Product Change Notification - LIAL-19RTVJ812

Date:

23 Apr 2018

Product Category:

Memory; Real-Time Clock/Calendar

Affected CPNs:

Notification subject:

CCB 3230 Initial Notice Qualification of palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 160K wafer technology available in 8L MSOP package at MTAI site.

Notification text:

PCN Status:

Initial notification.

PCN Type:

Manufacturing Change

Microchip Parts Affected:

Please open one of the icons found in the Affected CPNs section above.

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) bond wire in selected products of the 160K wafer technology available in 8L MSOP package at MTAI assembly site.

Pre Change:

Using gold (Au) bond wire

Post Change:

Using palladium coated copper with gold flash(CuPdAu) bond wire.

Pre and Post Change Summary:

	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	C194	C194

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve on-time delivery performance by qualifying palladium coated copper with gold flash (CuPdAu) bond wire.

Change Implementation Status:

In Progress

Estimated Qualification Completion Date:

June 2018

Note: Please be advised the qualification completion times may be extended because of unforeseen business conditions however implementation will not occur until after qualification has completed and a final PCN has been issued. The final PCN will include the qualification report and estimated first ship date. Also note that after the estimated first ship date guided in the final PCN customers may receive pre and post change parts.

Time Table Summary:

	April 2018					-->	June 2018				
Workweek	14	15	16	17	18		22	23	24	25	26
Initial PCN Issue Date				X							
Qual Report Availability							X				
Final PCN Issue Date							X				

Method to Identify Change:

Traceability code

Qualification Plan:

Please open the attachments included with this PCN labeled as PCN_#_Qual Plan.

Revision History:

April 23, 2018: Issued initial notification.

The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable products.

Attachment(s):

PCN_LIAL-19RTVJ812_QUAL_PLAN.pdf

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

Terms and Conditions:

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To opt out of future offer or information emails (other than product change notification emails), click here to go to microchipDIRECT and login, then click on the "My account" link, click on "Update profile" and un-check the box that states "Future offers or information about Microchip's products or services."

QUALIFICATION PLAN SUMMARY

PCN#: LIAL-19RTVJ812

Date
February 21, 2018

Qualification of palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 160K wafer technology available in 8L MSOP package at MTAI assembly site.

Purpose: **Qualification of palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 160K wafer technology available in 8L MSOP package at MTAI assembly site**

CCB No.: **3230**

Misc.	**Assembly site**	MTAI
	BD Number	BDM-001621 rev.A
	MP Code (MPC)	DFAW1
	Part Number (CPN)	24LC01B
Lead-Frame	**Paddle size**	82x94 mils
	Material	C194
	Surface	Bare Cu paddle
	Treatment	Roughening
	Process	Stamped
	Lead-lock	No
	Part Number	10100839
	Lead Plating	Matte Tin
Bond Wire	**Material**	CuPdAu
Die Attach	**Part Number**	8390A
	Conductive	Yes
MC	**Part Number**	G600V
PKG	**PKG Type**	MSOP
	Pin/Ball Count	8
	PKG width/size	3x3 mm
Die	**Die Thickness**	8 mils
	Die Size	28.3 x 26.8 mils
	MSL	MSL1/260

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
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0 fails after TC	5	MTAI	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5	MTAI	30 bonds from a min. 5 devices.
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MTAI	
HTSL (High Temp Storage Life)	+175 C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at +25C and hot temp.	45	5	1	50	0	10	MTAI	Must be in progress at time of package release to production, but completion is not required for release to production.
Preconditioning - Required for surface mount devices	+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. The standard sample size. **MSL1/260**	231	15	3	738	0	15	MTAI	Spares should be properly identified.
HAST	+130°C/85% RH for 96. Electrical test pre and post stress at +25°C and hot temp	77	5	3	246	0	10	MTAI	Spares should be properly identified.
UHAST	+130°C/85% RH for 96. Electrical test pre and post stress at +25°C	77	5	3	246	0	10	MTAI	Spares should be properly identified.
Temp Cycle	-65°C to +150°C for 500. 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.

LIAL-19RTVJ812 - CCB 3230 Initial Notice Qualification of palladium coated copper with gold flash (CuPdAu) bond

Affected Catalog Part Numbers(CPN)

11AA010-I/MS
11AA010T-I/MS
11AA020-I/MS
11AA020T-I/MS
11AA040-I/MS
11AA040T-I/MS
11AA080-I/MS
11AA080T-I/MS
11AA160-I/MS
11AA160T-I/MS
11AA161-I/MS
11AA161T-I/MS
11LC010-E/MS
11LC010-I/MS
11LC010T-E/MS
11LC010T-I/MS
11LC020-E/MS
11LC020-I/MS
11LC020T-E/MS
11LC020T-I/MS
11LC040-E/MS
11LC040-I/MS
11LC040T-E/MS
11LC040T-I/MS
11LC080-E/MS
11LC080-I/MS
11LC080T-E/MS
11LC080T-I/MS
11LC160-E/MS
11LC160-I/MS
11LC160T-E/MS
11LC160T-I/MS
11LC161-E/MS
11LC161-I/MS
11LC161T-E/MS
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24AA014H-I/MS
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24AA02T-I/MS
24AA02T-I/MSB31
24AA52-I/MS
24AA52T-I/MS
24C01C-E/MS
24C01C-I/MS
24C01CT-E/MS
24C01CT-I/MS
24C02C-E/MS
24C02C-I/MS
24C02CT-E/MS
24C02CT-I/MS
24LC014-E/MS
24LC014H-E/MS
24LC014H-I/MS
24LC014HT-E/MS
24LC014HT-I/MS
24LC014-I/MS
24LC014T-E/MS
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24LC01B-E/MS
24LC01BH-E/MS
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24LC01BHT-E/MS
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24LC01B-I/MS
24LC01BT-E/MS
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24LC02B-E/MS
24LC02BH-E/MS
24LC02BH-I/MS
24LC02BHT-E/MS
24LC02BHT-I/MS
24LC02B-I/MS
24LC02BT-E/MS
24LC02BT-I/MS
24LCS52-I/MS
24LCS52T-I/MS
24VL014/MS
24VL014H/MS
24VL014HT/MS
24VL014T/MS
24VL024/MS
24VL024H/MS
24VL024HT/MS
24VL024T/MS
24VL025/MS
24VL025T/MS
34AA02-E/MS
34AA02-I/MS
34AA02T-E/MS
34AA02T-I/MS
34LC02-E/MS
34LC02-I/MS
34LC02T-E/MS
34LC02T-I/MS
34VL02/MS
34VL02T/MS
MCP79400-I/MS
MCP79400T-I/MS
MCP79401-I/MS
MCP79401T-I/MS
MCP79402-I/MS
MCP79402T-I/MS
MCP7940M-I/MS
MCP7940MT-I/MS
MCP7940N-E/MS
MCP7940N-I/MS
MCP7940NT-E/MS
MCP7940NT-I/MS

MCP79410-I/MS
MCP79410T-I/MS
MCP79411-I/MS
MCP79411T-I/MS
MCP79412-I/MS
MCP79412T-I/MS