

Product Change Notification - JAON-01TTTP785

Date: 04 Jul 2014

Product Category: Memory; Analog (Linear & Mixed Signal) AND Interface; 8-bit Microcontrollers

Notification subject: CCB 1380.03 Final Notice: Qualification of palladium coated copper (PdCu) bond wire at MMT assembly site for selected 160K wafer technology in 20L, 18L, 14L and 8L PDIP packages

Notification text:

PCN Status:

Final notification

Microchip Parts Affected:

See attachments of affected catalog part numbers (CPN) labeled as...

PCN_JAON-01TTTP785_Affected_CPN.xls

PCN_JAON-01TTTP785_Affected_CPN.pdf

Description of Change:

Qualification of palladium coated copper (PdCu) bond wire at MMT assembly site for selected 160K wafer technology in 20L, 18L, 14L and 8L PDIP packages.

NOTE: Selected products are non-automotive analog, memory and PIC MCU devices. Please review the affected CPN lists (attached) to identify the actual parts affected.

Impacts to Data Sheet:

None

Reason for Change:

To improve manufacturability

Change Implementation Status:

Complete

Estimated First Ship Date:

August 1, 2014 (date code: 1431)

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

Markings to Distinguish Revised from Unrevised Devices:

Traceability code

Revision History:

March 17, 2014: Issued initial notification using the Notification ID IIRA-27UGCS142.

July 04, 2014: Issued final notification using the Notification ID JAON-01TTTP785. Revised the subject to only include the qualification of 160K wafer technology. Attached the qualification report. Revised the estimated first ship date from April 1, 2014 to August 1, 2014.

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-01TTTP785_Affected CPN.pdf](#) [PCN_JAON-01TTTP785_Qual Report.pdf](#) [PCN_JAON-01TTTP785_Affected CPN.xlsx](#)

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

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PCN_JAON-01TTTP785
CATALOG_PART_NBR
11AA010-I/P
11AA020-I/P
11AA040-I/P
11AA080-I/P
11AA160-I/P
11AA161-I/P
11LC010-E/P
11LC010-I/P
11LC020-E/P
11LC020-I/P
11LC040-E/P
11LC040-I/P
11LC080-E/P
11LC080-I/P
11LC160-E/P
11LC160-I/P
11LC161-E/P
11LC161-I/P
24AA014H-I/P
24AA014-I/P
24AA01H-I/P
24AA01-I/P
24AA02/P
24AA024H-I/P
24AA024-I/P
24AA025-I/P
24AA025UID-I/P
24AA02H-I/P
24AA02-I/P
24AA02UID-I/P
24AA04/P
24AA04H-I/P
24AA04-I/P
24AA08/P
24AA08H-I/P
24AA08-I/P
24AA08-I/PB25
24AA128-I/P
24AA16/P
24AA16-E/P
24AA16H-I/P
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24AA256-E/P
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24AA256UID-I/P

24AA32AF-I/P
24AA32A-I/P
24AA512-I/P
24AA52-I/P
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24AA64F-I/P
24AA64-I/P
24C01C/P
24C01C-E/P
24C01C-I/P
24C02C/P
24C02C-E/P
24C02C-I/P
24FC128-I/P
24FC256-I/P
24FC512-I/P
24FC64F-I/P
24FC64-I/P
24LC014-E/P
24LC014H-E/P
24LC014H-I/P
24LC014-I/P
24LC01B/P
24LC01B-E/P
24LC01BH-E/P
24LC01BH-I/P
24LC01B-I/P
24LC024/P
24LC024-E/P
24LC024H-E/P
24LC024H-I/P
24LC024-I/P
24LC025/P
24LC025-E/P
24LC025-I/P
24LC02B/P
24LC02B-E/P
24LC02BH-E/P
24LC02BH-I/P
24LC02B-I/P
24LC04B/P
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24LC16BH-E/P
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24LC16B-I/P
24LC256-E/P
24LC256-I/P
24LC32A/P
24LC32A-E/P
24LC32AF-E/P
24LC32AF-I/P
24LC32A-I/P
24LC512-E/P
24LC512-I/P
24LC64-E/P
24LC64F-E/P
24LC64F-I/P
24LC64-I/P
24LCS52-I/P
24VL014/P
24VL014H/P
24VL024/P
24VL024H/P
24VL025/P
25AA040A-I/P
25AA080C-I/P
25AA080D-I/P
25AA128-I/P
25AA160C-I/P
25AA160D-E/P
25AA160D-I/P
25AA256-E/P
25AA256-I/P
25AA320A-I/P
25AA640A-E/P
25AA640A-I/P
25LC040A-E/P
25LC040A-I/P
25LC040A-M/P
25LC080C-E/P
25LC080C-I/P

25LC080D-E/P
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25LC128-E/P
25LC128-I/P
25LC160C-E/P
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25LC160D-E/P
25LC160D-I/P
25LC256-E/P
25LC256-I/P
25LC320A-E/P
25LC320A-I/P
25LC640A-E/P
25LC640A-I/P
34AA02-E/P
34AA02-I/P
34LC02-E/P
34LC02-I/P
34VL02/P
MCP4131-103E/P
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MCP4811-E/P
MCP4812-E/P
MCP4821-E/P
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MCP4901-E/P
MCP4902-E/P
MCP4911-E/P
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MCP4921-E/P
MCP4922-E/P
MCP7940M-I/P
MCP7940N-I/P
MCV08A-I/P
MCV14A-I/P
MCV18A-I/P
PIC10F200-E/P
PIC10F200-I/P
PIC10F202-E/P
PIC10F202-I/P
PIC10F202-I/P057
PIC10F202-I/P074
PIC10F204-E/P
PIC10F204-I/P
PIC10F204-I/P030
PIC10F206-E/P

PIC10F206-I/P
PIC10F206-I/P046
PIC10F220-E/P
PIC10F220-I/P
PIC10F222-E/P
PIC10F222-I/P
PIC12F508-E/P
PIC12F508-I/P
PIC12F508-I/P058
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PIC12F508-I/P072
PIC12F510-E/P
PIC12F510-I/P
PIC12F510-I/P020
PIC12F510-I/P021
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PIC12F510-I/P043
PIC12F510-I/P063
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PIC12F683-I/P
PIC12F683-I/P047
PIC12F683-I/P064
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PIC12F683-I/P078
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PIC16F505-ICD/P
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PIC16F506-I/P
PIC16F506-I/P045
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PIC16F526-E/P
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PIC16F526-ICD/P
PIC16F527-E/P
PIC16F527-I/P
PIC16F54-E/P
PIC16F54-I/P
PIC16F54-I/P022
PIC16F54-I/P024
PIC16F54-I/P026
PIC16F54-I/P031
PIC16F54-I/P035
PIC16F610-E/P
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PIC16F616-E/P
PIC16F616-I/P
PIC16F616-I/PC09
PIC16F631-E/P
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PIC16F636-I/P
PIC16F677-E/P
PIC16F677-I/P
PIC16F677-I/P025
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PIC16F716-I/P020
PIC16F716-I/P024
PIC16F716-I/P025
PIC16F716-I/P035
PIC16F716-I/P042
PIC16F716-I/P049
PIC16F716-I/P057
PIC16F716-I/P4AP
PIC16F716-I/PC09
PIC16F753-E/P
PIC16F753-I/P
PIC16F753-ICD/P
PIC16F785-E/P
PIC16F785-I/P
PIC16HV610-E/P
PIC16HV610-I/P
PIC16HV616-E/P
PIC16HV616-I/P
PIC16HV616-I/P021
PIC16HV753-E/P
PIC16HV753-I/P



MICROCHIP

**QUALIFICATION REPORT
RELIABILITY LABORATORY**

PCN #: JAON-01TTTP785

**Date:
June 26, 2014**

**Qualification of palladium coated copper (PdCu) bond wire at
MMT assembly site for selected 160K wafer technology in
20L PDIP package. The 18L, 14L and 8L PDIP packages will
qualify by similarity at MMT assembly site.**

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MICROCHIP PACKAGE QUALIFICATION REPORT

Purpose Qualification of palladium coated copper (PdCu) bond wire at MMT assembly site for selected 160K wafer technology in 20L PDIP package. The 18L, 14L and 8L PDIP packages will qualify by similarity at MMT assembly site.

CN BC140523
QUAL ID Q14050
MP CODE DEBN44G6XAXF
Part No. PIC16F690-E/P
Bonding No. BDM-000492 Rev. A
CCB No. 1380.03

Package

Type 20L PDIP
Package size 300 mils
Die thickness 15 mils
Die size 97.5 x 86.3 mils

Lead Frame

Paddle size 140 x 160 mils
Material CDA194
Surface Ag Spot Plated
Process Stamped
Lead Lock No
Part Number 14M402001
Treatment None

Die attach material

Epoxy CRM-1064L
Wire PdCu wire
Mold Compound GE800
Plating Composition Matte Tin



MICROCHIP PACKAGE QUALIFICATION REPORT

Manufacturing Information


Assembly Lot No.	Wafer Lot No.	Date Code
MMT-150400506	GRSM414292891.100	141700K
MMT-150400507	GRSM414292891.100	14171VS
MMT-150400508	GRSM414292891.100	14174HD

Result Pass Fail _____

20L PDIP (.300") assembled by MMT pass reliability test per QCI-39000.

Prepared By:  **Date:** Jun 26, 2014 (Sr.Reliability Engineer)

(Mr.Udom Suksansakul)

Approved By:  **Date:** Jun 26, 2014 (Reliability Manager)

(Mr. Somnuek Thongprasert)

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Electrical Test	Electrical Test: +25°C and 125°C System: J750	JESD22- A113	693(0)	693		Good Devices
Temp Cycle	Stress Condition: (Standard) -65°C to +150°C 50,250, 500 Cycles System : TABAI ESPEC TSA-70H Electrical Test: + 85°C and 125°C System: J750 Bond Strength: Wire Pull (> 2.5 grams) Bond Shear (15.00 grams)	JESD22- A104	231(0)	0/231	Pass	
UNBIASED-HAST	Stress Condition: (Standard) +130°C/85%RH, 96 hrs. System: HAST 6000X Electrical Test: + 25°C System: J750	JESD22- A118	231(0)	0/231	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
HAST	Stress Condition: (Standard) +130°C/85%RH, 96 hrs. Bias Volt: 3.6 Volts System: HAST 6000X Electrical Test: +25°C,85°C and 125°C System: J750	JESD22- A110	231(0)	0/231	Pass	
High Temperature Storage Life	Stress Condition: Bake 175°C, 504 hrs System: SHEL LAB Electrical Test: + 25°C,85°C and 125°C System: J750	JESD22- A103	45(0)	45 0/45	Pass	45 units
Bond Strength Data Assembly	Wire Pull (> 2.5 grams) Bond Shear (15.00 grams)	JESD22- B116	30 (0) Wires 30 (0) bonds	0/30 0/30	Pass Pass	