



Product Change Notification: CAAN-04ALCQ551

Date:

25-Jun-2026

Product Category:

Linear Comparators, Linear Op Amps

Notification Subject:

CCB 8065 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 MCP601, MCP603, MCP6041, MCP6043, MCP606, MCP608, MCP6141, MCP6143, MCP616, MCP6231, MCP6241, MCP6271, MCP6273, MCP6281, MCP6283, MCP6291, MCP6293, MCP6541, MCP6546, MCP6L1 and MCP6L71 device families available in 8L SOIC (.150in) package at MTAI assembly site.

Affected CPNs:

[CAAN-04ALCQ551_Affected_CPN_06252026.pdf](#)

[CAAN-04ALCQ551_Affected_CPN_06252026.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 MCP601, MCP603, MCP6041, MCP6043, MCP606, MCP608, MCP6141, MCP6143, MCP616, MCP6231, MCP6241, MCP6271, MCP6273, MCP6281, MCP6283, MCP6291, MCP6293, MCP6541, MCP6546, MCP6L1 and MCP6L71 device families available in 8L SOIC (.150in) package at MTAI assembly site.

Pre and Post Summary Changes:

	Pre Change	Post Change	Change (Yes/No)

Assembly Site	Microchip Technology Thailand (HQ) (MTAI)			Microchip Technology Thailand (HQ) (MTAI)	No
Wire Material	Au			CuPdAu	Yes
Die Attach Material	8390A (PFAS-free)			QMI519 (PFAS-free)	Yes
Molding Compound Material	G600V			G600V	No
Lead-Frame Material	CDA194			CDA194	No
Lead-Frame Paddle Size	60 x 60 mils	90 x 90 mils	95 x 158 mils	90 x 90 mils	Yes
Lead-Frame Design	See Pre and Post Change Summary for comparison.				

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 and QMI519 as a new die attach material.

Change Implementation Status: In Progress

Estimated First Ship Date: 16 August 2026 (date code: 2633)

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

Timetable Summary:

	February 2026				>	June 2026					>	August 2026				
Work Week	06	07	08	09		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: February 06, 2026: Issued initial notification.
June 25, 2026: Issued final notification. Attached the Qualification Report. Provided estimated first ship date to be on August 16, 2026.

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-04ALCQ551_Qualification Report.pdf
PCN_CAAN-04ALCQ551_Pre and Post Change Summary.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):

MCP6281-E/SN
MCP6281T-E/SN
MCP6283-E/SN
MCP6283T-E/SN
MCP6291-E/SN
MCP6291T-E/SN
MCP6293-E/SN
MCP6293T-E/SN
MCP6541-E/SN
MCP6541-I/SN
MCP6541T-E/SN
MCP6541T-I/SN
MCP6546-E/SN
MCP6546-I/SN
MCP6546T-E/SN
MCP6546T-I/SN
MCP6L1T-E/SN
MCP6L71T-E/SN
MCP6L91T-E/SN
MCP601-E/SN
MCP601-I/SN
MCP601T-E/SN
MCP601T-I/SN
MCP603-E/SN
MCP603-I/SN
MCP603T-E/SN
MCP603T-I/SN
MCP6041-E/SN
MCP6041-I/SN
MCP6041T-E/SN
MCP6041T-I/SN
MCP6043-E/SN

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MCP6043-I/SN

MCP6043T-E/SN

MCP6043T-I/SN

MCP606-I/SN

MCP606T-I/SN

MCP608-I/SN

MCP608T-I/SN

MCP6141-E/SN

MCP6141-I/SN

MCP6141T-E/SN

MCP6141T-I/SN

MCP6143-E/SN

MCP6143-I/SN

MCP6143T-E/SN

MCP6143T-I/SN

MCP616-I/SN

MCP616T-I/SN

MCP6231-E/SN

MCP6231T-E/SN

MCP6241-E/SN

MCP6241T-E/SN

MCP6271-E/SN

MCP6271T-E/SN

MCP6273-E/SN

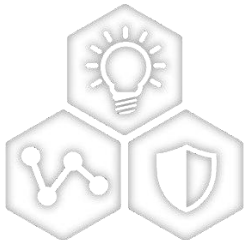
MCP6273T-E/SN

CCB 8065

Pre and Post Change Summary
PCN #: CAAN-04ALCQ551

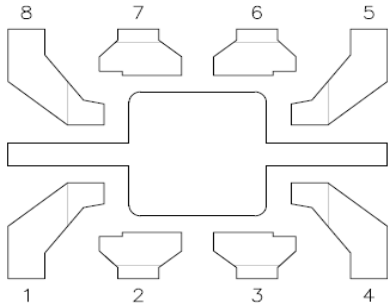
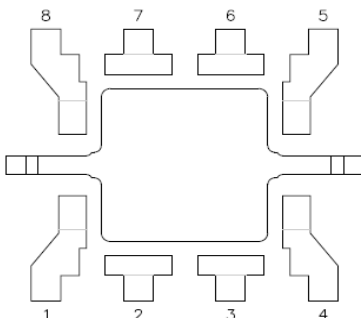
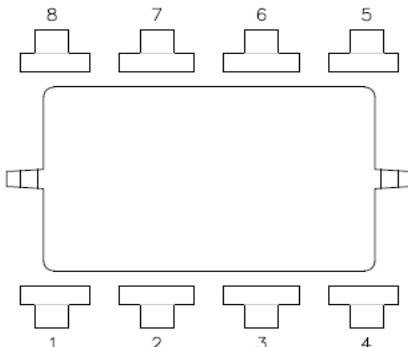
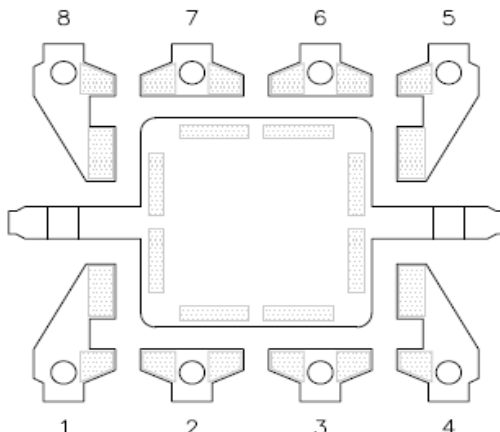


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Pre and Post Change Summary

Pre-Change			Post Change																
																			
<table><tr><td>Lead-Frame Material</td><td>CDA194</td></tr><tr><td>Lead-Frame Paddle Size</td><td>60 x 60 mils</td></tr></table>	Lead-Frame Material	CDA194	Lead-Frame Paddle Size	60 x 60 mils	<table><tr><td>Lead-Frame Material</td><td>CDA194</td></tr><tr><td>Lead-Frame Paddle Size</td><td>90 x 90 mils</td></tr></table>	Lead-Frame Material	CDA194	Lead-Frame Paddle Size	90 x 90 mils	<table><tr><td>Lead-Frame Material</td><td>CDA194</td></tr><tr><td>Lead-Frame Paddle Size</td><td>95 x 158 mils</td></tr></table>	Lead-Frame Material	CDA194	Lead-Frame Paddle Size	95 x 158 mils	<table><tr><td>Lead-Frame Material</td><td>CDA194</td></tr><tr><td>DAP Surface Prep</td><td>90 x 90 mils</td></tr></table>	Lead-Frame Material	CDA194	DAP Surface Prep	90 x 90 mils
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Lead-Frame Paddle Size	95 x 158 mils																		
Lead-Frame Material	CDA194																		
DAP Surface Prep	90 x 90 mils																		

*Note: Not to scale



QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN #: CAAN-04ALCQ551

Date:
June 23, 2026

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 MCP601, MCP603, MCP6041, MCP6043, MCP606, MCP608, MCP6141, MCP6143, MCP616, MCP6231, MCP6241, MCP6271, MCP6273, MCP6281, MCP6283, MCP6291, MCP6293, MCP6541, MCP6546, MCP6L1 and MCP6L71 device families available in 8L SOIC (.150in) package at MTAI assembly site.



MICROCHIP Package Qualification Report

Purpose: 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 MCP601, MCP603, MCP6041, MCP6043, MCP606, MCP608, MCP6141, MCP6143, MCP616, MCP6231, MCP6241, MCP6271, MCP6273, MCP6281, MCP6283, MCP6291, MCP6293, MCP6541, MCP6546, MCP6L1 and MCP6L71 device families available in 8L SOIC (.150in) package at MTAI assembly site.

CCB No. 8065

<u>Misc.</u>	Assembly site	MTAI
	BD Number	BD-004150-01
	MP Code (MPC)	AB0094C2XB00
	Part Number (CPN)	MCP603-E/SN
	Assembly Shipping Media (T/R, Tube/Tray)	Tube / T&R
	Base Quantity Multiple (BQM)	90 / 2100
<u>Lead-Frame</u>	Paddle size	90 x 90 mils
	Material	CDA194
	DAP Surface Prep	Ag
	Treatment	Roughened
	Process	Etched
	Lead-lock	No
	Part Number	10100857
<u>Bond Wire</u>	Material	CuPdAu
<u>Die Attach</u>	Part Number	QMI519
	Conductive	Yes
<u>MC</u>	Part Number	G600V
<u>PKG</u>	PKG Type	SOIC
	Pin/Ball Count	8
	PKG width/size	.150"



MICROCHIP

Package Qualification Report

Manufacturing Information:

Assembly Lot No.
MTAI264501791.000
MTAI264501905.000
MTAI264600108.000

Conclusion:

Qualification of AB009 mask / MCP603-E/SN product / 0.8 mil CuPdAu wire in 8L SOIC (150) (C2X) package at MTAI site is qualified for MSL1 at 260°C as per JEDEC J-STD-020 standard and is passed in accordance to Specified JEDEC and Mil Standards



MICROCHIP

Package Qualification Report

Moisture Soak Precondition Prior to Stresses

Test Method	JESD22-A113, JEDEC J-STD-020		
Test Condition	MSL1: 150°C 24 hours Bake, 168 hours Moisture Soak at 85°C/85%RH, 3x Reflow at 260°C		
Required Sample Size	231 units each lot / 3 lots;		
Lot ID	R2600290-1 MTAI264501791.000	R2600290-2 MTAI264501905.000	R2600290-3 MTAI264600108.000
Electrical Results (Fail / Pass)	0/231	0/231	0/231
Electrical Test Tester: ETS300	25°C, 85°C, and 125°C		
Result	Passed		



MICROCHIP

Package Qualification Report

High Temp Storage

Test Method	JESD22-A103		
Test Condition	175°C / 504 hours		
Required Sample Size	45 units / 3 lot;		
Lot ID	R2600290-1 MTAI264501791.000	R2600290-2 MTAI264501905.000	R2600290-3 MTAI264600108.000
Electrical Results (Fail / Pass)	0/45	0/45	0/45
Electrical Test Tester: ETS300	25°C, 85°C, and 125°C		
Result	Passed		

Temperature Cycling

Test Method	JESD22-A104		
Test Condition	-65°C / +150°C Air to Air / 500 Cycles		
Required Sample Size	77 units each lot / 3 lots; WBP		
Lot ID	R2600290-1 MTAI264501791.000	R2600290-2 MTAI264501905.000	R2600290-3 MTAI264600108.000
Electrical Results (Fail / Pass)	0/77	0/77	0/77
WBP (Fail / Pass)	0/5	N/A	N/A
Electrical Test Tester: ETS300	85°C, and 125°C		
Result	Passed		



MICROCHIP Package Qualification Report

Biased HAST

Test Method	JESD22-A110		
Test Condition	+130°C / 85%RH / 96 hours / Bias Voltage: 5.5V		
Required Sample Size	77 units each lot / 3 lots;		
Lot ID	R2600290-1 MTAI264501791.000	R2600290-2 MTAI264501905.000	R2600290-3 MTAI264600108.000
Electrical Results (Fail / Pass)	0/77	0/77	0/77
Electrical Test Tester: ETS300	25°C, 85°C, and 125°C		
Result	Passed		

Unbiased HAST

Test Method	JESD22-A118		
Test Condition	+130°C / 85%RH / 96 hours		
Required Sample Size	77 units each lot / 3 lots;		
Lot ID	R2600290-1 MTAI264501791.000	R2600290-2 MTAI264501905.000	R2600290-3 MTAI264600108.000
Electrical Results (Fail / Pass)	0/77	0/77	0/77
Electrical Test Tester: ETS300	25°C		
Result	Passed		

Wire Pull

Test Method	Mil. Std. 883-2011
Test Criteria	Bond Strength Data Assembly
Required Sample Size	5 units / 1 lot
Result (Fail / Pass)	0/5 - Passed

Bond Shear

Test Method	CDF-AEC-Q100-001
Test Criteria	Bond Strength Data Assembly
Required Sample Size	5 units / 1 lot
Result (Fail / Pass)	0/5 – Passed

Wire sweep

Test Method	X-ray
Test Criteria	15%
Required Sample Size	15 wires each lot / 3 lots
Result (Fail / Pass)	0/45 – Passed