

Product Change Notification - JAON-15VCCB774

Date: 13 Jun 2016
Product Category: Analog (Thermal, Power Management & Safety); Analog (Linear & Mixed Signal) AND Interface
Notification subject: CCB 2593 Initial Notice:Qualification of palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 120K wafer technology available in 8L MSOP package at MTAI assembly site
Notification text: **PCN Status:**
Initial notification

Microchip Parts Affected:

Please open the attachments found in the attachments field below labeled as PCN_#_Affected_CPN.

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 120K wafer technology available in 8L MSOP package at MTAI assembly site.

Pre Change:

Gold (Au) bond wire

Post Change:

Palladium coated copper with gold flash (CuPdAu) bond wire

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	MTAI assembly site	MTAI assembly site
Wire material	Au wire	CuPdAu wire
Die attach material	8390A	8390A
Molding compound material	G600	G600
Lead frame material	CDA194	CDA194

Impacts to Data Sheet:

None

Reason for Change:

To improve productivity and qualifying Palladium coated copper with gold flash (CuPdAu) bond wire.

Change Implementation Status:

In Progress

Estimated Qualification Completion Date:

June 2016

	22	23	24	25	26
Initial PCN Issue Date			X		
Qual Report Availability					X
Final PCN Issue Date					X

Markings to Distinguish Revised from Unrevised Devices:

Traceability code

Revision History:

June 13, 2016: 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_JAON-15VCCB774_Qual_Plan.pdf](#)

[PCN_JAON-15VCCB774_Affected_CPN.pdf](#)

[PCN_JAON-15VCCB774_Affected_CPN.xls](#)

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Affected Catalog Part Numbers (CPN)

PCN_JAON-15VCCB774
CATALOG_PART_NBR
MCP1650R-E/MS
MCP1650RT-E/MS
MCP1650S-E/MS
MCP1650ST-E/MS
MCP1651R-E/MS
MCP1651RT-E/MS
MCP1651S-E/MS
MCP1651ST-E/MS
MCP1652R-E/MS
MCP1652RT-E/MS
MCP1652S-E/MS
MCP1652ST-E/MS
MCP3001-I/MS
MCP3002-I/MS
MCP3201-CI/MS
MCP3201T-CI/MS
MCP3202-CI/MS
MCP3202T-CI/MS
MCP3301-BI/MS
MCP3301-CI/MS
MCP3301T-BI/MS
MCP3301T-CI/MS
MCP6002-E/MS
MCP6002-I/MS
MCP6002T-E/MS
MCP6002T-E/MSHAZ
MCP6002T-I/MS
MCP6021-E/MS
MCP6021T-E/MS
MCP6031-E/MS
MCP6031T-E/MS
MCP6032-E/MS
MCP6032T-E/MS
MCP6033-E/MS
MCP6033T-E/MS
MCP6041-E/MS
MCP6041-I/MS
MCP6041T-E/MS
MCP6041T-I/MS
MCP6042-E/MS
MCP6042-I/MS
MCP6042T-E/MS
MCP6042T-I/MS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-15VCCB774
CATALOG_PART_NBR
MCP6043-E/MS
MCP6043-I/MS
MCP6043T-E/MS
MCP6043T-I/MS
MCP6141-E/MS
MCP6141-I/MS
MCP6141T-E/MS
MCP6141T-I/MS
MCP6142-E/MS
MCP6142-I/MS
MCP6142T-E/MS
MCP6142T-I/MS
MCP6143-E/MS
MCP6143-I/MS
MCP6143T-E/MS
MCP6143T-I/MS
MCP616-I/MS
MCP616T-I/MS
MCP617-I/MS
MCP617T-I/MS
MCP618-I/MS
MCP618T-I/MS
MCP6231-E/MS
MCP6231T-E/MS
MCP6232-E/MS
MCP6232T-E/MS
MCP6241-E/MS
MCP6241T-E/MS
MCP6242-E/MS
MCP6242T-E/MS
MCP6271-E/MS
MCP6271T-E/MS
MCP6272-E/MS
MCP6272T-E/MS
MCP6273-E/MS
MCP6273T-E/MS
MCP6275-E/MS
MCP6275T-E/MS
MCP6281-E/MS
MCP6281T-E/MS
MCP6282-E/MS
MCP6282T-E/MS
MCP6283-E/MS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-15VCCB774
CATALOG_PART_NBR
MCP6283T-E/MS
MCP6285-E/MS
MCP6285T-E/MS
MCP6291-E/MS
MCP6291T-E/MS
MCP6292-E/MS
MCP6292-E/MSAAA
MCP6292T-E/MS
MCP6292T-E/MSAAA
MCP6293-E/MS
MCP6293T-E/MS
MCP6295-E/MS
MCP6295T-E/MS
MCP6442-E/MS
MCP6442T-E/MS
MCP6541-E/MS
MCP6541-I/MS
MCP6541T-E/MS
MCP6541T-I/MS
MCP6542-E/MS
MCP6542-I/MS
MCP6542T-E/MS
MCP6542T-I/MS
MCP6543-E/MS
MCP6543-I/MS
MCP6543T-E/MS
MCP6543T-I/MS
MCP6546-E/MS
MCP6546-I/MS
MCP6546T-E/MS
MCP6546T-I/MS
MCP6547-E/MS
MCP6547-I/MS
MCP6547T-E/MS
MCP6547T-I/MS
MCP6548-E/MS
MCP6548-I/MS
MCP6548T-E/MS
MCP6548T-I/MS
MCP6G01-E/MS
MCP6G01T-E/MS
MCP6G02-E/MS
MCP6G02T-E/MS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-15VCCB774
CATALOG_PART_NBR
MCP6G03-E/MS
MCP6G03T-E/MS
MCP6L02T-E/MS
MCP6L1T-E/MS
MCP6L2T-E/MS
MCP6L71T-E/MS
MCP6L72T-E/MS
MCP6L91T-E/MS
MCP6L92T-E/MS
MCP6L92T-E/MSHHH
MCP6S21-I/MS
MCP6S21T-I/MS
MCP6S22-I/MS
MCP6S22T-I/MS
MCP6S91-E/MS
MCP6S91T-E/MS
MCP6S92-E/MS
MCP6S92T-E/MS



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QUALIFICATION PLAN

PCN #: JAON-15VCCB774

**Date:
Mar 9, 2016**

Qualification of palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 120K wafer technology available in 8L MSOP package at MTAI assembly site.

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Purpose: Qualification of palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 120K wafer technology available in 8L MSOP package at MTAI assembly site.

CCB No.: 2593

Misc.	Assembly site	MTAI
	BD Number	BDM-001069 rev.A
	MP Code (MPC)	A7BV8YA3XA00
	Part Number (CPN)	MCP6282T-E/MS
Lead-Frame	Paddle size	68x94 mils
	Material	CDA194
	Surface	Bare Cu DAP
	Treatment	Brown Oxide Treated
	Process	Stamped
	Lead-lock	No
	Part Number	TBD
	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	43.5 x 58.0 mils

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	Special Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	3	24	0 fails after TC	5	30 bonds from a minimum of 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	3	24	0	5	30 bonds from a minimum of 5 devices.
Wire Sweep		5	0	3	15	0		Required for any reduction in wire bond thickness.
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	
HTSL (High Temp Storage Life)	+175 C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at +25°C and hot temp 85°C.	45	5	1	50	0	10	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-020D for package type; Electrical test pre and post stress at +25°C. MSL1 @ 260°C	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.
HAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C and hot temp 85°C.	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Unbiased HAST	+130°C/85% RH for 96 hrs. Electrical test pre and post stress at +25°C.	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at hot temp 85°C; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.