



Product Change Notification: JPZA-25QXVX440

Date:

03-Sep-2026

Product Category:

Closed Fan Controllers

Notification Subject:

CCB 8486 Final Notice: Qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material for EMC2303-1-KP-TR and EMC2305-1-AP-TR catalog part numbers (CPN) available in 16L VQFN (4x4x1mm) package at MTAI assembly site.

Affected CPNs:

[JPZA-25QXVX440_Affected_CPN_09032026.pdf](#)

[JPZA-25QXVX440_Affected_CPN_09032026.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 EMC2303-1-KP-TR and EMC2305-1-AP-TR catalog part numbers (CPN) available in 16L VQFN (4x4x1mm) package at MTAI assembly site.

Pre and Post Summary Changes:

	Pre Change	Post Change	Change
Assembly Site	Microchip Technology Thailand (HQ) (MTAI)	Microchip Technology Thailand (HQ) (MTAI)	No
Wire Material	Au	CuPdAu	Yes
Die Attach Material	QMI519 (PFAS-Free)	QMI519 (PFAS-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 wire material at MTAI assembly site.

Change Implementation Status: In Progress

Estimated First Ship Date: 25 November 2026 (date code: 2648)

Note Below EFSD:

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

Timetable Summary:

	September 2026					>	November 2026				
Work Week	36	37	38	39	40		45	46	47	48	49
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# 4724 and 7028.

Revision History: September 03, 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_JPZA-25QXVX440_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.

Affected Catalog Part Numbers (CPN):

EMC2303-1-KP-TR

EMC2305-1-AP-TR



Qualification Report Summary

RELIABILITY LABORATORY

PCN #: JPZA-25QXVX440

Date

January 24, 2022

Qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material for EMC2303-1-KP-TR and EMC2305-1-AP-TR catalog part numbers (CPN) available in 16L VQFN (4x4x1mm) package at MTAI assembly site.

PACKAGE QUALIFICATION REPORT

Purpose:

Qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material for EMC2303-1-KP-TR and EMC2305-1-AP-TR catalog part numbers (CPN) available in 16L VQFN (4x4x1mm) package at MTAI assembly site.

CN:	ES362938
QUAL ID:	R2100942
QUAL ID Rev.:	A
MP CODE:	TAV047NDCVBA
Part No.:	OS81212AF-B2B-010300-VAO
Bonding No.:	BD-000026 Rev. 02
CCB No.:	4724

Lead Frame

Paddle Size:	217 x 217 mils
Material:	A194
DAP Surface Prep:	Double ring
Process:	Etched
Lead Lock:	No
Part Number:	10105604
Lead Plating:	Matte Sn

Bond Wire

Wire:	CuPdAu wire
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Die Attach Material

Epoxy:	3280
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Mold Compound

Mold Compound:	G700LTD
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Package

Type:	56L VQFN-WFS
Package Size:	8 x 8 x 0.9 mm

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MTAI222400568.000	TC11921475959.100	2136D5C
MTAI222400781.000	TC11921475959.100	2136DK1
MTAI222400791.000	TC11921475959.100	2136DKB

Result: **Pass**

Conclusion:

56L QFN-WFS (8x8x0.9 mm) 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
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-020E)	IPC/JEDEC J-STD-020E	135	0/135	Pass	
Precondition Prior Perform Reliability Tests (At MSL Level 1)	Electrical Test: +25°C, 125°C and -45°C System: ULTRAFLEX_12	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 125°C System: ULTRAFLEX_12			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: ULTRAFLEX_12		231(0)	0/231	Pass	
	Bond Strength: Wire Pull (>2.50 grams) Bond Shear (>12.60 grams)		45(0)	0/45	Pass	
	Stress Condition: -65°C to +150°C, 1000 Cycles System: TABAI ESPEC TSA-70H			231		
	Electrical Test: +125°C System: ULTRAFLEX_12		231(0)	0/231	Pass	
	Bond Strength: Wire Pull (>2.50 grams) Bond Shear (>12.60 grams)		45(0)	0/45	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 1.8 Volts, 3.3 Volts System: HAST 6000X	JESD22-A110		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C and 125°C System: ULTRAFLEX_12		231(0)	0/231	Pass	77 units / lot
	Bond Strength: Wire Pull (>2.50 grams) Bond Shear (>12.60 grams)		45(0)	0/45	Pass	
	Stress Condition: +130°C/85%RH, 192 hrs. Bias Volt: 1.8 Volts, 3.3 Volts System: HAST 6000X			231		
	Electrical Test: +25°C and 125°C System: ULTRAFLEX_12		231(0)	0/231	Pass	
	Bond Strength: Wire Pull (>2.50 grams) Bond Shear (>12.60 grams)		45(0)	0/45	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: ULTRAFLEX_12		231(0)	0/231	Pass	77 units / lot
High Temperature Storage Life	Stress Condition: Bake 175°C, 500 hrs System: SHEL LAB	JESD22-A103		135		45 units / lot
	Electrical Test: +25°C and 125°C System: ULTRAFLEX_12		135(0)	0/135	Pass	
	Stress Condition: Bake 175°C, 1000 hrs System: SHEL LAB			135		
	Electrical Test: +25°C and 125°C System: ULTRAFLEX_12		135(0)	0/135	Pass	



Qualification Report Summary

RELIABILITY LABORATORY

PCN #: JPZA-25QXVX440

Date

December 3, 2024

Qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material for EMC2303-1-KP-TR and EMC2305-1-AP-TR catalog part numbers (CPN) available in 16L VQFN (4x4x1mm) package at MTAI assembly site.

PACKAGE QUALIFICATION REPORT

Purpose:

Qualification of palladium coated copper with gold flash (CuPdAu) as a new wire material for EMC2303-1-KP-TR and EMC2305-1-AP-TR catalog part numbers (CPN) available in 16L VQFN (4x4x1mm) package at MTAI assembly site.

CN: E000235827
QUAL ID: R2400901
QUAL ID Rev.: B
MP CODE: XA8011R4XA0C
Part No.: LAN9252/ML
Bonding No.: BD-002483 Rev. 01
CCB No.: 7028

Lead Frame

Paddle Size: 244 x 244 mils
Material: A194
DAP Surface Prep: Ag ring plated
Process: Etched
Lead Lock: No
Part Number: 10106416
Lead Plating: Matte Sn

Bond Wire

Wire: CuPdAu wire

Die Attach Material

Epoxy: QMI519

Mold Compound

Mold Compound: G700LTD

Package

Type: 64L QFN
Package Size: 9 x 9 mm

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MTAI251301704.000	TC14923292824.500	2426QU0
MTAI251301823.000	TC14923292824.500	2426RR4
MTAI251301829.000	TC14923292824.500	2426RSB

Result: **Pass**

Conclusion:

64L QFN (9x9 mm) 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
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-020E)	IPC/JEDEC J-STD-020E	135(0)	0/135	Pass	
Precondition Prior Perform Reliability Tests (At MSL Level 1)	Electrical Test: +25°C, 85°C and 105°C System: EX_DIGITAL	JESD22-A113	693(0)	0/693	Pass	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, 85°C, and 105°C System: EX_DIGITAL			0/693	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	Stress Condition: -55°C to +125°C, 1000 Cycles System : VOTSCH Electrical Test: +25°C, 85°C, and 105°C System: EX_DIGITAL	JESD22-A104	231(0)	231 0/231	Pass	Parts had been pre-conditioned at 260°C
	Bond Strength: Wire Pull (>3.00 grams)		45(0)	0/45	Pass	
	Bond Shear (>8.00 grams)					
	Stress Condition: -55°C to +125°C, 2000 Cycles System: VOTSCH Electrical Test: +25°C, 85°C, and 105°C System: EX_DIGITAL		231(0)	231 0/231	Pass	
	Bond Strength: Wire Pull (>3.00 grams)		45(0)	0/45	Pass	
	Bond Shear (>8.00 grams)					
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: PS1=1.2 Volts; PS3=3.3 Volts System: HAST 6000X Electrical Test: +25°C, 85°C, and 105°C System: EX_DIGITAL	JESD22-A110	231(0)	231 0/231	Pass	Parts had been pre-conditioned at 260°C; 77 units / lot
	Bond Strength: Wire Pull (>3.00 grams)		45(0)	0/45	Pass	
	Bond Shear (>8.00 grams)					
	Stress Condition: +130°C/85%RH, 192 hrs. Bias Volt: PS1=1.2 Volts; PS3=3.3 Volts System: HAST 6000X Electrical Test: +25°C, 85°C, and 105°C System: EX_DIGITAL		231(0)	231 0/231	Pass	
	Bond Strength: Wire Pull (>3.00 grams)		45(0)	0/45	Pass	
	Bond Shear (>8.00 grams)					

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	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: EX_DIGITAL	JESD22-A118	231(0)	231 0/231	Pass	Parts had been pre-conditioned at 260°C; 77 units / lot
High Temperature Storage Life	Stress Condition: Bake 150°C, 500 hrs System: CHINEE Electrical Test: +25°C, 85°C, and 105°C System: EX_DIGITAL	JESD22-A103	135(0)	135 0/135	Pass	45 units / lot
	Stress Condition: Bake 150°C, 1000 hrs System: CHINEE Electrical Test: +25°C, 85°C, and 105°C System: EX_DIGITAL		135(0)	135 0/135	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-Q1 00-001	30(0) bonds	0/30	Pass	