



Product Change Notification: ALAN-09HCJU538

Date:

05-Aug-2025

Product Category:

Memory

Notification Subject:

CCB 7642 Final Notice: Qualification of CuPdAu as a new wire material for selected 11LC010, 11AA010, 11LC040, 11AA040, 11LC020, 11AA020, 11AA02E48, 11AA02E64, 11AA02UID, 11LC160, 11AA160, 11LC080, 11AA080, 11LC161, and 11AA161 device families available in 3L SOT-23 (1.3mm) package.

Affected CPNs:

[ALAN-09HCJU538_Affected_CPN_08052025.pdf](#)

[ALAN-09HCJU538_Affected_CPN_08052025.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 11LC010, 11AA010, 11LC040, 11AA040, 11LC020, 11AA020, 11AA02E48, 11AA02E64, 11AA02UID, 11LC160, 11AA160, 11LC080, 11AA080, 11LC161, and 11AA161 device families available in 3L SOT-23 (1.3mm) 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	CDA194	CDA194

Impacts to Datasheet: None

Change Impact: None

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

Change Implementation Status: In Progress

Estimated First Ship Date: 21 August 2025 (date code: 2534)

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		31	32	33	34	35
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 12, 2025: Issued initial notification.

August 05, 2025: Issued final notification. Attached the Qualification Report. Provided estimated first ship date to be on August 21, 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_ALAN-09HCJU538_Qual Report.pdf](#)

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

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Affected Catalog Part Numbers (CPN)

11LC080T-I/TT

11AA080T-I/TT

11LC080T-E/TT

11LC161T-I/TT

11AA161T-I/TT

11LC161T-E/TT

11LC010T-I/TT

11AA010T-I/TT

11AA010T-I/TT-OK

11LC010T-E/TT

11LC040T-I/TT

11AA040T-I/TT

11LC040T-E/TT

11LC020T-I/TT

11AA020T-I/TT

11AA02E48T-I/TT

11AA02E64T-I/TT

11AA02UIDT-I/TT

11LC020T-E/TT

11LC160T-I/TT

11AA160T-I/TT

11LC160T-E/TT



QUALIFICATION REPORT SUMMARY RELIABILITY LABORATORY

PCN # ALAN-09HCJU538

**Date:
July 21, 2025**

**Qualification of CuPdAu as a new wire material for selected
11LC010, 11AA010, 11LC040, 11AA040, 11LC020, 11AA020,
11AA02E48, 11AA02E64, 11AA02UID, 11LC160, 11AA160,
11LC080, 11AA080, 11LC161, and 11AA161 device families
available in 3L SOT-23 (1.3mm) package.**



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PACKAGE QUALIFICATION REPORT

Purpose	Qualification of CuPdAu as a new wire material for selected 11LC010, 11AA010, 11LC040, 11AA040, 11LC020, 11AA020, 11AA02E48, 11AA02E64, 11AA02UID, 11LC160, 11AA160, 11LC080, 11AA080, 11LC161, and 11AA161 device families available in 3L SOT-23 (1.3mm) package.
CCB No.	7642
CN	E000273211
QUAL ID	R2500633 (Rev.A)
Bonding No.	BD-003376 Rev.02
MP CODE	DFAU1YC6XA00
Part No.	11LC010T-E/TT
<u>Lead Frame</u>	
Paddle size	64 x 38 mils
Material	CDA194
Surface	Ag Spot Plate
Process	Stamped
Lead lock	No
Part number	10100301
Plating composition	Matte Tin
<u>Bond Wire</u>	
Wire	CuPdAu wire
<u>Die Attach Material</u>	
Epoxy	8390A
Mold compound	G600V
<u>Package</u>	
Type	3L SOT-23



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PACKAGE QUALIFICATION REPORT

Manufacturing information

Assembly Lot No.	Wafer Lot No.	Date Code
MTAI260901169.000	TMPE225249596.120	2522GMY
MTAI260901432.000	TMPE225249596.120	2522H67
MTAI260901435.000	TMPE225249596.120	2522H7Q

Result

☒ Pass ☐ Fail ☐ _____

3L 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	
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 77 units / lot
	Electrical Test: +25°C System: NEXTEST_PT		231(0)	0/231	Pass	
	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		231		Parts had been pre-conditioned at 260°C 77 units / lot
	Electrical Test: +25°C System: NEXTEST_PT		231(0)	0/231	Pass	
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 77 units / lot
	Electrical Test: +25°C System: NEXTEST_PT		231(0)	0/231	Pass	
High Temperature Storage Life	Stress Condition: Bake 175°C, 504 hrs. System: TPS Bake Oven	JESD22-A103	135(0)	135	Pass	45 units / lot
	Electrical Test: +25°C System: NEXTEST_PT			0/135		
Bond Strength Data Assembly	Wire Pull (>3.00 grams)	Mil. Std. 883-2011	30(0) Wires	0/30	Pass	
	Bond Shear (>15.00 grams)	CDF-AEC- Q100-001	30(0) Bonds	0/30	Pass	