Product Change Notification - JAON-22CDLC928

Date: 06 Jul 2017

Product Category: Interface- Serial Peripherals; 8-bit PIC Microcontrollers

Notification subject: CCB 3000 Initial Notice: Qualification of MMT as an additional assembly site using CuPdAu bond wire in selected products of the 150K and 160K wafer technologies available in 28L SSOP package.

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 MMT as an additional assembly site using palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 150K and 160K wafer technologies available in 28L SSOP package.

Pre Change:
Assembled at MTAI using palladium coated copper (PdCu) bond wire.

Post Change:
Assembled at MTAI using palladium coated copper (PdCu) bond wire or assembled at MMT using 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	MMT Assembly Site
Wire material	PdCu Wire	PdCu Wire	CuPdAu Wire
Die attach material	3280	3280	3280
Molding compound material	G600	G600	G600
Lead frame material	CDA194	CDA194	CDA194

Impacts to Data Sheet:
None

Change Impact:
None

Reason for Change:
To improve productivity by qualifying MMT as an additional assembly site using palladium coated copper with gold flash (CuPdAu) bond wire.

Change Implementation Status:
In Progress

Estimated Qualification Completion Date:
October 2017

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:

	July 2017				-->	October 2017			
Workweek	27	28	29	30		40	41	42	43
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:
July 6, 2017: 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-22CDLC928_Qual Plan.pdf
PCN_JAON-22CDLC928_Affected CPN.pdf
PCN_JAON-22CDLC928_Affected CPN.xlsx

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."

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Affected Catalog Part Numbers (CPN)

PCN_JAON-22CDLC928
CATALOG_PART_NBR
HA1930-I/SS
HA1930T-I/SS
HA4315T-I/SS
HA4315T-I/SS022
MCP23016-I/SS
MCP23016T-I/SS
MCP23017-E/SS
MCP23017T-E/SS
MCP23S17-E/SS
MCP23S17T-E/SS
PIC16F570-E/SS
PIC16F570-I/SS
PIC16F570T-I/SS
PIC16F57-E/SS
PIC16F57-I/SS
PIC16F57T-E/SS
PIC16F57T-I/SS
PIC16F57T-I/SS024
PIC16F57T-I/SS025
PIC16F57T-I/SS027
PIC16F72-E/SS
PIC16F72-I/SS
PIC16F72T-E/SS
PIC16F72T-I/SS
PIC16F737-I/SS
PIC16F737T-I/SS
PIC16F73-E/SS
PIC16F73-I/SS
PIC16F73T-E/SS
PIC16F73T-I/SS
PIC16F73T-I/SS155
PIC16F73T-I/SSC15
PIC16F767-E/SS
PIC16F767-I/SS
PIC16F767T-I/SS
PIC16F76-E/SS
PIC16F76-I/SS
PIC16F76T-E/SS
PIC16F76T-I/SS
PIC16F873A-E/SS
PIC16F873A-I/SS
PIC16F873AT-I/SS
PIC16F876A-E/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-22CDLC928
CATALOG_PART_NBR
PIC16F876A-I/SS
PIC16F876AT-E/SS
PIC16F876AT-I/SS
PIC16F876AT-I/SSC36
PIC16F882-E/SS
PIC16F882-I/SS
PIC16F882T-E/SS
PIC16F882T-I/SS
PIC16F883-E/SS
PIC16F883-I/SS
PIC16F883-I/SS046
PIC16F883-I/SS063
PIC16F883-I/SS064
PIC16F883T-E/SS
PIC16F883T-I/SS
PIC16F883T-I/SS022
PIC16F883T-I/SS063
PIC16F883T-I/SS064
PIC16F883T-I/SS070
PIC16F883T-I/SS071
PIC16F886-E/SS
PIC16F886-I/SS
PIC16F886T-E/SS
PIC16F886T-I/SS
PIC16F886T-I/SS026
PIC16F886T-I/SS052
PIC16F886T-I/SS056
PIC16F886T-I/SSC07
PIC16F913-E/SS
PIC16F913-I/SS
PIC16F913T-E/SS
PIC16F913T-I/SS
PIC16F913T-I/SS025
PIC16F913T-I/SS027
PIC16F913T-I/SS032
PIC16F916-E/SS
PIC16F916-I/SS
PIC16F916-I/SS034
PIC16F916-I/SS035
PIC16F916T-I/SS
PIC16F916T-I/SS028
PIC16F916T-I/SS029
PIC16F916T-I/SS031

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Affected Catalog Part Numbers (CPN)

PCN_JAON-22CDLC928
CATALOG_PART_NBR
PIC16F916T-I/SS033
PIC16F916T-I/SS034
PIC16F916T-I/SS035
PIC16LF72-I/SS
PIC16LF72T-I/SS
PIC16LF737-I/SS
PIC16LF737T-I/SS
PIC16LF737T-I/SS021
PIC16LF73-I/SS
PIC16LF73T-I/SS
PIC16LF767-I/SS
PIC16LF767T-I/SS
PIC16LF76-I/SS
PIC16LF76T-I/SS
PIC16LF873A-I/SS
PIC16LF873AT-I/SS
PIC16LF876A-I/SS
PIC16LF876AT-I/SS
PIC16LF876AT-I/SSC26
PIC18F2221-E/SS
PIC18F2221-I/SS
PIC18F2221T-I/SS
PIC18F2321-E/SS
PIC18F2321-I/SS
PIC18F2321T-E/SS
PIC18LF2221-I/SS
PIC18LF2221T-I/SS
PIC18LF2321-I/SS
PIC18LF2321T-I/SS
PS501-I/SSC05
PS501T-I/SSC01
PS501T-I/SSC05

QUALIFICATION PLAN SUMMARY

PCN #: JAON-22CDLC928

Date:
June 15, 2017

Qualification of MMT as an additional assembly site using palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 160K wafer technology available in 28L SSOP package. The selected products of the 150K wafer technology available in 28L SSOP package will qualify by similarity.

Purpose:___Qualification of MMT as an additional assembly site using palladium coated copper with gold flash (CuPdAu) bond wire in selected products of the 160K wafer technology available in 28L SSOP package. The selected products of the 150K wafer technology available in 28L SSOP package will qualify by similarity.

CCB No.:___3000

Misc.	Assembly site	MMT
	BD Number	BDM-001363 rev A
	MP Code (MPC)	DEBY14N2XAXF
	Part Number (CPN)	PIC18F2321-E/SS
Lead-Frame	Paddle size	153x200 mils
	Material	CDA194
	Surface	Bare Cu
	Treatment	BOT
	Process	Stamped
	Lead-lock	No
	Part Number	10102834
	Lead Plating	Matte Tin
	LF Matrix (RowxColumn)	12x4
	Strip test capable	Yes
Bond Wire	Material	CuPdAu
Die Attach	Part Number	3280
	Conductive	Yes
MC	Part Number	G600
PKG	PKG Type	SSOP
	Pin/Ball Count	28
	PKG width/size	0.209”
Die	Die Thickness	15
	Die Size	129.9x124.1 mils
MSL Classification		L1/260C

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.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	
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. Electrical test pre and post stress at +25°C and hot temp.85ºC. 1 lot to be tested at 125C	45	5	1	50	0	25	For hot temp testing, pre/post test 1 lot at 85°C and 125°C
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. Extend HAST to 192 hrs post stress test at 25C. 1 lot to be tested at 125C	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

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
Unbiased HAST	+130°C/85% RH for 96 hrs. Electrical test pre and post stress at +25°C. Extend HAST to 192 hrs post stress test at 25C	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. Extend temp cycle to 1000 cycle post stress test at 25°C. 1 lot to be tested at 125C	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.