Branch) (MMT)	No
Wire Material	Au	CuPdAu	Yes
Die Attach Material	QMI519 (PFASS free)	QMI519 (PFASS free)	No
Molding Compound Material	G700LTD	G700LTD	No
Lead-Frame Material	A194	A194	No

Impacts to Datasheet: None

Change Impact: None

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

Change Implementation Status: In Progress

Estimated First Ship Date: 23 September 2026 (date code: 2639)

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 2026					>	**September 2026**				
Work Week	23	24	25	26	27		36	37	38	39	40
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.

Note: This is a qualification by similarity (QBS) to CCB# 4506 and 2700.

Revision History: June 29, 2026: 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_MAAN-24KAAI171 Qual Report-CCB2700.pdf
PCN_MAAN-24KAAI171 Qual Report-CCB4506.pdf

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

Terms and Conditions:

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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):

24AA52T-I/MNY

24LCS52T-I/MNY

24VL024T/MNY

24LC025T-E/MNY

24AA025T-I/MNY

24AA024T-I/MNY

24LC024T-I/MNY

24VL025T/MNY

24LC025T-I/MNY

24LC024T-E/MNY

11LC010T-I/MNY

11LC010T-E/MNY

11LC020T-E/MNY

11AA020T-I/MNY

11LC020T-I/MNY

11AA040T-I/MNY

11LC040T-I/MNY

11LC040T-E/MNY

11AA080T-I/MNY

11LC080T-I/MNY

11LC080T-E/MNY

11AA160T-I/MNY

11LC160T-E/MNY

11LC160T-I/MNY

11LC161T-E/MNY

11LC161T-I/MNY

11AA161T-I/MNY

24LC01BT-E/MNY

24AA01T-I/MNY

24LC01BT-I/MNY

24LC02BT-I/MNY

24LC02BT-E/MNY

24AA02T-I/MNY

24AA01HT-I/MNY

24LC01BHT-E/MNY

24LC01BHT-I/MNY

24AA02HT-I/MNY

24LC02BHT-I/MNY

24LC02BHT-E/MNY

24LC014T-E/MNY

24AA014T-I/MNY

24VL014T/MNY

24LC014T-I/MNY

24C02CT-E/MNY

24C02CT-I/MNY

24C01CT-I/MNY

24C01CT-E/MNY

24VL014HT/MNY

24LC014HT-E/MNY

24AA014HT-I/MNY

24LC014HT-I/MNY

24LC024HT-I/MNY

24LC024HT-E/MNY

24VL024HT/MNY

24AA024HT-I/MNY

34AA02T-E/MNY

34LC02T-E/MNY

34AA02T-I/MNYB22

34AA02T-I/MNY

34VL02T/MNYC21

34VL02T/MNY

34AA02T-I/MNYB21

34LC02T-I/MNY

MCP79411T-I/MNY

MCP79412T-I/MNY

MCP79410T-I/MNY

MCP79410-I/MNY

MCP79402T-I/MNY

MCP79401T-I/MNY

MCP79400T-I/MNY

MCP7940NT-I/MNY

MCP7940MT-I/MNY

11AA010T-I/MNY

Qualification Report Summary

RELIABILITY LABORATORY

PCN #: MAAN-24KAAI171

Date: October 18, 2016

Qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material for selected 11AA010T, 11LC010T, 11LC020T, 11AA020T, 11AA040T, 11LC040T, 11AA080T, 11LC080T, 11AA160T, 11LC160T, 11LC161T, 11AA161T, 24LC01BT, 24AA0xx, 24LC02BT, 24AA01HT, 24LC01BHT, 24AA02HT, 24LC02BHT, 24AA52T, 24LCS52T, 24VL02xx, 24LC02xx, 24AA02xx, 24LC014T, 24AA014T, 24VL014T, 24C02CT, 24C01CT, 34AA02T, 34LC02T, 34VL02T, MCP7941xx and MCP7940xx device families available in 8L TDFN (2x3x0.8mm) package.

PACKAGE QUALIFICATION REPORT

Purpose:

Qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material for selected 11AA010T, 11LC010T, 11LC020T, 11AA020T, 11AA040T, 11LC040T, 11AA080T, 11LC080T, 11AA160T, 11LC160T, 11LC161T, 11AA161T, 24LC01BT, 24AA0xx, 24LC02BT, 24AA01HT, 24LC01BHT, 24AA02HT, 24LC02BHT, 24AA52T, 24LCS52T, 24VL02xx, 24LC02xx, 24AA02xx, 24LC014T, 24AA014T, 24VL014T, 24C02CT, 24C01CT, 34AA02T, 34LC02T, 34VL02T, MCP7941xx and MCP7940xx device families available in 8L TDFN (2x3x0.8mm) package.

CN:	ES074394-16085
QUAL ID:	Q16154
MP CODE:	DFAX17C2XA00
Part No.:	24LCS52-I/SN
Bonding No.:	BDM-001092 Rev. A
CCB No.:	2700

Substrate

Plating Composition:	Matte Tin

Lead Frame

Paddle Size:	90 x 90 mils
Material:	CDA194
Surface:	Bare Cu
Process:	Stamped
Lead Lock:	No
Part Number:	10100812
Plating Composition:	Matte Tin

Bond Wire

Wire:	CuPdAu wire

Die Attach Material

Epoxy:	8390A

Mold Compound

Mold Compound:	G600V

Package

Type:	8L SOIC
Package Size:	150 mils

PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MMT-172000926.000	GRSM416340236.000	1632C0K
MMT-172100581.000	GRSM416340236.000	1633K53
MMT-172100625.000	GRSM416340236.000	1633K88

Conclusion:

8L SOIC (.150") assembled by MMT 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-020D standard.

PACKAGE QUALIFICATION REPORT

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
Moisture/Reflow Sensitivity Classification Test (At MSL Level 1)	85°C/ 85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH 3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243 (IPC/JEDEC J-STD-020D)	IPC/JEDEC J-STD-020D	135	0/135	Pass	

Test	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)	693		Good Devices
	Bake 150°C, 24 hrs System: CHINEE		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	

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
Temp Cycle	Stress Condition: (Standard) 65°C to +150°C, 500 Cycles System: TABAI ESPEC TSA-70H Electrical Test: +85°C System: J750	JESD22-A104	231(0)	0/231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot
	Bond Strength: Wire Pull (> 2.5 grams) Bond Shear (>15.00 grams)		15(0) 15(0)	0/15 0/15	Pass Pass	

PACKAGE QUALIFICATION REPORT

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
UNBIASED-HAST	Stress Condition: (Standard) +130°C/85%RH, 96 hrs. System: HAST 6000X Electrical Test: +25°C System: J750	JESD22-A118	231(0)	0/231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
HAST	Stress Condition: (Standard) +130°C/85%RH, 96 hrs. Bias Volt: 5.0 Volts System: HAST 6000X Electrical Test: +25°C and 125°C System: J750	JESD22-A110	231(0)	0/231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
High Temperature Storage Life	Stress Condition: Bake 175°C, 504 hrs System: SHEL LAB Electrical Test: +25°C and 85°C System: NEXTEST_PT	JESD22-A103	45(0)	0/45	Pass	45 units

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
Bond Strength Data Assembly	Wire Pull (> 2.5 grams) Bond Shear (>15.00 grams)	M2011 JESD22-B116	30(0) 30(0)	0/30 0/30	Pass Pass	

Qualification Report Summary

RELIABILITY LABORATORY

PCN #: MAAN-24KAAI171

Date: March 17, 2021

Qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material for selected 11AA010T, 11LC010T, 11LC020T, 11AA020T, 11AA040T, 11LC040T, 11AA080T, 11LC080T, 11AA160T, 11LC160T, 11LC161T, 11AA161T, 24LC01BT, 24AA0xx, 24LC02BT, 24AA01HT, 24LC01BHT, 24AA02HT, 24LC02BHT, 24AA52T, 24LCS52T, 24VL02xx, 24LC02xx, 24AA02xx, 24LC014T, 24AA014T, 24VL014T, 24C02CT, 24C01CT, 34AA02T, 34LC02T, 34VL02T, MCP7941xx and MCP7940xx device families available in 8L TDFN (2x3x0.8mm) package.

PACKAGE QUALIFICATION REPORT

Purpose:

Qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material for selected 11AA010T, 11LC010T, 11LC020T, 11AA020T, 11AA040T, 11LC040T, 11AA080T, 11LC080T, 11AA160T, 11LC160T, 11LC161T, 11AA161T, 24LC01BT, 24AA0xx, 24LC02BT, 24AA01HT, 24LC01BHT, 24AA02HT, 24LC02BHT, 24AA52T, 24LCS52T, 24VL02xx, 24LC02xx, 24AA02xx, 24LC014T, 24AA014T, 24VL014T, 24C02CT, 24C01CT, 34AA02T, 34LC02T, 34VL02T, MCP7941xx and MCP7940xx device families available in 8L TDFN (2x3x0.8mm) package.

CN:	ES350779
QUAL ID:	R2000987
MP CODE:	D5AP1Y5QXB00
Part No.:	25AA640AT-E/MNY
Bonding No.:	BDM-002778 Rev. A
CCB No.:	4506

Substrate

Plating Composition:	NiPdAu

Lead Frame

Paddle Size:	83 x 71 mils
Material:	A194
Surface:	NiPdAu
Process:	Etched
Lead Lock:	No
Part Number:	10100853
Plating Composition:	NiPdAu

Bond Wire

Wire:	CuPdAu wire

Die Attach Material

Epoxy:	3280

Mold Compound

Mold Compound:	G700LTD

Package

Type:	8L TDFN
Package Size:	2x3x0.8 mm

PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MMT-213601929.000	GRSM416063167.500	2049RRM
MMT-213701243.000	GRSM416063167.500	2050YDG
MMT-213701244.000	GRSM416063167.500	2050YDK

Conclusion:

8L TDFN (2x3x0.8 mm) assembled by MMT 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	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
Precondition Prior Perform Reliability Tests (At MSL Level 1)	Electrical Test: +25°C, 85°C and 125°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 Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT	JESD22-A113 JIP/IPC/JEDEC J-STD-020E	693(0)	0/693	Pass	Good Devices

Test	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, 85°C and 125°C System: NEXTEST_PT	JESD22-A104	231(0)	0/231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot
	Stress Condition: -65°C to +150°C, 1000 Cycles System: TABAI ESPEC TSA-70H Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT	JESD22-A104	231(0)	0/231	Pass	
	Bond Strength: Wire Pull (> 2.5 grams) Bond Shear (>15.00 grams)		15(0) 15(0)	0/15 0/15	Pass Pass	

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
UNBIASED-HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X Electrical Test: +25°C System: NEXTEST_PT	JESD22-A118	231(0)	0/231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot
	Stress Condition: +130°C/85%RH, 192 hrs. System: HAST 6000X Electrical Test: +25°C System: NEXTEST_PT	JESD22-A118	231(0)	0/231	Pass	

PACKAGE QUALIFICATION REPORT

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 5.5 Volts System: HAST 6000X Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT	JESD22-A110	231(0)	0/231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot
	Stress Condition: +130°C/85%RH, 192 hrs. Bias Volt: 5.5 Volts System: HAST 6000X Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT	JESD22-A110	231(0)	0/231	Pass	

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
High Temperature Storage Life	Stress Condition: Bake 175°C, 504 hrs System: SHEL LAB Electrical Test: +25°C, 85°C and 125°C System: NEXTEST_PT	JESD22-A103	45(0)	0/45	Pass	45 units

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
Wire sweep	Wire sweep Inspection 15 Wires / lot	-	45(0)	0/45	Pass	

Test	Test Condition	Standard / Method	Qty. (Acc.)	Def/SS	Result	Remarks
Bond Strength Data Assembly	Wire Pull (> 2.5 grams)	Mil. Std. 883-2011	30(0)	0/30	Pass	
	Bond Shear (>15.00 grams)	CDF-AEC-Q100 -001	30(0)	0/30	Pass	