

Product Change Notification - JAON-22VBSE169

Date:

02 Mar 2016

Product Category:

Analog (Linear & Mixed Signal) AND Interface; Analog (Thermal, Power Management & Safety)

Notification subject:

CCB 2543 Initial Notice: Qualification of palladium coated copper with gold flash (CuPdAu) bond wire for products fabricated at XFGM available in 8L SOIC package at MMT 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 for products fabricated at XFGM available in 8L SOIC package at MMT 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	MMT assembly site	MMT assembly site
Wire material	Au wire	CuPdAu wire
Die attach material	8390A	8390A
Molding compound material	G600V	G600V
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 First Ship Date:

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

Summary Table:

	March 2016					April 2016					May 2016				June 2016				
WW	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
Initial PCN Issue Date	X																		
Qual Report Availability															X				
Final PCN Issue Date															X				
Implementation Date																	X		

Markings to Distinguish Revised from Unrevised Devices:

Traceability code

Revision History:

March 2, 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-22VBSE169_Qual_Plan.pdf](#) [PCN_JAON-22VBSE169_Affected_CPN.pdf](#) [PCN_JAON-](#)

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

Terms and Conditions:

If you wish to change your product/process change notification (PCN) profile please log on to our website at <http://www.microchip.com/PCN> sign into myMICROCHIP to open the myMICROCHIP home page, then select a profile option from the left navigation bar.

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."

JAON-22VBSE169 - CCB 2543 Initial Notice: Qualification of palladium coated copper with gold flash (CuPdAu) bond wire for products fabricated at XFGM available in 8L SOIC package at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_JAON-22VBSE169
CATALOG_PART_NBR
MCP2025-330E/SN
MCP2025-500E/SN
MCP2025T-330E/SN
MCP2025T-500E/SN
MCP2551-E/SN
MCP2551-I/SN
MCP2551T-E/SN
MCP2551T-I/SN
RE46C100S8F
RE46C100S8TF
RE46C101S8F
RE46C101S8TF
RE46C108S8F
RE46C108S8TF
RE46C117S8F
RE46C117S8TF
RE46C317S8F
RE46C317S8TF
RE46C318S8F



MICROCHIP

QUALIFICATION PLAN

PCN #: JAON-22VBSE169

**Date:
Feb 11, 2016**

**Qualification of palladium coated copper with gold flash
(CuPdAu) bond wire for products fabricated at XFGM
available in 8L SOIC package at MMT assembly site.**

Distribution

Surasit P.
A. Navarro
Wichai K.
Chaweng W.
Chalermpon P.
Atthapong W.

Greg P.
Vassilis D.
Fernando C.
Gerry O.
Arnel M.
Sombat K.

Microchip Technology (Thailand) Co., Ltd.
14 Moo 1 T. Wangtakien A. Muangchacherngsao,
Chacherngsao, Thailand, 24000
Tel. (6638) 857119-45, 857311-19 ext. 1231
Fax (6638) 857149-50

Purpose: _____ Qualification of palladium coated copper with gold flash (CuPdAu) bond wire for products fabricated at XFGM available in 8L SOIC package at MMT assembly site.

CCB No.: _____ 2543

Misc.	Assembly site	MMT
	BD Number	BDM-000949 rev. A
	MP Code (MPC)	VK0014C2XA00
	Part Number (CPN)	MCP2551-E/SN
Lead-Frame	Paddle size	95x130
	Material	CDA194
	Manufacturer	ASM
	Surface	Bare Cu
	Treatment	Brow Oxide Treatment
	Process	Stamped
	Lead-lock	No
	Part Number	10100819
	Lead Plating	Matte Tin
Bond Wire	Material	CuPdAu
Die Attach	Part Number	8390A
	Conductive	Yes
MC	Part Number	G600V
PKG	PKG Type	SOIC
	Pin/Ball Count	8
	PKG width/size	3.90mm
Die	Die Thickness	15 mils
	Die Size	103.4x62.3 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.
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.85oC, (1 lot to be tested at 125°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. MSL1/260C	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 or 110°C/85%RH for 264 hours. Electrical test pre and post stress at +25°C and hot temp. (1 lot to be tested at 125°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 or +110°C/85% RH for 264 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; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress. (1 lot to be tested at 125°C)	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.