

# Product Change Notification - IIRA-27UGCS142

---

**Date:** 17 Mar 2014

**Product Category:** Memory; 16-bit Microcontrollers and Digital Signal Controllers; RF and Security; Analog (Thermal, Power Management & Safety); Analog (Linear & Mixed Signal) AND Interface; Touch Sensing Technologies; 8-bit Microcontrollers

**Notification subject:** CCB 1380.01 Initial Notice: Qualification of palladium coated copper (PdCu) bond wire at ALPH (MMT) assembly site for selected products available in 20L, 18L, 14L and 8L PDIP packages.

**Notification text:** **PCN Status:**  
Initial notification

## **Microchip Parts Affected:**

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

PCN\_IIRA-27UGCS142\_Affected\_CPN.xls

PCN\_IIRA-27UGCS142\_Affected\_CPN.pdf

## **Description of Change:**

Qualification of palladium coated copper (PdCu) bond wire at ALPH (MMT) assembly site for selected products available in 20L, 18L, 14L and 8L PDIP packages.

NOTE: Selected products are non-automotive standalone analog 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:**

In Progress

**Estimated First Ship Date:**

April 1, 2014 (date code: 1414)

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.

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\\_IIRA-27UGCS142\\_Affected CPN.pdf](#) [PCN\\_IIRA-27UGCS142\\_Qual Plan.pdf](#) [PCN\\_IIRA-27UGCS142\\_Affected CPN.xls](#)

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."

PCN_IIRA-27UGCS142
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
24AA02/PRVC
24AA024H-I/P
24AA024-I/P
24AA025-I/P
24AA025UID-I/P
24AA02H-I/P
24AA02-I/P
24AA02-I/PRVC
24AA02UID-I/P
24AA04/P
24AA04/PRVC
24AA04H-I/P
24AA04-I/P
24AA04-I/PRVC
24AA08/P
24AA08H-I/P
24AA08-I/P
24AA08-I/PB25
24AA128-I/P
24AA16/P
24AA16-E/P
24AA16H-I/P

24AA16-I/P
24AA256-E/P
24AA256-I/P
24AA256UID-I/P
24AA32AF-I/P
24AA32A-I/P
24AA512-I/P
24AA52-I/P
24AA64/P
24AA64/PRVA
24AA64-E/P
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/PROCRVC
24LC02B/PRVC
24LC02B-E/P
24LC02B-E/PRVC
24LC02BH-E/P

24LC02BH-I/P
24LC02B-I/P
24LC02B-I/PRVC
24LC04B/P
24LC04B/PROCRVC
24LC04B/PRVC
24LC04B-E/P
24LC04B-E/PRVC
24LC04BH-E/P
24LC04BH-I/P
24LC04B-I/P
24LC04B-I/PROCRVC
24LC04B-I/PRVC
24LC08B/P
24LC08B-E/P
24LC08BH-E/P
24LC08BH-I/P
24LC08B-I/P
24LC128-E/P
24LC128-I/P
24LC128-I/PRVE
24LC16B/P
24LC16B-E/P
24LC16BH-E/P
24LC16BH-I/P
24LC16B-I/P
24LC256-E/P
24LC256-I/P
24LC256-I/PG
24LC256-I/PRVE
24LC32A/P
24LC32A-E/P
24LC32AF-E/P
24LC32AF-I/P
24LC32A-I/P
24LC32A-I/PRVE
24LC512-E/P
24LC512-I/P
24LC64-E/P
24LC64F-E/P
24LC64F-I/P
24LC64-I/P
24LC64-I/PRVE
24LCS52-I/P
24VL014/P
24VL014H/P
24VL024/P

24VL024H/P
24VL025/P
25AA040A-I/P
25AA080A-I/P
25AA080B-I/P
25AA080B-I/PB79
25AA080C-I/P
25AA080D-I/P
25AA128-I/P
25AA160A-I/P
25AA160B-I/P
25AA160C-I/P
25AA160D-E/P
25AA160D-I/P
25AA256-E/P
25AA256-I/P
25AA320A-I/P
25AA320-I/P
25AA640A-E/P
25AA640A-I/P
25AA640-I/P
25C320/P
25C320-E/P
25C320-I/P
25LC040A-E/P
25LC040A-I/P
25LC040A-M/P
25LC080A-E/P
25LC080A-I/P
25LC080B-E/P
25LC080B-I/P
25LC080C-E/P
25LC080C-I/P
25LC080D-E/P
25LC080D-I/P
25LC128-E/P
25LC128-I/P
25LC160A-E/P
25LC160A-I/P
25LC160A-I/PA79
25LC160B-E/P
25LC160B-I/P
25LC160C-E/P
25LC160C-I/P
25LC160D-E/P
25LC160D-I/P
25LC256-E/P

25LC256-I/P
25LC320/P
25LC320A-E/P
25LC320A-I/P
25LC320-E/P
25LC320-I/P
25LC640A-E/P
25LC640A-I/P
25LC640-E/P
25LC640-I/P
34AA02-E/P
34AA02-I/P
34LC02-E/P
34LC02-I/P
34VL02/P
93AA46A-I/P
93AA46B-I/P
93AA46C-I/P
93AA56A-I/P
93AA56B-I/P
93AA56C-I/P
93AA66A-I/P
93AA66B-I/P
93AA66C-I/P
93AA76C-I/P
93AA86C-I/P
93C46A-E/P
93C46A-I/P
93C46B/P
93C46B-E/P
93C46B-I/P
93C46C-E/P
93C46C-I/P
93C56A-E/P
93C56A-I/P
93C56B-E/P
93C56B-I/P
93C56C-E/P
93C56C-I/P
93C66A-E/P
93C66A-I/P
93C66B-E/P
93C66B-I/P
93C66C-E/P
93C66C-I/P
93C76C-E/P
93C76C-I/P

93C86C-E/P
93C86C-I/P
93LC46A/P
93LC46A-E/P
93LC46A-I/P
93LC46B/P
93LC46B-E/P
93LC46B-I/P
93LC46C-E/P
93LC46C-I/P
93LC56A/P
93LC56A-E/P
93LC56A-I/P
93LC56B/P
93LC56B-E/P
93LC56B-I/P
93LC56C-E/P
93LC56C-I/P
93LC66A/P
93LC66A-E/P
93LC66A-I/P
93LC66A-I/PE31
93LC66B/P
93LC66B-E/P
93LC66B-I/P
93LC66C-E/P
93LC66C-I/P
93LC76C-E/P
93LC76C-I/P
93LC86C-E/P
93LC86C-I/P
CF745-04/P
DSPIC33FJ12MC201-E/P
DSPIC33FJ12MC201-I/P
DSPIC33FJ16MC101-E/P
DSPIC33FJ16MC101-H/P
DSPIC33FJ16MC101-I/P
DSPIC33FJ32MC101-E/P
DSPIC33FJ32MC101-I/P
HCS101/P
HCS101-I/P
HCS201/P
HCS201-I/P
HCS370/P
HCS370-I/P
HCS500/P
HCS500-I/P



MCP1525-I/P
MCP1541-I/P
MCP2030A-I/P
MCP2030-I/P
MCP2036-I/P
MCP2120-I/P
MCP2122-E/P
MCP2140A-I/P
MCP25020-E/P
MCP25020-I/P
MCP25025-I/P
MCP25050-E/P
MCP25050-I/P
MCP25055-I/P
MCP3001-I/P
MCP3002-I/P
MCP3004-I/P
MCP3201-BI/P
MCP3201-CI/P
MCP3202-BI/P
MCP3202-CI/P
MCP3204-BI/P
MCP3204-CI/P
MCP3301-BI/P
MCP3301-CI/P
MCP3302-BI/P
MCP3302-CI/P
MCP41010-E/P
MCP41010-I/P
MCP41050-E/P
MCP41050-I/P
MCP41100-E/P
MCP41100-I/P
MCP4131-103E/P
MCP4131-104E/P
MCP4131-502E/P
MCP4131-503E/P
MCP4132-103E/P
MCP4132-104E/P
MCP4132-502E/P
MCP4132-503E/P
MCP4141-103E/P
MCP4141-104E/P
MCP4141-502E/P
MCP4141-503E/P
MCP4142-103E/P
MCP4142-104E/P

MCP4142-502E/P
MCP4142-503E/P
MCP4151-103E/P
MCP4151-104E/P
MCP4151-502E/P
MCP4151-503E/P
MCP4152-103E/P
MCP4152-104E/P
MCP4152-502E/P
MCP4152-503E/P
MCP4161-103E/P
MCP4161-104E/P
MCP4161-502E/P
MCP4161-503E/P
MCP4162-103E/P
MCP4162-104E/P
MCP4162-502E/P
MCP4162-503E/P
MCP42010-E/P
MCP42010-I/P
MCP42050-E/P
MCP42050-I/P
MCP42100-E/P
MCP42100-I/P
MCP4231-103E/P
MCP4231-104E/P
MCP4231-502E/P
MCP4231-503E/P
MCP4241-103E/P
MCP4241-104E/P
MCP4241-502E/P
MCP4241-503E/P
MCP4251-103E/P
MCP4251-104E/P
MCP4251-502E/P
MCP4251-503E/P
MCP4261-103E/P
MCP4261-104E/P
MCP4261-502E/P
MCP4261-503E/P
MCP4801-E/P
MCP4802-E/P
MCP4811-E/P
MCP4812-E/P
MCP4821-E/P
MCP4822-E/P
MCP4901-E/P

MCP4902-E/P
MCP4911-E/P
MCP4912-E/P
MCP4921-E/P
MCP4922-E/P
MCP6002-E/P
MCP6002-I/P
MCP6004-E/P
MCP6004-I/P
MCP601-E/P
MCP601-I/P
MCP6021-E/P
MCP6021-I/P
MCP6022-E/P
MCP6022-I/P
MCP6023-E/P
MCP6023-I/P
MCP6024-E/P
MCP6024-I/P
MCP602-E/P
MCP602-I/P
MCP6031-E/P
MCP6031-E/PAAA
MCP6032-E/P
MCP6032-E/PAAA
MCP603-E/P
MCP603-I/P
MCP603-I/PBAA
MCP6041-E/P
MCP6041-I/P
MCP6041-I/PAAA
MCP6042-E/P
MCP6042-I/P
MCP6042-I/PAAA
MCP6043-E/P
MCP6043-I/P
MCP6044-E/P
MCP6044-I/P
MCP604-E/P
MCP604-I/P
MCP606-I/P
MCP607-I/P
MCP608-I/P
MCP609-I/P
MCP6141-E/P
MCP6141-I/P
MCP6142-E/P

MCP6142-I/P
MCP6143-E/P
MCP6143-I/P
MCP6144-E/P
MCP6144-I/P
MCP616-I/P
MCP617-I/P
MCP618-I/P
MCP619-I/P
MCP6231-E/P
MCP6232-E/P
MCP6234-E/P
MCP6241-E/P
MCP6242-E/P
MCP6244-E/P
MCP6272-E/P
MCP6274-E/P
MCP6275-E/P
MCP6282-E/P
MCP6284-E/P
MCP6285-E/P
MCP6292-E/P
MCP6294-E/P
MCP6295-E/P
MCP6541-E/P
MCP6541-I/P
MCP6542-E/P
MCP6542-I/P
MCP6543-E/P
MCP6543-I/P
MCP6544-E/P
MCP6544-I/P
MCP6546-E/P
MCP6546-I/P
MCP6547-E/P
MCP6547-I/P
MCP6548-E/P
MCP6548-I/P
MCP6549-E/P
MCP6549-I/P
MCP6S21-I/P
MCP6S22-I/P
MCP6S26-I/P
MCP6S91-E/P
MCP6S92-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
PIC12C508-04/P
PIC12C508-04E/P
PIC12C508-04I/P
PIC12C508A-04/P
PIC12C508A-04/P072
PIC12C508A-04E/P
PIC12C508A-04I/P
PIC12C508A-04I/P020
PIC12C508A-04I/P085
PIC12C508A-04I/P227
PIC12C508A-04I/P230
PIC12C509-04/P
PIC12C509-04E/P
PIC12C509-04I/P
PIC12C509A-04/P
PIC12C509A-04E/P
PIC12C509A-04I/P
PIC12CR509A-04/P013
PIC12CR509A-04I/P054
PIC12F508-E/P
PIC12F508-I/P
PIC12F508-I/P058
PIC12F508-I/P059
PIC12F508-I/P060
PIC12F508-I/P072
PIC12F510-E/P
PIC12F510-I/P
PIC12F510-I/P020

PIC12F510-I/P021
PIC12F510-I/P042
PIC12F510-I/P043
PIC12F510-I/P063
PIC12F519-E/P
PIC12F519-I/P
PIC12F609-E/P
PIC12F609-I/P
PIC12F615-E/P
PIC12F615-I/P
PIC12F617-E/P
PIC12F617-I/P
PIC12F629-C/P
PIC12F629-E/P
PIC12F629-E/P227
PIC12F629-I/P
PIC12F629-I/P231
PIC12F635-E/P
PIC12F635-I/P
PIC12F675-C/P
PIC12F675-E/P
PIC12F675-I/P
PIC12F675-I/P103
PIC12F675-I/P115
PIC12F675-I/P127
PIC12F675-I/P141
PIC12F675-I/P156
PIC12F675-I/P163
PIC12F675-I/P189
PIC12F675-I/P192
PIC12F675-I/P193
PIC12F675-I/P198
PIC12F675-I/PG
PIC12F675-ICD/P
PIC12F683-E/P
PIC12F683-I/P
PIC12F683-I/P047
PIC12F683-I/P064
PIC12F683-I/P065
PIC12F683-I/P067
PIC12F683-I/P068
PIC12F683-I/P069
PIC12F683-I/P074
PIC12F683-I/P078
PIC12F752-E/P
PIC12F752-I/P
PIC12F752-ICD/P

PIC12HV609-E/P
PIC12HV609-I/P
PIC12HV615-E/P
PIC12HV615-I/P
PIC12HV752-E/P
PIC12HV752-I/P
PIC12HV752-ICD/P
PIC12LC508A-04/P
PIC12LC508A-04I/P
PIC12LC509A-04/P
PIC12LC509A-04I/P
PIC16C505-04/P
PIC16C505-04E/P
PIC16C505-04I/P
PIC16C505-04I/P121
PIC16C505-04I/P122
PIC16C505-04I/P131
PIC16C505-20/P
PIC16C505-20E/P
PIC16C505-20I/P
PIC16C54C-04/P
PIC16C54C-04/P053
PIC16C54C-04/P064
PIC16C54C-04/P091
PIC16C54C-04/P103
PIC16C54C-04/P133
PIC16C54C-04/P148
PIC16C54C-04/P154
PIC16C54C-04E/P
PIC16C54C-04I/P
PIC16C54C-04I/P096
PIC16C54C-04I/P155
PIC16C54C-20/P
PIC16C54C-20E/P
PIC16C54C-20I/P
PIC16C54C-40/P
PIC16C711-04/P
PIC16C711-04E/P
PIC16C711-04I/P
PIC16C711-20/P
PIC16C711-20E/P
PIC16C711-20I/P
PIC16C771/P
PIC16C771-E/P
PIC16C771-I/P
PIC16F505-E/P
PIC16F505-I/P

PIC16F505-I/P038
PIC16F505-I/P052
PIC16F505-I/P060
PIC16F505-ICD/P
PIC16F506-E/P
PIC16F506-I/P
PIC16F506-I/P045
PIC16F506-ICD/P
PIC16F526-E/P
PIC16F526-I/P
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
PIC16F610-I/P
PIC16F616-E/P
PIC16F616-I/P
PIC16F616-I/PC09
PIC16F627A-E/P
PIC16F627A-I/P
PIC16F627A-I/P035
PIC16F628A-E/P
PIC16F628A-E/P079
PIC16F628A-I/P
PIC16F628A-I/P052
PIC16F628A-I/P058
PIC16F628A-I/P060
PIC16F628A-I/P069
PIC16F628A-I/P080
PIC16F630-C/P
PIC16F630-E/P
PIC16F630-I/P
PIC16F630-I/P054
PIC16F630-I/PC14
PIC16F630-I/PG
PIC16F631-E/P
PIC16F631-I/P
PIC16F636-E/P
PIC16F636-I/P
PIC16F648A-E/P



PIC16F648A-I/P
PIC16F676-C/P
PIC16F676-E/P
PIC16F676-I/P
PIC16F676-ICD/P
PIC16F677-E/P
PIC16F677-I/P
PIC16F677-I/P025
PIC16F684-E/P
PIC16F684-I/P
PIC16F684-ICD/P
PIC16F685-E/P
PIC16F685-I/P
PIC16F687-E/P
PIC16F687-I/P
PIC16F688-E/P
PIC16F688-I/P
PIC16F688-ICD/P
PIC16F689-E/P
PIC16F689-I/P
PIC16F690-E/P
PIC16F690-I/P
PIC16F716-E/P
PIC16F716-I/P
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
PIC16F818-E/P
PIC16F818-I/P
PIC16F818-I/PTSL
PIC16F819-E/P
PIC16F819-I/P
PIC16F819-I/PV06
PIC16F84A-04/P
PIC16F84A-04E/P
PIC16F84A-04I/P

PIC16F84A-20/P
PIC16F84A-20E/P
PIC16F84A-20I/P
PIC16HV610-E/P
PIC16HV610-I/P
PIC16HV616-E/P
PIC16HV616-I/P
PIC16HV616-I/P021
PIC16HV753-E/P
PIC16HV753-I/P
PIC16LC505-04/P
PIC16LC505-04I/P
PIC16LC54C-04/P
PIC16LC54C-04I/P
PIC16LC711-04/P
PIC16LC711-04E/P
PIC16LC711-04I/P
PIC16LC771/P
PIC16LC771-I/P
PIC16LF627A-I/P
PIC16LF628A-I/P
PIC16LF648A-I/P
PIC16LF818-I/P
PIC16LF819-I/P
PIC16LF84A-04/P
PIC16LF84A-04I/P
TC2185-2.8VPA
TC2185-5.0VPA



**MICROCHIP**

## **QUALIFICATION PLAN**

**PCN #: IIRA-27UGCS142**

**Date:  
Feb 26, 2014**

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

**Distribution**

**Surasit P.  
Mitchell R.  
Wichai K.  
Arnel M.**

**Rangsun K.  
F. Chen  
S. Melby  
Chaweng W.**

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 (PdCu) bond wire at ALPH (MMT) assembly site for selected products available in 20L PDIP package. The 18L, 14L and 8L PDIP packages will qualify by similarity at ALPH (MMT) assembly site.

**MP code:** \_\_\_\_\_ A7BE37G6XA20

**Part No.:** \_\_\_\_\_ PIC16C771-I/P

**BD No:** \_\_\_\_\_ BDM-000459 rev. A

**CCB No:** \_\_\_\_\_ 1380.01

**Package:**

**Type** \_\_\_\_\_ 20L PDIP

**Width or Size** \_\_\_\_\_ 300 mils

**Die thickness:** \_\_\_\_\_ 15 mils

**Die size:** \_\_\_\_\_ 134.2 x 172.5 mils

**Lead frame:**

**Paddle size:** \_\_\_\_\_ 160x200 mils

**Material** \_\_\_\_\_ CDA194

**Surface** \_\_\_\_\_ Ag Spot Plated

**Process** \_\_\_\_\_ Stamped

**Lead Lock** \_\_\_\_\_ No

**Part Number** \_\_\_\_\_ 14-M4020-02

**Treatment** \_\_\_\_\_ None

**Wire:**

**Material** \_\_\_\_\_ PdCu (Nippon-Japan)

**Die Attach Epoxy:**

**Part Number** \_\_\_\_\_ CRM-1064L (Sumitomo-Singapore)

**Conductive** \_\_\_\_\_ Yes

**Mold Compound:** \_\_\_\_\_ GE800 (Hitachi-Malaysia)

**Reliability Test plan:** \_\_\_\_\_ See attached, STD Package Reliability Test plan on each package.

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	1	5	0 fails after TC	5	30 bonds from a minimum of 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5	30 bonds from a minimum of 5 devices.
Wire Sweep		5	1	3	15			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 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.
HAST	+130 °C/85% RH for 96 hours. Electrical test pre and post stress at +25 °C and 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 85 °C; 3 gram force WBP, on 5 devices from 1 lot, Test by following readpoint TC50,TC250 and TC 500.	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.