



Product Change Notification / NTDO-13ZFJZ174

Date:

15-Mar-2022

Product Category:

8-bit Microcontrollers, Digital Temperature Sensors, Digital to Analog Converters, Memory, Real-Time Clock/Calendar

PCN Type:

Manufacturing Change

Notification Subject:

CCB 5028 Final Notice: Qualification of palladium coated copper with gold flash (CuPdAu) bond wire for selected products available in 8L TSSOP (4.4mm) package assembled at MMT assembly site.

Affected CPNs:

[NTDO-13ZFJZ174_Affected_CPN_03152022.pdf](#)

[NTDO-13ZFJZ174_Affected_CPN_03152022.csv](#)

Notification Text:

PCN Status:Final 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) bond wire for selected products available in 8L TSSOP (4.4mm) package assembled at MMT assembly site.

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Microchip Technology Thailand (Branch) (MMT)	Microchip Technology Thailand (Branch) (MMT)
Wire Material	Au	CuPdAu
Die Attach Material	2200D	2200D
Molding Compound Material	G600	G600
Lead-Frame Material	C7025	C7025

Impacts to Data Sheet: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 First Ship Date:March 17, 2022 (date code: 2212)

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

Time Table Summary:

Workweek	March 2022				
	10	11	12	13	14
Final PCN Issue Date			x		
Qual Report Availability			x		
Estimated Implementation Date			x		

Method to Identify Change:Traceability code

Qualification Report:Please open the attachments included with this PCN labeled as PCN_#_Qual_Report.

Revision History:

March 15, 2022: Issued final notification.

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

Attachments:

[PCN_NTDO-13ZFJZ174_Qual Report.pdf](#)

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

Terms and Conditions:

If you wish to receive Microchip PCNs via email please register for our PCN email service at our [PCN home page](#) select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the [PCN FAQ](#) section.

If you wish to change your PCN profile, including opt out, please go to the [PCN home page](#) select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.

Affected Catalog Part Numbers (CPN)

24LC256-E/ST
24LC256-E/STRVE
24LC256-I/ST
24LC256-I/STA31
24AA256-I/ST
24AA256-I/STRVE
24LC256T-I/ST
24LC256T-I/STA31
24AA256T-I/ST
24AA256T-I/STRVE
24LC256T-E/ST
24LC256T-E/STRVE
24LC128-E/ST
24LC128-I/ST
24AA128-I/ST
24LC128T-I/ST
24LC128T-I/STDLL
24AA128T-I/ST
24LC128T-E/ST
24FC128-I/ST
24FC128-I/STA31
24FC128T-I/ST
24FC128T-I/STA31
24AA64X/ST
24LC64-E/ST
24LC64X-E/ST
24LC64-I/ST
24LC64X-I/ST
24LC64-I/STRVE
24AA64-I/ST
24AA64-I/STB31
24AA64X-I/ST
24LC64X-I/STRVE
24AA64XT/ST
24LC64T-I/ST
24LC64XT-I/ST
24LC64T-I/STRVE
24AA64T-I/ST
24AA64XT-I/ST
24LC64XT-I/STRVE
24LC64T-E/ST
24LC64XT-E/ST
24AA01-I/ST
24AA01T-I/ST
24LC02B/ST
24AA02/ST

24LC02B-E/ST
24LC02B-I/ST
24LC02B-I/STA31
24AA02-I/ST
24LC02BT/ST
24LC02BT-I/ST
24LC02BT-I/STA31
24AA02T-I/ST
24LC02BT-E/ST
24LC04B/ST
24LC04B-E/ST
24LC04B-I/ST
24AA04-I/ST
24LC04BT/ST
24LC04BT-I/ST
24AA04T-I/ST
24LC04BT-E/ST
24LC32A-E/ST
24LC32AX-E/ST
24LC32A-I/ST
24LC32AX-I/ST
24LC32A-I/STA31
24AA32A-I/ST
24AA32AX-I/ST
24AA32A-I/STB31
24LC32AT-I/ST
24LC32AXT-I/ST
24AA32AT-I/ST
24AA32AXT-I/ST
24AA32AT-I/STB31
24LC32AT-E/ST
24LC32AXT-E/ST
25LC160B-E/ST
25LC160B-I/ST
25AA160B-I/ST
25LC160BT-I/ST
25AA160BT-I/ST
25LC160BT-E/ST
25LC080B-E/ST
25LC080B-I/ST
25AA080B-I/ST
25LC080BT-I/ST
25AA080BT-I/ST
25LC080BT-E/ST
25LC080A-E/ST
25LC080A-I/ST
25AA080A-I/ST
25LC080AT-I/ST
25AA080AT-I/ST

25LC080AT-E/ST
25LC160A-E/ST
25LC160A-I/ST
25AA160A-I/ST
25LC160AT-I/ST
25AA160AT-I/ST
25LC160AT-E/ST
93LC46A/ST
93LC46A-E/ST
93LC46A-I/ST
93AA46A-I/ST
93LC46AT/ST
93LC46AT-I/ST
93AA46AT-I/ST
93LC46AT-E/ST
93LC46B/ST
93LC46B-E/ST
93LC46B-I/ST
93AA46B-I/ST
93LC46BT/ST
93LC46BT-I/ST
93AA46BT-I/ST
93LC46BT-E/ST
93C46B/ST
93C46B-E/ST
93C46B-I/ST
93C46BT/ST
93C46BT-I/ST
93C46BT-E/ST
93C46A-E/ST
93C46A-I/ST
93C46AT-I/ST
93C46AT-E/ST
93LC46C-E/ST
93LC46C-I/ST
93AA46C-I/ST
93LC46CT-I/ST
93AA46CT-I/ST
93LC46CT-E/ST
93LC56A/ST
93LC56B/ST
93LC56C-E/ST
93LC56A-E/ST
93LC56B-E/ST
93LC56C-I/ST
93AA56C-I/ST
93LC56A-I/ST
93AA56A-I/ST
93LC56B-I/ST

93AA56B-I/ST
93LC56BT/ST
93LC56CT-I/ST
93AA56CT-I/ST
93LC56AT-I/ST
93AA56AT-I/ST
93LC56BT-I/ST
93AA56BT-I/ST
93LC56CT-E/ST
93LC56AT-E/ST
93LC56BT-E/ST
93LC66A/ST
93LC66B/ST
93LC66C-E/ST
93LC66A-E/ST
93LC66B-E/ST
93LC66C-I/ST
93AA66C-I/ST
93LC66A-I/ST
93AA66A-I/ST
93LC66B-I/ST
93AA66B-I/ST
93LC66AT/ST
93LC66CT-I/ST
93AA66CT-I/ST
93LC66AT-I/ST
93AA66AT-I/ST
93LC66BT-I/ST
93AA66BT-I/ST
93LC66CT-E/ST
93LC66AT-E/ST
93LC66BT-E/ST
93C46C-E/ST
93C46C-I/ST
93C46CT-I/ST
93C46CT-E/ST
93C56C-E/ST
93C56A-E/ST
93C56B-E/ST
93C56C-I/ST
93C56A-I/ST
93C56B-I/ST
93C56CT-I/ST
93C56AT-I/ST
93C56BT-I/ST
93C56CT-E/ST
93C56AT-E/ST
93C56BT-E/ST
93C66C-E/ST

93C66A-E/ST
93C66B-E/ST
93C66C-I/ST
93C66A-I/ST
93C66B-I/ST
93C66CT-I/ST
93C66AT-I/ST
93C66BT-I/ST
93C66CT-E/ST
93C66AT-E/ST
93C66BT-E/ST
93LC76C-E/ST
93LC76C-I/ST
93AA76C-I/ST
93LC76CT-I/ST
93AA76CT-I/ST
93LC76CT-E/ST
93LC86C-E/ST
93LC86C-I/ST
93AA86C-I/ST
93LC86CT-I/ST
93AA86CT-I/ST
93LC86CT-E/ST
93C76C-E/ST
93C76C-I/ST
93C76CT-I/ST
93C76CT-E/ST
93C86C-E/ST
93C86C-I/ST
93C86CT-I/ST
93C86CT-E/ST
93LC76A-E/ST
93LC76B-E/ST
93LC76A-I/ST
93AA76A-I/ST
93LC76B-I/ST
93AA76B-I/ST
93LC76AT-I/ST
93AA76AT-I/ST
93LC76BT-I/ST
93AA76BT-I/ST
93LC76AT-E/ST
93LC76BT-E/ST
93LC86A-E/ST
93LC86B-E/ST
93LC86A-I/ST
93AA86A-I/ST
93LC86B-I/ST
93AA86B-I/ST

93LC86AT-I/ST
93AA86AT-I/ST
93LC86BT-I/ST
93AA86BT-I/ST
93LC86AT-E/ST
93LC86BT-E/ST
93C76A-E/ST
93C76B-E/ST
93C76A-I/ST
93C76B-I/ST
93C76AT-I/ST
93C76BT-I/ST
93C76AT-E/ST
93C76BT-E/ST
93C86A-E/ST
93C86B-E/ST
93C86A-I/ST
93C86B-I/ST
93C86AT-I/ST
93C86BT-I/ST
93C86AT-E/ST
93C86BT-E/ST
25LC256-E/ST
25AA256-E/ST
25LC256-I/ST
25LC256-I/ST
25AA256-I/ST
25LC256T-I/ST
25LC256T-I/STRVA
25LC256T-I/STA31
25AA256T-I/ST
25LC256T-E/ST
25AA256T-E/ST
25LC320A-E/ST
25LC320AX-E/ST
25LC320A-I/ST
25AA320A-I/ST
25AA320A-I/STB22
25LC320AX-I/ST
25AA320AX-I/ST
25LC320AT-I/ST
25AA320AT-I/ST
25AA320AT-I/STB22
25LC320AXT-I/ST
25AA320AXT-I/ST
25LC320AT-E/ST
25LC320AXT-E/ST
25LC160D-E/ST
25AA160D-E/ST

25LC160D-I/ST
25AA160D-I/ST
25LC160DT-I/ST
25AA160DT-I/ST
25LC160DT-E/ST
25AA160DT-E/ST
25LC080D-E/ST
25LC080D-I/ST
25AA080D-I/ST
25LC080DT-I/ST
25AA080DT-I/ST
25LC080DT-E/ST
25LC160C-E/ST
25LC160C-I/ST
25AA160C-I/ST
25LC160CT-I/ST
25AA160CT-I/ST
25LC160CT-E/ST
25LC080C-E/ST
25LC080C-I/ST
25AA080C-I/ST
25LC080CT-I/ST
25AA080CT-I/ST
25LC080CT-E/ST
25LC128X-E/ST
25LC128X-I/ST
25AA128X-I/ST
25LC128XT-I/ST
25AA128XT-I/ST
25LC128XT-E/ST
25LC128-E/ST
25AA128-E/ST
25LC128-I/ST
25AA128-I/ST
25LC128T-I/ST
25AA128T-I/ST
25LC128T-E/ST
25AA128T-E/ST
25LC640A-E/ST
25AA640A-E/ST
25LC640AX-E/ST
25LC640A-I/ST
25AA640A-I/ST
25LC640AX-I/ST
25AA640AX-I/ST
25LC640AT-I/ST
25AA640AT-I/ST
25LC640AXT-I/ST
25AA640AXT-I/ST

25LC640AT-E/ST
25AA640AT-E/ST
25LC640AXT-E/ST
25LC010A-E/ST
25LC010A-I/ST
25AA010A-I/ST
25LC010AT-I/ST
25AA010AT-I/ST
25LC010AT-E/ST
25LC020A-E/ST
25LC020A-I/ST
25AA020A-I/ST
25LC020AT-I/ST
25AA020AT-I/ST
25LC020AT-E/ST
25LC040A-E/ST
25LC040AX-E/ST
25LC040A-I/ST
25AA040A-I/ST
25LC040AX-I/ST
25AA040AX-I/ST
25LC040AT-I/ST
25AA040AT-I/ST
25LC040AXT-I/ST
25AA040AXT-I/ST
25LC040AT-E/ST
25LC040AXT-E/ST
MCP98242-BE/ST
MCP98242-CE/ST
24LC08B/ST
24LC08B-E/ST
24LC08B-I/ST
24LC08B-I/STA31
24AA08-I/ST
24LC08BT/ST
24LC08BT-I/ST
24LC08BT-I/STA31
24AA08T-I/ST
24LC08BT-E/ST
24LC08BH-E/ST
24LC08BH-I/ST
24AA08H-I/ST
24LC08BHT-I/ST
24AA08HT-I/ST
24LC08BHT-E/ST
24LC16B/ST
24LC16B-E/ST
24AA16-E/ST
24LC16B-I/ST116

24LC16B-I/ST
24AA16-I/ST
24LC16BT/ST
24LC16BT-I/ST114
24LC16BT-I/ST116
24LC16BT-I/ST
24LC16BT-I/STA31
24AA16T-I/ST
24LC16BT-I/ST
24LC16BT-E/ST
24AA16T-E/ST
24LC16BH-E/ST
24LC16BH-I/ST
24AA16H-I/ST
24LC16BHT-I/ST
24AA16HT-I/ST
24LC16BHT-E/ST
24LC32A-E/ST
24LC32AX-E/ST
24LC32A-I/ST
24AA32A-I/ST
24LC32AX-I/ST
24AA32AX-I/ST
24LC32AT-I/ST
24AA32AT-I/ST
24LC32AXT-I/ST
24AA32AXT-I/ST
24LC32AT-E/ST
24LC32AXT-E/ST
24LC32AF-E/ST
24LC32AF-I/ST
24AA32AF-I/ST
24LC32AFT-I/ST
24AA32AFT-I/ST
24LC32AFT-E/ST
24AA64X/ST
24LC64-E/ST
24AA64-E/ST
24LC64X-E/ST
24LC64-I/ST
24AA64-I/ST
24AA64-I/STB31
24AA64X-I/ST
24LC64X-I/ST
24FC64-I/ST
24AA64XT/ST
24LC64T-I/ST
24AA64T-I/ST
24AA64XT-I/ST

24LC64XT-I/ST
24FC64T-I/ST
24LC64T-E/ST
24AA64T-E/ST
24LC64XT-E/ST
24LC64F-E/ST
24LC64F-I/ST
24AA64F-I/ST
24FC64F-I/ST
24LC64FT-I/ST
24AA64FT-I/ST
24FC64FT-I/ST
24LC64FT-E/ST
24LC128-E/ST
24AA128-E/ST
24FC128-E/ST
24LC128-I/ST
24LC128-I/STRVF
24AA128-I/ST
24FC128-I/ST
24LC128T-I/ST
24AA128T-I/ST
24FC128T-I/ST
24LC128T-E/ST
24AA128T-E/ST
24FC128T-E/ST
24LC04B/ST
24LC04B-E/ST
24LC04B-I/ST
24AA04-I/ST
24LC04BT/ST
24LC04BT-I/ST
24AA04T-I/ST
24LC04BT-E/ST
24LC04BH-E/ST
24LC04BH-I/ST
24AA04H-I/ST
24LC04BHT-I/ST
24AA04HT-I/ST
24LC04BHT-E/ST
24LC512-E/ST
24LC512-I/ST
24AA512-I/ST
24FC512-I/ST
24LC512T-I/ST
24AA512T-I/ST
24FC512T-I/ST
24LC512T-E/ST
24LC256-E/ST

24AA256-E/ST
24FC256-E/ST
24LC256-I/ST
24AA256-I/ST
24FC256-I/ST
24LC256T-I/ST
24AA256T-I/ST
24FC256T-I/ST
24LC256T-E/ST
24AA256T-E/ST
24FC256T-E/ST
MCP98243-BE/ST
MCP98243T-BE/ST
MCP9843-BE/ST
MCP9843T-BE/ST
24LC01B/ST
24LC01B-E/ST
24LC01B-I/ST
24AA01-I/ST
24LC01BT/ST
24LC01BT-I/ST
24AA01T-I/ST
24LC01BT-E/ST
24LC02B/ST
24AA02/ST
24LC02B-E/ST
24LC02B-I/ST
24LC02BT-I/STA31
24AA02-I/ST
24LC02BT/ST
24LC02BT-I/ST
24LC02BT-I/STA31
24AA02T-I/ST
24LC02BT-E/ST
24LC01BH-E/ST
24LC01BH-I/ST
24AA01H-I/ST
24LC01BHT-I/ST
24AA01HT-I/ST
24LC01BHT-E/ST
24LC02BH-E/ST
24LC02BH-I/ST
24AA02H-I/ST
24LC02BHT-I/ST
24AA02HT-I/ST
24LC02BHT-E/ST
24LCS52/ST
24LCS52-I/ST
24AA52-I/ST

24LCS52T/ST
24LCS52T-I/ST
24AA52T-I/ST
24LC024/ST
24LC025/ST
24VL024/ST
24VL025/ST
24LC024-E/ST
24LC025-E/ST
24LC024-I/ST160
24LC024-I/ST184
24LC024-I/ST185
24LC024-I/ST186
24LC024-I/ST187
24LC024-I/ST
24AA024-I/ST
24LC025-I/ST
24AA025-I/ST
24LC024T/ST
24VL024T/ST
24VL025T/ST
24LC024T-I/ST160
24LC024T-I/ST178
24LC024T-I/ST183
24LC024T-I/ST184
24LC024T-I/ST185
24LC024T-I/ST186
24LC024T-I/ST187
24LC024T-I/ST
24AA024T-I/ST
24LC025T-I/ST
24AA025T-I/ST
24LC024T-E/ST
24LC025T-E/ST
24VL014/ST
24LC014-E/ST
24LC014-I/ST
24AA014-I/ST
24VL014T/ST
24LC014T-I/ST
24AA014T-I/ST
24LC014T-E/ST
24C02C-E/ST
24C02C-I/ST
24C02CT/ST
24C02CT-I/ST
24C02CT-E/ST
24C01C-E/ST
24C01C-I/ST

24C01CT-I/ST
24C01CT-E/ST
24VL014H/ST
24LC014H-E/ST
24LC014H-I/ST
24AA014H-I/ST
24VL014HT/ST
24LC014HT-I/ST
24AA014HT-I/ST
24LC014HT-E/ST
24VL024H/ST
24LC024H-E/ST
24LC024H-I/ST
24AA024H-I/ST
24VL024HT/ST
24LC024HT-I/ST
24AA024HT-I/ST
24LC024HT-E/ST
34VL02/ST
34LC02-E/ST
34AA02-E/ST
34LC02-I/ST
34AA02-I/ST
34VL02T/ST
34LC02T-I/ST
34AA02T-I/ST
34LC02T-E/ST
34AA02T-E/ST
MCP79410-I/ST
MCP79411-I/ST
MCP79412-I/ST
MCP79410T-I/ST
MCP79411T-I/ST
MCP79412T-I/ST
MCP79400-I/ST
MCP79401-I/ST
MCP79402-I/ST
MCP79400T-I/ST
MCP79401T-I/ST
MCP79402T-I/ST
MCP7940N-I/ST
MCP7940M-I/ST
MCP7940NT-I/ST
MCP7940MT-I/ST
MCP47FVB01A0-E/ST
MCP47FVB01A1-E/ST
MCP47FVB01A2-E/ST
MCP47FVB01A3-E/ST
MCP47FVB11A0-E/ST

MCP47FVB11A1-E/ST
MCP47FVB11A2-E/ST
MCP47FVB11A3-E/ST
MCP47FVB21A0-E/ST
MCP47FVB21A1-E/ST
MCP47FVB21A2-E/ST
MCP47FVB21A3-E/ST
MCP47FVB02A0-E/ST
MCP47FVB02A1-E/ST
MCP47FVB02A2-E/ST
MCP47FVB02A3-E/ST
MCP47FVB12A0-E/ST
MCP47FVB12A1-E/ST
MCP47FVB12A2-E/ST
MCP47FVB12A3-E/ST
MCP47FVB22A0-E/ST
MCP47FVB22A1-E/ST
MCP47FVB22A2-E/ST
MCP47FVB22A3-E/ST
MCP47FEB01A0-E/ST
MCP47FEB01A1-E/ST
MCP47FEB01A2-E/ST
MCP47FEB01A3-E/ST
MCP47FEB11A0-E/ST
MCP47FEB11A1-E/ST
MCP47FEB11A2-E/ST
MCP47FEB11A3-E/ST
MCP47FEB21A0-E/ST
MCP47FEB21A1-E/ST
MCP47FEB21A2-E/ST
MCP47FEB21A3-E/ST
MCP47FEB02A0-E/ST
MCP47FEB02A1-E/ST
MCP47FEB02A2-E/ST
MCP47FEB02A3-E/ST
MCP47FEB12A0-E/ST
MCP47FEB12A1-E/ST
MCP47FEB12A2-E/ST
MCP47FEB12A3-E/ST
MCP47FEB22A0-E/ST
MCP47FEB22A1-E/ST
MCP47FEB22A2-E/ST
MCP47FEB22A3-E/ST
MCP47FVB01A0T-E/ST
MCP47FVB01A1T-E/ST
MCP47FVB01A2T-E/ST
MCP47FVB01A3T-E/ST
MCP47FVB11A0T-E/ST
MCP47FVB11A1T-E/ST

MCP47FVB11A2T-E/ST
MCP47FVB11A3T-E/ST
MCP47FVB21A0T-E/ST
MCP47FVB21A1T-E/ST
MCP47FVB21A2T-E/ST
MCP47FVB21A3T-E/ST
MCP47FVB02A0T-E/ST
MCP47FVB02A1T-E/ST
MCP47FVB02A2T-E/ST
MCP47FVB02A3T-E/ST
MCP47FVB12A0T-E/ST
MCP47FVB12A1T-E/ST
MCP47FVB12A2T-E/ST
MCP47FVB12A3T-E/ST
MCP47FVB22A0T-E/ST
MCP47FVB22A1T-E/ST
MCP47FVB22A2T-E/ST
MCP47FVB22A3T-E/ST
MCP47FEB01A0T-E/ST
MCP47FEB01A1T-E/ST
MCP47FEB01A2T-E/ST
MCP47FEB01A3T-E/ST
MCP47FEB11A0T-E/ST
MCP47FEB11A1T-E/ST
MCP47FEB11A2T-E/ST
MCP47FEB11A3T-E/ST
MCP47FEB21A0T-E/ST
MCP47FEB21A1T-E/ST
MCP47FEB21A2T-E/ST
MCP47FEB21A3T-E/ST
MCP47FEB02A0T-E/ST
MCP47FEB02A1T-E/ST
MCP47FEB02A2T-E/ST
MCP47FEB02A3T-E/ST
MCP47FEB12A0T-E/ST
MCP47FEB12A1T-E/ST
MCP47FEB12A2T-E/ST
MCP47FEB12A3T-E/ST
MCP47FEB22A0T-E/ST
MCP47FEB22A1T-E/ST
MCP47FEB22A2T-E/ST
MCP47FEB22A3T-E/ST



MICROCHIP

QUALIFICATION REPORT SUMMARY

PCN #: NTDO-13ZFJZ174

Date

July 12, 2018

Qualification of CuPdAu for selected PIC16F616 device family available in 14L TSSOP (4.4 mm) assembled at MMT assembly. The qualification of palladium coated copper with gold flash (CuPdAu) bond wire for selected products available in 8L TSSOP (4.4mm) package assembled at MMT assembly site will qualify by similarity (QBS).



MICROCHIP PACKAGE QUALIFICATION REPORT

Purpose	Qualification of CuPdAu for selected PIC16F616 device family available in 14L TSSOP (4.4 mm) assembled at MMT assembly. The qualification of palladium coated copper with gold flash (CuPdAu) bond wire for selected products available in 8L TSSOP (4.4mm) package assembled at MMT assembly site will qualify by similarity (QBS).
CN	ES172735
QUAL ID	Q18088 Rev A.
MP CODE	DECF14D4XB04
Part No.	PIC16F616
Bonding No.	A-053581 Rev. B
CCB:	3291 and 5028
<u>Package</u>	
Type	14L TSSOP
Package size	4.4 mils
<u>Lead Frame</u>	
Paddle size	118 x 153 mils
Material	C7025
Surface	Bare Cu
Process	Stamped
Lead Lock	No
Part Number	10101406
Treatment	BOT
<u>Material</u>	
Epoxy	2200D
Wire	CuPdAu
Mold Compound	G600
Plating Composition	Matte Tin



MICROCHIP PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MMT-190400675.000	TMPE218278714.100	18177C6
MMT-190401146.000	TMPE218278714.100	1817AKD
MMT-190401343.000	TMPE218278714.100	1817C03

Result

Pass Fail _____

14L TSSOP 4.4 assembled by MMT pass reliability test per QCI-39000. This package was qualified the Moisture/Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020E standard.

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
Moisture/Reflow Sensitivity Classification Test (At MSL Level 1)	85°C/ 85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH 3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243 (IPC/JEDEC J-STD-020E)	IPC/JEDEC C J-STD-020E	135	0/135	Pass	

Precondition Prior Perform Reliability Tests (At MSL Level 1)	Electrical Test :+25°C and 125°C System: J750	JESD22-A113	693(0)	693	Pass	Good Devices
	Bake 150°C, 24 hrs System: CHINEE			693		
	85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH			693		
	3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243			693		
	Electrical Test :+25°C and 125°C System: J750			0/693		

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks		
Temp Cycle	Stress Condition: -65°C to +150°C, 500 Cycles System : TABAI ESPEC TSA-70H Electrical Test: + 25°C System: J750	JESD22- A104	231(0)	231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot		
	Stress Condition: -65°C to +150°C, 1000 Cycles System : TABAI ESPEC TSA-70H Electrical Test: 25°C and 125°C System: J750			0/231			231	
	Bond Strength: Wire Pull (> 2.5 grams) Bond Shear (>15.00 grams)			0/231			231(0)	Pass
				15 (0)			0/15	Pass
	15 (0)	0/15	Pass					
UNBIASED-HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X Electrical Test: +25°C System: J750	JESD22- A118	231(0)	231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot		
	Stress Condition: +130°C/85%RH, 192 hrs. System: HAST 6000X Electrical Test: + 25°C System J750			0/231			231	
				0/231			231(0)	Pass
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 5.5 Volts System: HAST 6000X Electrical Test: + 25°C and 125°C System: J750	JESD22- A110	231(0)	231	Pass	Parts had been pre-conditioned at 260°C 77 units / lot		
	Stress Condition: +130°C/85%RH, 192 hrs. Bias Volt: 5.5 Volts System: HAST 6000X Electrical Test: + 25°C and 125°C System: J750			0/231			231	
				0/231			231(0)	Pass

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
High Temperature Storage Life	Stress Condition: Bake 175°C, 504 hrs System: SHEL LAB	JESD22- A103		45		45 units
	Electrical Test :+25°C and 125°C System: J750		45(0)	0/45	Pass	
Bond Strength Data Assembly	Wire Pull (> 2.5 grams)	M2011	30 (0) Wires	0/30	Pass	
	Bond Shear (>15.00 grams)	JESD22- B116	30 (0) bonds	0/30	Pass	



MICROCHIP

QUALIFICATION REPORT SUMMARY

PCN #: NTDO-13ZFJZ174

Date
May 20, 2021

Qualification of MMT as assembly site for selected LX3301AQPW device family available in 14L TSSOP (4.4mm). The qualification of palladium coated copper with gold flash (CuPdAu) bond wire for selected products available in 8L TSSOP (4.4mm) package assembled at MMT assembly site will qualify by similarity (QBS). This is Q100 Grade 1 qualification.



MICROCHIP PACKAGE QUALIFICATION REPORT

Purpose	Qualification of MMT as assembly site for selected LX3301AQPW device family available in 14L TSSOP (4.4mm). The qualification of palladium coated copper with gold flash (CuPdAu) bond wire for selected products available in 8L TSSOP (4.4mm) package assembled at MMT assembly site will qualify by similarity (QBS). This is Q100 Grade 1 qualification.
CN	ES351114
QUAL ID	R2100172 Rev. A
MP CODE	VXBF14D4XVA1
Part No.	LX3301AQPW
Bonding No.	BDM-002766 Rev. A
CCB No.	4485 and 5028
<u>Package</u>	
Type	14L TSSOP
Package size	4.4 mm
<u>Lead Frame</u>	
Paddle size	126 x 150 mils
Material	C7025
Surface	Bare Copper-Selective Ag
Process	Etched
Lead Lock	None
Part Number	10101417
Treatment	BOT
<u>Material</u>	
Epoxy	2200D
Wire	Au wire
Mold Compound	G600
Plating Composition	Matte Sn



MICROCHIP PACKAGE QUALIFICATION REPORT

Manufacturing Information:

Assembly Lot No.	Wafer Lot No.	Date Code
MMT-213802276.000	XFML921037397.100	2051H33
MMT-213802275.000	XFML921037397.100	2051EJT
MMT-213802273.000	XFML921037397.100	2051644

Result

Pass

Fail

14L TSSOP (4.4 mm) assembled by MMT pass reliability test per QCI-39000. This package was qualified the Moisture/Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020E standard.

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
<u>Precondition</u> <u>Prior Perform</u> <u>Reliability Tests</u> (At MSL Level 1)	<p>Electrical Test: +25°C and 125°C System: TMT_SNR_XP</p> <p>Bake 150°C, 24 hrs System: CHINEE</p> <p>85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH</p> <p>3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243</p> <p>Electrical Test: +25°C and 125°C System: TMT_SNR_XP</p>	<p>JESD22- A113</p> <p>JIP/ IPC/JEDEC J-STD-020E</p>	<p>693(0)</p>	<p>693</p> <p>693</p> <p>693</p> <p>693</p> <p>0/693</p>	<p>Pass</p>	<p>Good Devices</p>

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	Stress Condition: -65°C to +150°C, 500 Cycles System: TABAI ESPEC TSA-70H	JESD22-A104		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +125°C System: TMT_SNR_XP		231(0)	0/231	Pass	77 units / lot
	Bond Strength: Wire Pull (> 2.5 grams) Bond Shear (>15.00 grams)		15 (0)	0/15	Pass	
UNBIASED-HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X	JESD22-A118		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: TMT_SNR_XP		231(0)	0/231	Pass	77 units / lot
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 5.6 Volts System: HAST 6000X	JESD22-A110		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C and 125°C System: TMT_SNR_XP		231(0)	0/231	Pass	77 units / lot

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
High Temperature Storage Life	Stress Condition: Bake 175°C, 504 hrs System: SHEL LAB	JESD22-A103		45		45 units
	Electrical Test: +25°C and 125°C System: TMT_SNR_XP		45(0)	0/45	Pass	
Solderability Temp 245°C	Steam Aging: Temp 93°C,8Hrs System: SAS-3000 Solder Dipping:Solder Temp.245°C Solder material:Pb Free Sn 95.5Ag3.9 Cu0.6 System: ERSA RA 2200D Visual Inspection: External Visual Inspection	J-STD-002	22 (0)	22 22 0/22	Pass	
Physical Dimensions	Physical Dimension, 10 units from 1 lot	JESD22-B100/B108	30(0) Units	0/30	Pass	
Bond Strength Data Assembly	Wire Pull (>4.00 grams)	Mil. Std. 883-2011	30 (0) Wires	0/30	Pass	
	Bond Shear (>18.00 grams)	CDF-AEC-Q100-001	30 (0) bonds	0/30	Pass	