



## Product Change Notification / LIAL-12QHCQ792

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### Date:

15-Sep-2022

### Product Category:

Linear Comparators, Linear Op Amps, Linear Programmable Gain Amplifiers, Power Management - System Supervisors/Voltage Detectors

### PCN Type:

Manufacturing Change

### Notification Subject:

CCB 5280 and 5280.001 Initial Notice: Qualification of palladium coated copper with gold flash (CuPdAu) as a new bond wire material for selected MCP11xxx, MCP60xxx, MCP61xxx, MCP62xxx, MCP64xxx, MCP65xxx, MCP6Gxxx, MCP6Lxxx, and TC127xxx device families available in 6L and 5L SOT-23 package assembled at MMT assembly site

### Affected CPNs:

[LIAL-12QHCQ792\\_Affected\\_CPN\\_09152022.pdf](#)

[LIAL-12QHCQ792\\_Affected\\_CPN\\_09152022.csv](#)

### Notification Text:

**PCN Status:**Initial 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 for selected MCP11xxx, MCP60xxx, MCP61xxx, MCP62xxx, MCP64xxx, MCP65xxx, MCP6Gxxx, MCP6Lxxx, and TC127xxx device families available in 6L and 5L SOT-23 package assembled at MMT assembly site.





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Affected Catalog Part Numbers (CPN)

MCP6273T-E/CH  
MCP6283T-E/CH  
MCP6293T-E/CH  
MCP603T-I/CH  
MCP603T-E/CH  
MCP6043T-I/CH  
MCP6043T-E/CH  
MCP6143T-E/CH  
MCP111T-360E/OT  
MCP111T-370E/OT  
MCP6541T-I/OT  
MCP6541RT-I/OT  
MCP6541T-E/OT  
MCP6541RT-E/OT  
MCP6546T-I/OT  
MCP6546RT-I/OT  
MCP6546T-E/OT  
MCP6546RT-E/OT  
MCP6271T-E/OT  
MCP6281T-E/OT  
MCP6291T-E/OT  
MCP6271RT-E/OT  
MCP6281RT-E/OT  
MCP6291RT-E/OT  
MCP6L71T-E/OT  
MCP6L71RT-E/OT  
MCP6L91T-E/OT  
MCP6L91RT-E/OT  
MCP6021RT-E/OT  
TC1270ARVCTTR  
TC1270ASVCTTR  
TC1270ATVCTTR  
TC1270AMVCTTR  
TC1270ALVCTTR  
TC1270ANRVCTTR  
TC1270ANSVCTTR  
TC1270ANTVCTTR  
TC1270ANMVCTTR  
TC1270ANLVCTTR  
TC1271ARVCTTR  
TC1271ASVCTTR  
TC1271ATVCTTR  
TC1271AMVCTTR  
TC1271ALVCTTR  
TC1270ARAVCTTR  
TC1270ASAVCTTR

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TC1270AMAVCTTR  
TC1270ALAVCTTR  
TC1270ANRAVCTTR  
TC1270ANSAVCTTR  
TC1270ANTAVCTTR  
TC1270ANMAVCTTR  
TC1270ANLAVCTTR  
TC1271ARAVCTTR  
TC1271ASAVCTTR  
TC1271ATAVCTTR  
TC1271AMAVCTTR  
TC1271ALAVCTTR  
TC1270ARBVCTTR  
TC1270ASBVCTTR  
TC1270ATBVCTTR  
TC1270AMBVCTTR  
TC1270ALBVCTTR  
TC1270ANRBVCTTR  
TC1270ANSBVCTTR  
TC1270ANTBVCTTR  
TC1270ANMBVCTTR  
TC1270ANLBVCTTR  
TC1271ARBVCTTR  
TC1271ASBVCTTR  
TC1271ATBVCTTR  
TC1271AMBVCTTR  
TC1271ALBVCTTR  
MCP601RT-I/OT  
MCP601RT-E/OT  
MCP6L1RT-E/OT  
MCP6001T-I/OT  
MCP6001RT-I/OT  
MCP6001T-E/OT  
MCP6001RT-E/OT  
MCP6L01T-E/OT  
MCP6L01RT-E/OT  
MCP6231RT-E/OT  
MCP6241RT-E/OT  
MCP6G01RT-E/OT  
MCP6401RT-E/OT  
MCP6001T-I/OT-HCM  
MCP6561RT-E/OT  
MCP6566RT-E/OT



**MICROCHIP**

## **QUALIFICATION PLAN SUMMARY**

**PCN #: LIAL-12QHCQ792**

**Date:  
September 01, 2022**

**Qualification of palladium coated copper with gold flash (CuPdAu) as a new bond wire material for selected MCP60xxx, MCP61xxx and MCP62xxx device families available in 6L SOT-23 package assembled at MMT assembly site. The selected MCP11xxx, MCP64xxx, MCP65xxx, MCP6Gxxx, MCP6Lxxx, and TC127xxx device families available in 5L SOT-23 package assembled in MMT assembly site will qualify by similarity (QBS).**

**Purpose:** Qualification of palladium coated copper with gold flash (CuPdAu) as a new bond wire material for selected MCP60xxx, MCP61xxx and MCP62xxx device families available in 6L SOT-23 package assembled at MMT assembly site. The selected MCP11xxx, MCP64xxx, MCP65xxx, MCP6Gxxx, MCP6Lxxx, and TC127xxx device families available in 5L SOT-23 package assembled in MMT assembly site will qualify by similarity (QBS).

<b><u>Misc.</u></b>	<b>Assembly site</b>	MMT
	<b>BD Number</b>	BD-000967/01
	<b>MP Code (MPC)</b>	A7BZ4YC8XF00
	<b>Part Number (CPN)</b>	MCP6293T-E/CH
	<b>MSL information</b>	MSL-1@260C
	<b>Assembly Shipping Media (T/R, Tube/Tray)</b>	TnR
	<b>Base Quantity Multiple (BQM)</b>	3000
	<b>CCB No</b>	5280 and 5280.001
<b><u>Lead-Frame</u></b>	<b>Paddle size</b>	72x41 mils
	<b>Material</b>	CDA194
	<b>DAP Surface Prep</b>	Ag Spot Plated
	<b>Treatment</b>	No
	<b>Process</b>	Stamped
	<b>Lead-lock</b>	No
	<b>Part Number</b>	10100602
	<b>Lead Plating</b>	Matte Tin
	<b>Strip Size</b>	228.288x50.800mm
	<b>Strip Density</b>	192units/strip
<b><u>Bond Wire</u></b>	<b>Material</b>	CuPdAu
<b><u>Die Attach</u></b>	<b>Part Number</b>	84-3J/8006NS
	<b>Conductive</b>	No
<b><u>MC</u></b>	<b>Part Number</b>	G600V
<b><u>PKG</u></b>	<b>PKG Type</b>	SOT-23
	<b>Pin/Ball Count</b>	6

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Test Site	Special Instructions
<b>Wire Bond Pull - WBP</b>	Mil. Std. 883-2011	5	0	3	15	0 fails after TC	5	MMT/MTAI	30 bonds from a minimum of 5 devices.
<b>Wire Bond Shear - WBS</b>	CDF-AEC-Q100-001	5	0	3	15	0	5	MMT/MTAI	30 bonds from a minimum of 5 devices.
<b>Wire Sweep</b>		5	0	3	15	0		MMT	Required for any reduction in wire bond thickness.
<b>External Visual</b>	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MMT/ MTAI	
<b>Preconditioning - Required for surface mount devices</b>	JESD22-A113. +150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020E for package type; Electrical test pre and post stress at +25°C. <b>MSL-1/260C</b>	231	15	3	738	0	15	MTAI	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
<b>HAST</b>	JESD22-A110. +130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C and hot temp.	77	5	3	246	0	10	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning for details
<b>Unbiased HAST</b>	JESD22-A118 +130°C/85% RH for 96 hrs. Electrical test pre and post stress at +25°C.	77	5	3	246	0	10	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
<b>Temp Cycle</b>	JESD22-A104. -65°C to +150°C for 500 cycles.  Electrical test pre and post stress at hot temp; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress	77	5	3	246	0	15	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.