



Product Change Notification - KSRA-20PIWE587

Date:

27 Mar 2018

Product Category:

16-Bit - Microcontrollers and Digital Signal Controllers; 8-bit PIC Microcontrollers; Ethernet Controllers; 32-bit PIC Microcontrollers; Display A/D Converters

Affected CPNs:**Notification subject:**

CCB 2970.002 Final Notice: Qualification of CuPdAu bond wire in selected products available in 64L and 44L TQFP package at MTAI assembly site

Notification text:**PCN Status:**

Final notification.

PCN Type:

Manufacturing Change

Microchip Parts Affected:

Please open one of the icons found in the Affected CPNs section above.

NOTE: For your convenience Microchip includes identical files in two formats (.pdf and .xls).

Description of Change:

Qualification of CuPdAu bond wire in selected products available in 64L and 44L TQFP package at MTAI assembly site

Pre Change:

Using palladium coated copper (PdCu) wire material

Post Change:

Using palladium coated copper wire with gold flash (CuPdAu) wire material

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	Microchip Technology Thailand (MTAI)	Microchip Technology Thailand (MTAI)
Wire material	PdCu	CuPdAu
Die attach material	3280	3280
Molding compound material	G700HA	G700HA
Lead frame material	C7025	C7025

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve manufacturability by qualifying CuPdAu bond wire at MTAI assembly site.

Change Implementation Status:

In Progress

Estimated First Ship Date:

April 27, 2018 (date code: 1817)



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

Time Table Summary:

	March 2018					April 2018				
Workweek	09	10	11	12	13	14	15	16	17	18
Qual Report Availability					X					
Final PCN Issue Date					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 27, 2018: Issued final notification. Attached the Qualification Report. Revised the affected parts list. Provided estimated first ship date on April 27, 2018.

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_KSRA-20PIWE587_Qual_Report.pdf](#)

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."

KSRA-20PIWE587 - CCB 2970.002 Final Notice: Qualification of CuPdAu bond wire in selected products available in 64L and 44L TQFP package at MTAI assembly site

Affected Catalog Part Numbers(CPN)
DSPIC30F2023-20E/PT
DSPIC30F2023-30I/PT
DSPIC30F2023T-30I/PT
DSPIC30F3011-10E/PTB23
DSPIC30F3011-20E/PT
DSPIC30F3011-20I/PT
DSPIC30F3011-30I/PT
DSPIC30F3011T-20E/PT
DSPIC30F3011T-30I/PT
DSPIC30F3014-20E/PT
DSPIC30F3014-20I/PT
DSPIC30F3014-30I/PT
DSPIC30F3014T-30I/PT
DSPIC30F4011-20E/PT
DSPIC30F4011-20E/PTA22
DSPIC30F4011-20I/PT
DSPIC30F4011-30I/PT
DSPIC30F4011T-20E/PTA22
DSPIC30F4011T-20I/PT
DSPIC30F4011T-30I/PT
DSPIC30F4013-20E/PT
DSPIC30F4013-20I/PT
DSPIC30F4013-30I/PT
DSPIC30F4013T-30I/PT
DSPIC30F5011-20E/PT
DSPIC30F5011-20I/PT
DSPIC30F5011-30I/PT
DSPIC30F5011T-20E/PT
DSPIC30F5011T-20I/PT
DSPIC30F5011T-30I/PT
DSPIC30F5015-20E/PT
DSPIC30F5015-30I/PT
DSPIC30F5015T-30I/PT
DSPIC30F6011A-20E/PT
DSPIC30F6011A-30I/PT
DSPIC30F6011AT-30I/PT
DSPIC30F6012A-20E/PT
DSPIC30F6012A-30I/PT
DSPIC30F6012AT-20E/PT
DSPIC30F6012AT-30I/PT
DSPIC33EP256MU806-E/PT
DSPIC33EP256MU806-I/PT

DSPIC33EP256MU806T-E/PT
DSPIC33EP256MU806T-I/PT
DSPIC33EP512GP806-E/PT
DSPIC33EP512GP806-I/PT
DSPIC33EP512GP806T-E/PT
DSPIC33EP512GP806T-I/PT
DSPIC33EP512MC806-E/PT
DSPIC33EP512MC806-I/PT
DSPIC33EP512MC806-I/PT022
DSPIC33EP512MC806T-E/PT
DSPIC33EP512MC806T-I/PT
DSPIC33FJ128GP204-E/PT
DSPIC33FJ128GP204-I/PT
DSPIC33FJ128GP204T-E/PT
DSPIC33FJ128GP204T-I/PT
DSPIC33FJ128GP206A-E/PT
DSPIC33FJ128GP206A-I/PT
DSPIC33FJ128GP206AT-E/PT
DSPIC33FJ128GP206AT-I/PT
DSPIC33FJ128GP206-I/PT
DSPIC33FJ128GP206T-I/PT
DSPIC33FJ128GP306A-E/PT
DSPIC33FJ128GP306A-I/PT
DSPIC33FJ128GP306A-I/PT039
DSPIC33FJ128GP306AT-E/PT
DSPIC33FJ128GP306AT-I/PT
DSPIC33FJ128GP306-I/PT
DSPIC33FJ128GP306T-I/PT
DSPIC33FJ128GP706A-E/PT
DSPIC33FJ128GP706A-H/PT
DSPIC33FJ128GP706A-I/PT
DSPIC33FJ128GP706AT-E/PT
DSPIC33FJ128GP706AT-H/PT
DSPIC33FJ128GP706AT-I/PT
DSPIC33FJ128GP706-I/PT
DSPIC33FJ128GP706-I/PTB22
DSPIC33FJ128GP706T-I/PT
DSPIC33FJ128GP706T-I/PTB22
DSPIC33FJ128GP804-E/PT
DSPIC33FJ128GP804-H/PT
DSPIC33FJ128GP804-I/PT
DSPIC33FJ128GP804T-E/PT
DSPIC33FJ128GP804T-H/PT
DSPIC33FJ128GP804T-I/PT
DSPIC33FJ128MC204-E/PT
DSPIC33FJ128MC204-I/PT
DSPIC33FJ128MC204T-E/PT

DSPIC33FJ128MC204T-I/PT
DSPIC33FJ128MC506A-E/PT
DSPIC33FJ128MC506A-H/PT
DSPIC33FJ128MC506A-I/PT
DSPIC33FJ128MC506AT-E/PT
DSPIC33FJ128MC506AT-H/PT
DSPIC33FJ128MC506AT-I/PT
DSPIC33FJ128MC506-I/PT
DSPIC33FJ128MC706A-E/PT
DSPIC33FJ128MC706A-H/PT
DSPIC33FJ128MC706A-I/PT
DSPIC33FJ128MC706AT-E/PT
DSPIC33FJ128MC706AT-H/PT
DSPIC33FJ128MC706AT-I/PT
DSPIC33FJ128MC706-I/PT
DSPIC33FJ128MC706T-I/PT
DSPIC33FJ128MC706T-I/PTC26
DSPIC33FJ128MC804-E/PT
DSPIC33FJ128MC804-H/PT
DSPIC33FJ128MC804-I/PT
DSPIC33FJ128MC804T-E/PT
DSPIC33FJ128MC804T-H/PT
DSPIC33FJ128MC804T-I/PT
DSPIC33FJ16GP304-E/PT
DSPIC33FJ16GP304-I/PT
DSPIC33FJ16GS404-50I/PT
DSPIC33FJ16GS404-E/PT
DSPIC33FJ16GS404-H/PT
DSPIC33FJ16GS404-I/PT
DSPIC33FJ16GS404T-50I/PT
DSPIC33FJ16GS404T-E/PT
DSPIC33FJ16GS404T-H/PT
DSPIC33FJ16GS404T-I/PT
DSPIC33FJ16GS504-50I/PT
DSPIC33FJ16GS504-E/PT
DSPIC33FJ16GS504-E/PTD22
DSPIC33FJ16GS504-H/PT
DSPIC33FJ16GS504-I/PT
DSPIC33FJ16GS504-I/PTC02
DSPIC33FJ16GS504-I/PTD24
DSPIC33FJ16GS504T-50I/PT
DSPIC33FJ16GS504T-E/PT
DSPIC33FJ16GS504T-E/PTD22
DSPIC33FJ16GS504T-H/PT
DSPIC33FJ16GS504T-I/PT
DSPIC33FJ16GS504T-I/PTC02
DSPIC33FJ16GS504T-I/PTD23

DSPIC33FJ16MC304-E/PT
DSPIC33FJ16MC304-I/PT
DSPIC33FJ16MC304T-E/PT
DSPIC33FJ16MC304T-I/PT
DSPIC33FJ256GP506A-E/PT
DSPIC33FJ256GP506A-I/PT
DSPIC33FJ256GP506AT-E/PT
DSPIC33FJ256GP506AT-I/PT
DSPIC33FJ256GP506-I/PT
DSPIC33FJ256GP506T-I/PT
DSPIC33FJ32GP104-I/PT
DSPIC33FJ32GP204-E/PT
DSPIC33FJ32GP204-I/PT
DSPIC33FJ32GP304-E/PT
DSPIC33FJ32GP304-I/PT
DSPIC33FJ32GP304T-E/PT
DSPIC33FJ32GP304T-I/PT
DSPIC33FJ32GS406-50I/PT
DSPIC33FJ32GS406-E/PT
DSPIC33FJ32GS406-I/PT
DSPIC33FJ32GS406T-50I/PT
DSPIC33FJ32GS406T-E/PT
DSPIC33FJ32GS406T-I/PT
DSPIC33FJ32GS606-50I/PT
DSPIC33FJ32GS606-E/PT
DSPIC33FJ32GS606-I/PT
DSPIC33FJ32GS606-I/PTD23
DSPIC33FJ32GS606-I/PTD25
DSPIC33FJ32GS606T-50I/PT
DSPIC33FJ32GS606T-E/PT
DSPIC33FJ32GS606T-I/PT
DSPIC33FJ32GS606T-I/PTC01
DSPIC33FJ32GS606T-I/PTC04
DSPIC33FJ32GS606T-I/PTD23
DSPIC33FJ32GS606T-I/PTD25
DSPIC33FJ32MC104-I/PT
DSPIC33FJ32MC204-E/PT
DSPIC33FJ32MC204-H/PT
DSPIC33FJ32MC204-I/PT
DSPIC33FJ32MC204T-E/PT
DSPIC33FJ32MC204T-I/PT
DSPIC33FJ32MC304-E/PT
DSPIC33FJ32MC304-I/PT
DSPIC33FJ32MC304T-E/PT
DSPIC33FJ32MC304T-I/PT
DSPIC33FJ64GP204-E/PT
DSPIC33FJ64GP204-I/PT

DSPIC33FJ64GP204T-E/PT
DSPIC33FJ64GP204T-I/PT
DSPIC33FJ64GP206A-E/PT
DSPIC33FJ64GP206A-I/PT
DSPIC33FJ64GP206AT-E/PT
DSPIC33FJ64GP206AT-I/PT
DSPIC33FJ64GP206AT-I/PT032
DSPIC33FJ64GP206-I/PT
DSPIC33FJ64GP206T-I/PT
DSPIC33FJ64GP306A-E/PT
DSPIC33FJ64GP306A-I/PT
DSPIC33FJ64GP306A-I/PT037
DSPIC33FJ64GP306AT-E/PT
DSPIC33FJ64GP306AT-I/PT
DSPIC33FJ64GP306-I/PT
DSPIC33FJ64GP306T-I/PT
DSPIC33FJ64GP706A-E/PT
DSPIC33FJ64GP706A-I/PT
DSPIC33FJ64GP706AT-E/PT
DSPIC33FJ64GP706AT-I/PT
DSPIC33FJ64GP706-I/PT
DSPIC33FJ64GP706T-I/PT
DSPIC33FJ64GP804-E/PT
DSPIC33FJ64GP804-I/PT
DSPIC33FJ64GP804T-E/PT
DSPIC33FJ64GP804T-I/PT
DSPIC33FJ64GS406-50I/PT
DSPIC33FJ64GS406-E/PT
DSPIC33FJ64GS406-I/PT
DSPIC33FJ64GS406T-50I/PT
DSPIC33FJ64GS406T-E/PT
DSPIC33FJ64GS406T-I/PT
DSPIC33FJ64GS606-50I/PT
DSPIC33FJ64GS606-E/PT
DSPIC33FJ64GS606-I/PT
DSPIC33FJ64GS606-I/PTD22
DSPIC33FJ64GS606T-50I/PT
DSPIC33FJ64GS606T-50I/PTC01
DSPIC33FJ64GS606T-E/PT
DSPIC33FJ64GS606T-E/PTC06
DSPIC33FJ64GS606T-E/PTD22
DSPIC33FJ64GS606T-I/PT
DSPIC33FJ64GS606T-I/PTD22
DSPIC33FJ64MC204-E/PT
DSPIC33FJ64MC204-I/PT
DSPIC33FJ64MC204T-E/PT
DSPIC33FJ64MC204T-I/PT

DSPIC33FJ64MC204T-I/PT034
DSPIC33FJ64MC204T-I/PTC05
DSPIC33FJ64MC204T-I/PTC21
DSPIC33FJ64MC506A-E/PT
DSPIC33FJ64MC506A-H/PT
DSPIC33FJ64MC506A-I/PT
DSPIC33FJ64MC506AT-E/PT
DSPIC33FJ64MC506AT-H/PT
DSPIC33FJ64MC506AT-I/PT
DSPIC33FJ64MC506AT-I/PT022
DSPIC33FJ64MC506AT-I/PT023
DSPIC33FJ64MC506AT-I/PT025
DSPIC33FJ64MC506AT-I/PT026
DSPIC33FJ64MC506AT-I/PT027
DSPIC33FJ64MC506AT-I/PT029
DSPIC33FJ64MC506AT-I/PT034
DSPIC33FJ64MC506AT-I/PTC27
DSPIC33FJ64MC506-I/PT
DSPIC33FJ64MC506-I/PTC21
DSPIC33FJ64MC506T-I/PT
DSPIC33FJ64MC506T-I/PTC21
DSPIC33FJ64MC506T-I/PTC22
DSPIC33FJ64MC706A-E/PT
DSPIC33FJ64MC706A-I/PT
DSPIC33FJ64MC706AT-E/PT
DSPIC33FJ64MC706AT-I/PT
DSPIC33FJ64MC706-I/PT
DSPIC33FJ64MC706T-I/PT
DSPIC33FJ64MC804-E/PT
DSPIC33FJ64MC804-H/PT
DSPIC33FJ64MC804-I/PT
DSPIC33FJ64MC804T-E/PT
DSPIC33FJ64MC804T-H/PT
DSPIC33FJ64MC804T-I/PT
ENC424J600-I/PT
ENC424J600T-I/PT
ENC624J600-I/PT
ENC624J600T-I/PT
HA2156-I/PT
HA2156T-I/PT
HA2960-I/PT
HA2960T-I/PT
HA4012-I/PT
HA4012T-I/PT
HA4262-I/PT
HA4262T-I/PT
HA5067-I/PT

HA5067T-I/PT
HA5538-I/PT
HA5538T-I/PT
HA6580-I/PT
HA6580T-I/PT
HA6858-I/PT
HA6858T-I/PT
HA9566-I/PT
MCV443B-I/PT
MCV443BT-I/PT
MTR2727-I/PT
MTR2727T-I/PT
MTR5117-I/PT
MTR6158-I/PT
MTR6618-I/PT
MTR6677-I/PT
MTR6853-I/PT
MTR7519-I/PT
MTR7519-I/PTC04
MTR7519T-I/PTC04
PIC16C64A-10/PT
PIC16C64A-20/PT
PIC16C64A-20I/PT
PIC16C65B-04I/PT
PIC16C65B-20/PT
PIC16C67-20/PT
PIC16C67-20I/PT
PIC16C711-ME/PT
PIC16C715-ME/PT
PIC16C74A-20I/PT
PIC16C74B-04/PT
PIC16C74B-20/PT
PIC16C74B-20I/PT
PIC16C765-I/PT
PIC16C765T-I/PT
PIC16C77-04/PT
PIC16C77-04I/PT
PIC16C77-10I/PT
PIC16C771-ME/PT
PIC16C77-20I/PT
PIC16C774/PT
PIC16C774-I/PT
PIC16C774T-I/PT
PIC16C77T-04I/PT022
PIC16C782-ME/PT
PIC16C923-04/PT
PIC16C923-04I/PT

PIC16C924-04/PT
PIC16C924-04I/PT
PIC16C924-08/PT
PIC16C924-08I/PT
PIC16C925-I/PT
PIC16C926-I/PT
PIC16C926-I/PT030
PIC16C926T-I/PT
PIC16C926T-I/PT030
PIC16F1517-E/PT
PIC16F1517-I/PT
PIC16F1517T-I/PT
PIC16F1519-E/PT
PIC16F1519-I/PT
PIC16F1519T-E/PT
PIC16F1519T-I/PT
PIC16F1526-E/PT
PIC16F1526-I/PT
PIC16F1526T-I/PT
PIC16F1527-E/PT
PIC16F1527-I/PT
PIC16F1527T-E/PT
PIC16F1527T-I/PT
PIC16F1717-E/PT
PIC16F1717-I/PT
PIC16F1717T-I/PT
PIC16F1719-E/PT
PIC16F1719-I/PT
PIC16F1719T-I/PT
PIC16F1784-E/PT
PIC16F1784-I/PT
PIC16F1784T-I/PT
PIC16F1787-E/PT
PIC16F1787-I/PT
PIC16F1787T-I/PT
PIC16F1789-E/PT
PIC16F1789-I/PT
PIC16F1789T-E/PT
PIC16F1789T-I/PT
PIC16F1934-E/PT
PIC16F1934-I/PT
PIC16F1934-I/PTC02
PIC16F1934T-I/PT
PIC16F1934T-I/PTC02
PIC16F1937-E/PT
PIC16F1937-I/PT
PIC16F1937-I/PT021

PIC16F1937-I/PTC01
PIC16F1937-I/PTC02
PIC16F1937-I/PTC04
PIC16F1937T-E/PT
PIC16F1937T-I/PT
PIC16F1937T-I/PT023
PIC16F1937T-I/PT024
PIC16F1937T-I/PTC04
PIC16F1939-E/PT
PIC16F1939-I/PT
PIC16F1939-I/PTC01
PIC16F1939-ICE/PT
PIC16F1939T-I/PT
PIC16F1939T-I/PT021
PIC16F1946-E/PT
PIC16F1946-I/PT
PIC16F1946T-I/PT
PIC16F1947-E/PT
PIC16F1947-I/PT
PIC16F1947-I/PT020
PIC16F1947-I/PTC02
PIC16F1947-I/PTC03
PIC16F1947T-I/PT
PIC16F1947T-I/PTC02
PIC16F1947T-I/PTC03
PIC16F570-ICD/PT
PIC16F59-I/PT
PIC16F59-I/PT021
PIC16F59T-I/PT
PIC16F59T-I/PT021
PIC16F628-ME/PT
PIC16F648A-ME/PT
PIC16F676-ME/PT
PIC16F690-ICD/PT
PIC16F707-E/PT
PIC16F707-I/PT
PIC16F707T-I/PT
PIC16F716-ME/PT
PIC16F724-E/PT
PIC16F724-I/PT
PIC16F724T-I/PT
PIC16F727-E/PT
PIC16F727-I/PT
PIC16F727-ICE/PT
PIC16F727T-I/PT
PIC16F747-I/PT
PIC16F747T-I/PT

PIC16F74-E/PT
PIC16F74-I/PT
PIC16F74T-I/PT
PIC16F74T-I/PT152
PIC16F777-E/PT
PIC16F777-I/PT
PIC16F777T-I/PT
PIC16F77-E/PT
PIC16F77-I/PT
PIC16F77T-I/PT
PIC16F77T-I/PT058
PIC16F77T-I/PT102
PIC16F84A-ME/PT
PIC16F871-I/PT
PIC16F874-04/PT
PIC16F874-04I/PT
PIC16F874-20/PT
PIC16F874-20I/PT
PIC16F874A-E/PT
PIC16F874A-I/PT
PIC16F874A-I/PTV01
PIC16F874AT-E/PT
PIC16F874AT-I/PT
PIC16F874AT-I/PTC06
PIC16F877-04/PT
PIC16F877-04E/PT
PIC16F877-04I/PT
PIC16F877-10E/PT
PIC16F877-20/PT
PIC16F877-20I/PT
PIC16F877A-E/PT
PIC16F877A-I/PT
PIC16F877A-I/PTV03
PIC16F877AT-I/PT
PIC16F877T-20/PT
PIC16F877T-20I/PT
PIC16F884-E/PT
PIC16F884-I/PT
PIC16F884T-E/PT
PIC16F884T-I/PT
PIC16F887-E/PT
PIC16F887-I/PT
PIC16F887T-E/PT
PIC16F887T-I/PT
PIC16F887T-I/PT023
PIC16F88-ME/PT
PIC16F914-E/PT

PIC16F914-I/PT
PIC16F914T-I/PT
PIC16F917-E/PT
PIC16F917-I/PT
PIC16F917-I/PT026
PIC16F917-I/PT046
PIC16F917T-E/PT
PIC16F917T-I/PT
PIC16F946-E/PT
PIC16F946-I/PT
PIC16F946-I/PTC02
PIC16F946-I/PTREL
PIC16F946T-I/PT
PIC16F946T-I/PT023
PIC16F946T-I/PT024
PIC16F946T-I/PT026
PIC16F946T-I/PTC02
PIC16LC65A-04/PT
PIC16LC65B-04/PT
PIC16LC65B-04I/PT
PIC16LC67-04/PT
PIC16LC77-04/PT
PIC16LC77-04I/PT
PIC16LC774-I/PT
PIC16LC923-04/PT
PIC16LC923-04I/PT
PIC16LC924-04/PT
PIC16LC924-04I/PT
PIC16LC924-04I/PT020
PIC16LC925-I/PT
PIC16LC926-I/PT
PIC16LC926-I/PTC01
PIC16LC926-I/PTC03
PIC16LF1517-E/PT
PIC16LF1517-I/PT
PIC16LF1517T-I/PT
PIC16LF1519-E/PT
PIC16LF1519-I/PT
PIC16LF1519T-I/PT
PIC16LF1526-E/PT
PIC16LF1526-I/PT
PIC16LF1526T-I/PT
PIC16LF1527-E/PT
PIC16LF1527-I/PT
PIC16LF1527-I/PTC01
PIC16LF1527T-I/PT
PIC16LF1717-E/PT

PIC16LF1717-I/PT
PIC16LF1717T-I/PT
PIC16LF1719-E/PT
PIC16LF1719-I/PT
PIC16LF1719T-I/PT
PIC16LF1784-E/PT
PIC16LF1784-I/PT
PIC16LF1784T-I/PT
PIC16LF1787-E/PT
PIC16LF1787-I/PT
PIC16LF1787T-I/PT
PIC16LF1789-E/PT
PIC16LF1789-I/PT
PIC16LF1789T-I/PT
PIC16LF1904-E/PT
PIC16LF1904-I/PT
PIC16LF1904T-I/PT
PIC16LF1907-E/PT
PIC16LF1907-I/PT
PIC16LF1907-ICE/PT
PIC16LF1907T-I/PT
PIC16LF1934-E/PT
PIC16LF1934-I/PT
PIC16LF1934-I/PT022
PIC16LF1934-I/PT023
PIC16LF1934-I/PT024
PIC16LF1934-I/PT025
PIC16LF1934T-I/PT
PIC16LF1934T-I/PT025
PIC16LF1937-E/PT
PIC16LF1937-I/PT
PIC16LF1937T-I/PT
PIC16LF1937T-I/PT022
PIC16LF1937T-I/PT023
PIC16LF1939-E/PT
PIC16LF1939-I/PT
PIC16LF1939-I/PT021
PIC16LF1939-I/PT023
PIC16LF1939-ICE/PT
PIC16LF1939T-I/PT
PIC16LF1939T-I/PT024
PIC16LF1946-E/PT
PIC16LF1946-I/PT
PIC16LF1946-I/PTC01
PIC16LF1946T-I/PT
PIC16LF1946T-I/PTC01
PIC16LF1947-E/PT

PIC16LF1947-I/PT
PIC16LF1947-I/PTC01
PIC16LF1947-I/PTC02
PIC16LF1947-I/PTC03
PIC16LF1947T-I/PT
PIC16LF1947T-I/PTC01
PIC16LF1947T-I/PTC02
PIC16LF1947T-I/PTC03
PIC16LF707-E/PT
PIC16LF707-I/PT
PIC16LF707T-I/PT
PIC16LF724-E/PT
PIC16LF724-I/PT
PIC16LF724T-I/PT
PIC16LF727-E/PT
PIC16LF727-I/PT
PIC16LF727-ICE/PT
PIC16LF727T-I/PT
PIC16LF747-I/PT
PIC16LF747T-I/PT
PIC16LF74-I/PT
PIC16LF777-I/PT
PIC16LF777T-I/PT
PIC16LF77-I/PT
PIC16LF77T-I/PT
PIC16LF77T-I/PTC10
PIC16LF871-I/PT
PIC16LF874-04/PT
PIC16LF874-04I/PT
PIC16LF874A-I/PT
PIC16LF874AT-I/PT
PIC16LF877-04/PT
PIC16LF877-04I/PT
PIC16LF877A-I/PT
PIC16LF877AT-I/PT
PIC16LF877AT-I/PT033
PIC17C43-25/PT
PIC17C43-33I/PT
PIC17C44-16/PT
PIC17C44-16I/PT
PIC17C44-25/PT
PIC17C44-33/PT
PIC17C752-16/PT
PIC17C752-16I/PT
PIC17C752-33/PT
PIC17C752-33I/PT
PIC17C752T-16I/PT

PIC17C756A-16/PT
PIC17C756A-16I/PT
PIC17C756A-33/PT
PIC17C756A-33I/PT
PIC17C756A-33I/PTC03
PIC17C756AT-33/PT
PIC17LC44-08I/PT
PIC17LC756A-08/PT
PIC17LC756A-08I/PT
PIC17LC756AT-08I/PT
PIC18C601-I/PT
PIC18C658-E/PT
PIC18C658-I/PT
PIC18CR6627-I/PT
PIC18F4220-E/PT
PIC18F4220-I/PT
PIC18F4220T-I/PT
PIC18F4221-E/PT
PIC18F4221-I/PT
PIC18F4221T-E/PT
PIC18F4221T-I/PT
PIC18F4320-E/PT
PIC18F4320-I/PT
PIC18F4320-I/PTC09
PIC18F4320T-I/PT
PIC18F4320T-I/PTC2
PIC18F4321-E/PT
PIC18F4321-I/PT
PIC18F4321T-I/PT
PIC18F4331-E/PT
PIC18F4331-I/PT
PIC18F4331T-I/PT
PIC18F43K20-E/PT
PIC18F43K20-I/PT
PIC18F43K20T-I/PT
PIC18F43K20T-I/PTC01
PIC18F43K22-E/PT
PIC18F43K22-I/PT
PIC18F43K22T-I/PT
PIC18F4410-I/PT
PIC18F4410T-I/PT
PIC18F4420-E/PT
PIC18F4420-I/PT
PIC18F4420T-E/PT
PIC18F4420T-I/PT
PIC18F4423-E/PT
PIC18F4423-I/PT

PIC18F4423T-I/PT
PIC18F442-E/PT
PIC18F442-I/PT
PIC18F442T-I/PT
PIC18F4431-E/PT
PIC18F4431-I/PT
PIC18F4431-I/PT027
PIC18F4431-I/PT028
PIC18F4431T-E/PT
PIC18F4431T-I/PT
PIC18F4431T-I/PT020
PIC18F4431T-I/PT021
PIC18F4431T-I/PT027
PIC18F4431T-I/PT028
PIC18F4439-I/PT
PIC18F4450-I/PT
PIC18F4455-I/PT
PIC18F4455T-I/PT
PIC18F4458-I/PT
PIC18F4480-E/PT
PIC18F4480-I/PT
PIC18F4480T-E/PT
PIC18F4480T-I/PT
PIC18F448-E/PT
PIC18F448-I/PT
PIC18F448T-I/PT
PIC18F44J10-I/PT
PIC18F44J10-I/PTC01
PIC18F44J10T-I/PT
PIC18F44J11-I/PT
PIC18F44J11T-I/PT
PIC18F44J50-I/PT
PIC18F44J50T-I/PT
PIC18F44K20-E/PT
PIC18F44K20-I/PT
PIC18F44K20T-E/PT
PIC18F44K20T-I/PT
PIC18F44K20T-I/PT020
PIC18F44K20T-I/PT021
PIC18F44K22-E/PT
PIC18F44K22-I/PT
PIC18F44K22T-E/PT
PIC18F44K22T-I/PT
PIC18F4510-E/PT
PIC18F4510-I/PT
PIC18F4510T-I/PT
PIC18F4515-I/PT

PIC18F4520-E/PT
PIC18F4520-I/PT
PIC18F4520-I/PTB4
PIC18F4520-I/PTC05
PIC18F4520T-E/PT
PIC18F4520T-I/PT
PIC18F4520T-I/PTB4
PIC18F4523-E/PT
PIC18F4523-I/PT
PIC18F4523T-I/PT
PIC18F4525-E/PT
PIC18F4525-I/PT
PIC18F4525T-I/PT
PIC18F452-E/PT
PIC18F452-E/PTC34
PIC18F452-I/PT
PIC18F452-I/PTC17
PIC18F452T-I/PT
PIC18F4539-I/PT
PIC18F4550-I/PT
PIC18F4550T-I/PT
PIC18F4550T-I/PT028
PIC18F4553-I/PT
PIC18F4580-E/PT
PIC18F4580-I/PT
PIC18F4580-I/PTC01
PIC18F4580-I/PTC02
PIC18F4580T-E/PT
PIC18F4580T-I/PT
PIC18F4580T-I/PTC01
PIC18F4580T-I/PTC02
PIC18F4585-E/PT
PIC18F4585-H/PT
PIC18F4585-I/PT
PIC18F4585T-I/PT
PIC18F458-E/PT
PIC18F458-I/PT
PIC18F458T-I/PT
PIC18F45J10-I/PT
PIC18F45J10T-I/PT
PIC18F45J11-I/PT
PIC18F45J11T-I/PT
PIC18F45J50-I/PT
PIC18F45J50T-I/PT
PIC18F45K20-E/PT
PIC18F45K20-I/PT
PIC18F45K20-I/PTC02

PIC18F45K20-I/PTC04
PIC18F45K20-I/PTC07
PIC18F45K20T-I/PT
PIC18F45K20T-I/PTC02
PIC18F45K20T-I/PTC04
PIC18F45K20T-I/PTC07
PIC18F45K22-E/PT
PIC18F45K22-I/PT
PIC18F45K22-I/PT020
PIC18F45K22-I/PT021
PIC18F45K22T-E/PT
PIC18F45K22T-I/PT
PIC18F45K50-E/PT
PIC18F45K50-I/PT
PIC18F45K50T-I/PT
PIC18F45K80-E/PT
PIC18F45K80-H/PT
PIC18F45K80-I/PT
PIC18F45K80T-E/PT
PIC18F45K80T-I/PT
PIC18F4610-I/PT
PIC18F4610T-I/PT
PIC18F4620-E/PT
PIC18F4620-E/PTB4
PIC18F4620-I/PT
PIC18F4620T-I/PT
PIC18F4680-E/PT
PIC18F4680-E/PTC04
PIC18F4680-H/PT
PIC18F4680-I/PT
PIC18F4680T-E/PT
PIC18F4680T-I/PT
PIC18F4682-E/PT
PIC18F4682-I/PT
PIC18F4682T-I/PT
PIC18F4685-E/PT
PIC18F4685-I/PT
PIC18F4685T-I/PT
PIC18F46J11-I/PT
PIC18F46J11T-I/PT
PIC18F46J13-I/PT
PIC18F46J13T-I/PT
PIC18F46J50-I/PT
PIC18F46J50-I/PTREL
PIC18F46J50T-I/PT
PIC18F46J50T-I/PT031
PIC18F46J50T-I/PT032

PIC18F46J53-I/PT
PIC18F46J53T-I/PT
PIC18F46K20-E/PT
PIC18F46K20-E/PTC03
PIC18F46K20-I/PT
PIC18F46K20-I/PT022
PIC18F46K20-I/PTC05
PIC18F46K20-I/PTC06
PIC18F46K20-I/PTC07
PIC18F46K20T-E/PT
PIC18F46K20T-E/PTC03
PIC18F46K20T-I/PT
PIC18F46K20T-I/PT024
PIC18F46K20T-I/PT025
PIC18F46K20T-I/PT026
PIC18F46K20T-I/PT027
PIC18F46K20T-I/PT028
PIC18F46K20T-I/PT030
PIC18F46K20T-I/PT031
PIC18F46K20T-I/PTC05
PIC18F46K20T-I/PTC06
PIC18F46K20T-I/PTC07
PIC18F46K22-E/PT
PIC18F46K22-I/PT
PIC18F46K22T-E/PT
PIC18F46K22T-I/PT
PIC18F46K22T-I/PT020
PIC18F46K22T-I/PT022
PIC18F46K80-E/PT
PIC18F46K80-H/PT
PIC18F46K80-I/PT
PIC18F46K80T-E/PT
PIC18F46K80T-I/PT
PIC18F47J13-I/PT
PIC18F47J13T-I/PT
PIC18F47J53-I/PT
PIC18F47J53T-I/PT
PIC18F6310-E/PT
PIC18F6310-I/PT
PIC18F6310T-I/PT
PIC18F6390-E/PT
PIC18F6390-I/PT
PIC18F6390T-I/PT
PIC18F6393-I/PT
PIC18F6393T-I/PT
PIC18F63J11-I/PT
PIC18F63J90-I/PT

PIC18F63J90T-I/PT
PIC18F6410-E/PT
PIC18F6410-I/PT
PIC18F6410T-I/PT
PIC18F6410T-I/PTC01
PIC18F6490-E/PT
PIC18F6490-I/PT
PIC18F6490T-I/PT
PIC18F6493-I/PT
PIC18F6493-I/PTREL
PIC18F6493T-I/PT
PIC18F64J11-I/PT
PIC18F64J11T-I/PT
PIC18F64J90-I/PT
PIC18F64J90T-I/PT
PIC18F6520-E/PT
PIC18F6520-I/PT
PIC18F6520-I/PTC08
PIC18F6520-I/PTREL
PIC18F6520T-E/PT
PIC18F6520T-I/PT
PIC18F6525-E/PT
PIC18F6525-I/PT
PIC18F6527-I/PT
PIC18F6527T-I/PT
PIC18F6585-E/PT
PIC18F6585-I/PT
PIC18F65J10-I/PT
PIC18F65J10T-I/PT
PIC18F65J15-I/PT
PIC18F65J15T-I/PT
PIC18F65J50-I/PT
PIC18F65J90-I/PT
PIC18F65J90-I/PTREL
PIC18F65J90T-I/PT
PIC18F65K22-E/PT
PIC18F65K22-I/PT
PIC18F65K22-I/PTC07
PIC18F65K22-I/PTC10
PIC18F65K22-I/PTRSL
PIC18F65K22T-E/PT
PIC18F65K22T-I/PT
PIC18F65K22T-I/PTC07
PIC18F65K22T-I/PTC10
PIC18F65K22T-I/PTRSL
PIC18F65K80-E/PT
PIC18F65K80-H/PT

PIC18F65K80-I/PT
PIC18F65K80T-E/PT
PIC18F65K80T-I/PT
PIC18F65K90-E/PT
PIC18F65K90-I/PT
PIC18F65K90-I/PTRSL
PIC18F65K90T-I/PT
PIC18F65K90T-I/PTRSL
PIC18F6620-E/PT
PIC18F6620-I/PT
PIC18F6620T-I/PT
PIC18F6621-E/PT
PIC18F6621-I/PT
PIC18F6621-I/PTREL
PIC18F6621T-I/PT
PIC18F6622-E/PT
PIC18F6622-I/PT
PIC18F6622-I/PTC06
PIC18F6622-I/PTREL
PIC18F6622T-I/PT
PIC18F6622T-I/PTC06
PIC18F6627-E/PT
PIC18F6627-I/PT
PIC18F6627T-E/PT
PIC18F6627T-I/PT
PIC18F6627T-I/PT024
PIC18F6627T-I/PT026
PIC18F6627T-I/PT036
PIC18F6628-E/PT
PIC18F6628-I/PT
PIC18F6628T-I/PT
PIC18F6680-E/PT
PIC18F6680-I/PT
PIC18F6680-I/PTREL
PIC18F6680T-I/PT
PIC18F66J10-I/PT
PIC18F66J10T-I/PT
PIC18F66J10T-I/PTC01
PIC18F66J11-I/PT
PIC18F66J11-I/PTC01
PIC18F66J11T-I/PT
PIC18F66J15-I/PT
PIC18F66J15T-I/PT
PIC18F66J16-I/PT
PIC18F66J16-I/PTC05
PIC18F66J16T-I/PT
PIC18F66J50-I/PT

PIC18F66J50T-I/PT
PIC18F66J55-I/PT
PIC18F66J55T-I/PT
PIC18F66J60-I/PT
PIC18F66J60T-I/PT020
PIC18F66J65-I/PT
PIC18F66J65T-I/PT
PIC18F66J90-I/PT
PIC18F66J90T-I/PT
PIC18F66J90T-I/PTC05
PIC18F66J93-I/PT
PIC18F66J93T-I/PT
PIC18F66K22-E/PT
PIC18F66K22-I/PT
PIC18F66K22-I/PTC11
PIC18F66K22-I/PTRSL
PIC18F66K22T-E/PT
PIC18F66K22T-I/PT
PIC18F66K22T-I/PTC11
PIC18F66K22T-I/PTRSL
PIC18F66K80-E/PT
PIC18F66K80-H/PT
PIC18F66K80-I/PT
PIC18F66K80-I/PTREL
PIC18F66K80T-E/PT
PIC18F66K80T-I/PT
PIC18F66K90-E/PT
PIC18F66K90-I/PT
PIC18F66K90-I/PTC01
PIC18F66K90-I/PTRSL
PIC18F66K90T-I/PT
PIC18F66K90T-I/PTC01
PIC18F66K90T-I/PTC07
PIC18F66K90T-I/PTRSL
PIC18F6720-E/PT
PIC18F6720-I/PT
PIC18F6720-I/PTC01
PIC18F6720T-I/PT
PIC18F6720T-I/PTC01
PIC18F6722-E/PT
PIC18F6722-I/PT
PIC18F6722-I/PTB1
PIC18F6722-I/PTV04
PIC18F6722T-E/PT
PIC18F6722T-I/PT
PIC18F6722T-I/PTB1
PIC18F6723-E/PREL

PIC18F6723-E/PT
PIC18F6723-I/PREL
PIC18F6723-I/PT
PIC18F6723T-I/PT
PIC18F67J10-I/PT
PIC18F67J10-I/PTC03
PIC18F67J10-I/PTREL
PIC18F67J10-I/PTXXX
PIC18F67J10T-I/PT
PIC18F67J10T-I/PT020
PIC18F67J11-I/PT
PIC18F67J11-I/PTC02
PIC18F67J11-I/PTC03
PIC18F67J11-I/PTC04
PIC18F67J11-I/PTC06
PIC18F67J11T-I/PT
PIC18F67J11T-I/PTC03
PIC18F67J11T-I/PTC06
PIC18F67J50-I/PT
PIC18F67J50T-I/PT
PIC18F67J50T-I/PT024
PIC18F67J60-I/PT
PIC18F67J60-I/PTREL
PIC18F67J60T-I/PT
PIC18F67J90-I/PT
PIC18F67J90T-I/PT
PIC18F67J93-I/PT
PIC18F67J93T-I/PT
PIC18F67K22-E/PT
PIC18F67K22-I/PT
PIC18F67K22-I/PT027
PIC18F67K22-I/PT036
PIC18F67K22-I/PTC02
PIC18F67K22-I/PTC08
PIC18F67K22-I/PTRSL
PIC18F67K22T-I/PT
PIC18F67K22T-I/PT027
PIC18F67K22T-I/PT036
PIC18F67K22T-I/PTRSL
PIC18F67K90-E/PT
PIC18F67K90-I/PT
PIC18F67K90-I/PT021
PIC18F67K90-I/PT022
PIC18F67K90-I/PT024
PIC18F67K90-I/PT028
PIC18F67K90-I/PT029
PIC18F67K90-I/PT030

PIC18F67K90-I/PT033
PIC18F67K90-I/PT037
PIC18F67K90-I/PTC05
PIC18F67K90-I/PTRSL
PIC18F67K90T-E/PT
PIC18F67K90T-I/PT
PIC18F67K90T-I/PT021
PIC18F67K90T-I/PT022
PIC18F67K90T-I/PT024
PIC18F67K90T-I/PT037
PIC18F67K90T-I/PTRSL
PIC18LC658-I/PT
PIC18LF4220-I/PT
PIC18LF4220T-I/PT
PIC18LF4221-I/PT
PIC18LF4320-I/PT
PIC18LF4320T-I/PT
PIC18LF4321-I/PT
PIC18LF4321T-I/PT
PIC18LF4331-I/PT
PIC18LF43K22-E/PT
PIC18LF43K22-I/PT
PIC18LF43K22T-I/PT
PIC18LF4410-I/PT
PIC18LF4420-I/PT
PIC18LF4420T-I/PT
PIC18LF4423-I/PT
PIC18LF4423T-I/PT
PIC18LF442-I/PT
PIC18LF4431-I/PT
PIC18LF4450-I/PT
PIC18LF4455-I/PT
PIC18LF4455T-I/PT
PIC18LF4458-I/PT
PIC18LF4480-I/PT
PIC18LF4480T-I/PT
PIC18LF448-I/PT
PIC18LF44J10-I/PT
PIC18LF44J11-I/PT
PIC18LF44J11T-I/PT
PIC18LF44J50-I/PT
PIC18LF44J50T-I/PT
PIC18LF44K22-E/PT
PIC18LF44K22-I/PT
PIC18LF44K22T-I/PT
PIC18LF4510-I/PT
PIC18LF4510T-I/PT

PIC18LF4510T-I/PTC01
PIC18LF4515-I/PT
PIC18LF4520-I/PT
PIC18LF4520-I/PTC12
PIC18LF4520T-I/PT
PIC18LF4523-I/PT
PIC18LF4523T-I/PT
PIC18LF4525-I/PT
PIC18LF4525-I/PTLB4
PIC18LF4525T-I/PT
PIC18LF452-I/PT
PIC18LF452T-I/PT
PIC18LF4539-I/PT
PIC18LF4550-I/PT
PIC18LF4550T-I/PT
PIC18LF4553-I/PT
PIC18LF4580-I/PT
PIC18LF4580T-I/PT
PIC18LF4585-I/PT
PIC18LF4585T-I/PT
PIC18LF458-I/PT
PIC18LF45J10-I/PT
PIC18LF45J11-I/PT
PIC18LF45J11T-I/PT
PIC18LF45J50-I/PT
PIC18LF45J50T-I/PT
PIC18LF45K22-E/PT
PIC18LF45K22-I/PT
PIC18LF45K22T-I/PT
PIC18LF45K50-E/PT
PIC18LF45K50-I/PT
PIC18LF45K50T-I/PT
PIC18LF45K80-I/PT
PIC18LF45K80T-I/PT
PIC18LF4610-I/PT
PIC18LF4610T-I/PT
PIC18LF4620-I/PT
PIC18LF4620T-I/PT
PIC18LF4680-I/PT
PIC18LF4680T-I/PT
PIC18LF4682-I/PT
PIC18LF4685-I/PT
PIC18LF46J11-I/PT
PIC18LF46J11T-I/PT
PIC18LF46J13-I/PT
PIC18LF46J13T-I/PT
PIC18LF46J50-I/PT

PIC18LF46J50T-I/PT
PIC18LF46J53-I/PT
PIC18LF46J53T-I/PT
PIC18LF46K22-E/PT
PIC18LF46K22-I/PT
PIC18LF46K22T-I/PT
PIC18LF46K22T-I/PT024
PIC18LF46K22T-I/PTC01
PIC18LF46K22T-I/PTC04
PIC18LF46K80-I/PT
PIC18LF46K80T-I/PT
PIC18LF47J13-I/PT
PIC18LF47J13T-I/PT
PIC18LF47J53-I/PT
PIC18LF47J53T-I/PT
PIC18LF6310-I/PT
PIC18LF6390-I/PT
PIC18LF6390T-I/PT
PIC18LF6410-I/PT
PIC18LF6490-I/PT
PIC18LF6490T-I/PT
PIC18LF6520-I/PT
PIC18LF6520T-I/PT
PIC18LF6525-I/PT
PIC18LF6527-I/PT
PIC18LF6527T-I/PT
PIC18LF6585-I/PT
PIC18LF65K80-I/PT
PIC18LF65K80T-I/PT
PIC18LF6620-I/PT
PIC18LF6620T-I/PT
PIC18LF6621-I/PT
PIC18LF6622-I/PT
PIC18LF6622T-I/PT
PIC18LF6627-I/PT
PIC18LF6627T-I/PT
PIC18LF6628-I/PT
PIC18LF6628T-I/PT
PIC18LF6680-I/PT
PIC18LF66K80-I/PT
PIC18LF66K80T-I/PT
PIC18LF6720-I/PT
PIC18LF6720T-I/PT
PIC18LF6722-I/PT
PIC18LF6722-I/PT032
PIC18LF6722T-I/PT
PIC18LF6723-I/PT

PIC18LF6723T-I/PT
PIC24EP512GP806-E/PT
PIC24EP512GP806-I/PT
PIC24EP512GP806T-E/PT
PIC24EP512GP806T-I/PT
PIC24F08KM204-I/PT
PIC24F16KA304-I/PT
PIC24F16KM104-I/PT
PIC24F16KM204-E/PT
PIC24F16KM204-I/PT
PIC24F32KA304-E/PT
PIC24F32KA304-I/PT
PIC24F32KA304T-I/PT
PIC24FJ128DA106-I/PT
PIC24FJ128DA106T-I/PT
PIC24FJ128DA206-I/PT
PIC24FJ128GA006-I/PT
PIC24FJ128GA006-I/PT022
PIC24FJ128GA006-I/PT028
PIC24FJ128GA006-I/PTC2
PIC24FJ128GA006T-I/PT
PIC24FJ128GA006T-I/PT028
PIC24FJ128GA006T-I/PT033
PIC24FJ128GA006T-I/PTC2
PIC24FJ128GA006T-I/PTV04
PIC24FJ128GA106-E/PT
PIC24FJ128GA106-I/PT
PIC24FJ128GA106-I/PT026
PIC24FJ128GA106-I/PT028
PIC24FJ128GA106-I/PT034
PIC24FJ128GA106-I/PT038
PIC24FJ128GA106-I/PTA5
PIC24FJ128GA106-I/PTC13
PIC24FJ128GA106-I/PTC24
PIC24FJ128GA106T-I/PT
PIC24FJ128GA106T-I/PT026
PIC24FJ128GA106T-I/PT028
PIC24FJ128GA106T-I/PT034
PIC24FJ128GA106T-I/PT036
PIC24FJ128GA106T-I/PT038
PIC24FJ128GA106T-I/PTA5
PIC24FJ128GA106T-I/PTC13
PIC24FJ128GA106T-I/PTC19
PIC24FJ128GB106-I/PT
PIC24FJ128GB106T-I/PT
PIC24FJ128GB106T-I/PT022
PIC24FJ128GB106T-I/PT031

PIC24FJ128GB106T-I/PT032
PIC24FJ128GB206-I/PT
PIC24FJ16GA004-E/PT
PIC24FJ16GA004-I/PT
PIC24FJ16GA004-I/PTB8
PIC24FJ16GA004T-I/PT
PIC24FJ16GA004T-I/PTB4
PIC24FJ192GA106-E/PT
PIC24FJ192GA106-I/PT
PIC24FJ192GA106-I/PTC22
PIC24FJ192GA106T-I/PT
PIC24FJ192GB106-I/PT
PIC24FJ256DA106-I/PT
PIC24FJ256DA206-I/PT
PIC24FJ256DA206T-I/PT
PIC24FJ256GA106-E/PT
PIC24FJ256GA106-I/PT
PIC24FJ256GA106-I/PT031
PIC24FJ256GA106-I/PTC25
PIC24FJ256GA106T-I/PT
PIC24FJ256GA106T-I/PT023
PIC24FJ256GA106T-I/PT037
PIC24FJ256GA106T-I/PTC33
PIC24FJ256GB106-I/PT
PIC24FJ256GB106T-I/PT
PIC24FJ256GB106T-I/PT028
PIC24FJ256GB206-I/PT
PIC24FJ256GB206T-I/PT
PIC24FJ32GA004-E/PT
PIC24FJ32GA004-I/PT
PIC24FJ32GA004-I/PTC01
PIC24FJ32GA004-I/PTC04
PIC24FJ32GA004T-I/PT
PIC24FJ32GA004T-I/PTC01
PIC24FJ32GA004T-I/PTC04
PIC24FJ32GA104-I/PT
PIC24FJ32GA104T-I/PT
PIC24FJ32GB004-I/PT
PIC24FJ32MC104-I/PT
PIC24FJ48GA004-E/PT
PIC24FJ48GA004-I/PT
PIC24FJ48GA004T-I/PT
PIC24FJ64GA004-E/PT
PIC24FJ64GA004-I/PT
PIC24FJ64GA004-I/PT037
PIC24FJ64GA004-I/PTC02
PIC24FJ64GA004-I/PTC08

PIC24FJ64GA004-I/PTC16
PIC24FJ64GA004T-I/PT
PIC24FJ64GA004T-I/PT032
PIC24FJ64GA004T-I/PT033
PIC24FJ64GA004T-I/PT035
PIC24FJ64GA004T-I/PT036
PIC24FJ64GA004T-I/PT037
PIC24FJ64GA004T-I/PT038
PIC24FJ64GA004T-I/PT039
PIC24FJ64GA004T-I/PT040
PIC24FJ64GA004T-I/PT041
PIC24FJ64GA004T-I/PTC08
PIC24FJ64GA006-I/PT
PIC24FJ64GA006-I/PTC03
PIC24FJ64GA006T-I/PT
PIC24FJ64GA006T-I/PT027
PIC24FJ64GA006T-I/PT032
PIC24FJ64GA006T-I/PT034
PIC24FJ64GA006T-I/PT036
PIC24FJ64GA006T-I/PT037
PIC24FJ64GA006T-I/PT039
PIC24FJ64GA006T-I/PTC03
PIC24FJ64GA006T-I/PTC08
PIC24FJ64GA104-I/PT
PIC24FJ64GA104-I/PTREL
PIC24FJ64GA104T-I/PT
PIC24FJ64GA106-E/PT
PIC24FJ64GA106-I/PT
PIC24FJ64GA106-I/PTC23
PIC24FJ64GA106T-I/PT
PIC24FJ64GB004-I/PT
PIC24FJ64GB004-I/PT021
PIC24FJ64GB004-I/PTREL
PIC24FJ64GB004T-I/PT
PIC24FJ64GB106-I/PT
PIC24FJ64GB106T-I/PT
PIC24FJ96GA006-I/PT
PIC24FJ96GA006-I/PT025
PIC24FJ96GA006-I/PTC09
PIC24FJ96GA006T-I/PT
PIC24FJ96GA006T-I/PT025
PIC24FJ96GA006T-I/PTV01
PIC24FV08KM204-I/PT
PIC24FV16KA304-I/PT
PIC24FV16KA304T-I/PT
PIC24FV16KM104-I/PT
PIC24FV16KM204-E/PT

PIC24FV16KM204-I/PT
PIC24FV16KM204T-I/PT
PIC24FV32KA304-E/PT
PIC24FV32KA304-I/PT
PIC24FV32KA304T-I/PT
PIC24HJ128GP204-E/PT
PIC24HJ128GP204-I/PT
PIC24HJ128GP204T-E/PT
PIC24HJ128GP204T-I/PT
PIC24HJ128GP206A-E/PT
PIC24HJ128GP206A-I/PT
PIC24HJ128GP206AT-E/PT
PIC24HJ128GP206AT-I/PT
PIC24HJ128GP206-I/PT
PIC24HJ128GP206T-I/PT
PIC24HJ128GP306A-E/PT
PIC24HJ128GP306A-I/PT
PIC24HJ128GP306AT-E/PT
PIC24HJ128GP306AT-I/PT
PIC24HJ128GP306-I/PT
PIC24HJ128GP504-E/PT
PIC24HJ128GP504-H/PT
PIC24HJ128GP504-I/PT
PIC24HJ128GP504-I/PTC26
PIC24HJ128GP504T-E/PT
PIC24HJ128GP504T-H/PT
PIC24HJ128GP504T-I/PT
PIC24HJ128GP506A-E/PT
PIC24HJ128GP506A-H/PT
PIC24HJ128GP506A-I/PT
PIC24HJ128GP506AT-E/PT
PIC24HJ128GP506AT-H/PT
PIC24HJ128GP506AT-I/PT
PIC24HJ128GP506-I/PT
PIC24HJ128GP506T-I/PT
PIC24HJ16GP304-E/PT
PIC24HJ16GP304-H/PT
PIC24HJ16GP304-I/PT
PIC24HJ16GP304T-I/PT
PIC24HJ256GP206A-E/PT
PIC24HJ256GP206A-H/PT
PIC24HJ256GP206A-I/PT
PIC24HJ256GP206AT-E/PT
PIC24HJ256GP206AT-I/PT
PIC24HJ256GP206-I/PT
PIC24HJ256GP206T-I/PT
PIC24HJ32GP204-E/PT

PIC24HJ32GP204-I/PT
PIC24HJ32GP204T-I/PT
PIC24HJ32GP304-E/PT
PIC24HJ32GP304-I/PT
PIC24HJ32GP304T-E/PT
PIC24HJ32GP304T-I/PT
PIC24HJ64GP204-E/PT
PIC24HJ64GP204-I/PT
PIC24HJ64GP204T-E/PT
PIC24HJ64GP204T-I/PT
PIC24HJ64GP206A-E/PT
PIC24HJ64GP206A-E/PTA27
PIC24HJ64GP206A-I/PT
PIC24HJ64GP206AT-E/PT
PIC24HJ64GP206AT-E/PTA27
PIC24HJ64GP206AT-I/PT
PIC24HJ64GP206-I/PT
PIC24HJ64GP206T-I/PT
PIC24HJ64GP504-E/PT
PIC24HJ64GP504-I/PT
PIC24HJ64GP504-I/PTA23
PIC24HJ64GP504T-E/PT
PIC24HJ64GP504T-I/PT
PIC24HJ64GP504T-I/PTA23
PIC24HJ64GP506A-E/PT
PIC24HJ64GP506A-I/PT
PIC24HJ64GP506AT-E/PT
PIC24HJ64GP506AT-I/PT
PIC24HJ64GP506-I/PT
PIC24HJ64GP506T-I/PT
PIC24HJ64GP506T-I/PT031
PIC32MX320F032H-40I/PT
PIC32MX320F032H-40V/PT
PIC32MX320F032HT-40I/PT
PIC32MX320F032HT-40V/PT
PIC32MX320F064H-40I/PT
PIC32MX320F064H-40V/PT
PIC32MX320F064H-80I/PT
PIC32MX320F064H-80V/PT
PIC32MX320F064HT-40I/PT
PIC32MX320F064HT-40V/PT
PIC32MX320F064HT-80I/PT
PIC32MX320F064HT-80V/PT
PIC32MX320F128H-80I/PT
PIC32MX320F128H-80V/PT
PIC32MX320F128HT-80I/PT
PIC32MX320F128HT-80V/PT

PIC32MX340F128H-80I/PT
PIC32MX340F128H-80V/PT
PIC32MX340F128HT-80I/PT
PIC32MX340F128HT-80V/PT
PIC32MX340F256H-80I/PT
PIC32MX340F256H-80V/PT
PIC32MX340F256HT-80I/PT
PIC32MX340F256HT-80V/PT
PIC32MX340F512H-80I/PT
PIC32MX340F512H-80V/PT
PIC32MX340F512HT-80I/PT
PIC32MX340F512HT-80V/PT
PIC32MX420F032H-40I/PT
PIC32MX420F032H-40V/PT
PIC32MX420F032HT-40I/PT
PIC32MX420F032HT-40V/PT
PIC32MX440F128H-80I/PT
PIC32MX440F128H-80V/PT
PIC32MX440F128HT-80I/PT
PIC32MX440F128HT-80V/PT
PIC32MX440F256H-80I/PT
PIC32MX440F256H-80V/PT
PIC32MX440F256HT-80I/PT
PIC32MX440F256HT-80V/PT
PIC32MX440F512H-80I/PT
PIC32MX440F512H-80V/PT
PIC32MX440F512HT-80I/PT
PIC32MX440F512HT-80V/PT
PIC32MX534F064H-I/PT
PIC32MX534F064HT-I/PT
PIC32MX534F064HT-V/PT
PIC32MX534F064H-V/PT
PIC32MX564F064H-I/PT
PIC32MX564F064HT-I/PT
PIC32MX564F064HT-V/PT
PIC32MX564F064H-V/PT
PIC32MX564F128H-I/PT
PIC32MX564F128HT-I/PT
PIC32MX564F128HT-V/PT
PIC32MX564F128H-V/PT
PIC32MX575F256H-80I/PT
PIC32MX575F256H-80I/PTC22
PIC32MX575F256H-80V/PT
PIC32MX575F256H-80V/PTC21
PIC32MX575F256H-80V/PTC23
PIC32MX575F256HT-80I/PT
PIC32MX575F256HT-80I/PTC22

PIC32MX575F256HT-80V/PT
PIC32MX575F256HT-80V/PTC23
PIC32MX575F512H-80I/PT
PIC32MX575F512H-80I/PTC24
PIC32MX575F512H-80V/PT
PIC32MX575F512HT-80I/PT
PIC32MX575F512HT-80I/PTC24
PIC32MX575F512HT-80V/PT
PIC32MX664F064H-I/PT
PIC32MX664F064HT-I/PT
PIC32MX664F064HT-V/PT
PIC32MX664F064H-V/PT
PIC32MX664F128H-I/PT
PIC32MX664F128HT-I/PT
PIC32MX664F128HT-V/PT
PIC32MX664F128H-V/PT
PIC32MX675F256H-80I/PT
PIC32MX675F256H-80I/PTD21
PIC32MX675F256H-80V/PT
PIC32MX675F256HT-80I/PT
PIC32MX675F256HT-80V/PT
PIC32MX675F512H-80I/PT
PIC32MX675F512H-80V/PT
PIC32MX675F512HT-80I/PT
PIC32MX675F512HT-80V/PT
PIC32MX695F512H-80I/PT
PIC32MX695F512H-80I/PTD22
PIC32MX695F512H-80V/PT
PIC32MX695F512HT-80I/PT
PIC32MX695F512HT-80V/PT
PIC32MX764F128H-I/PT
PIC32MX764F128HT-I/PT
PIC32MX764F128HT-V/PT
PIC32MX764F128H-V/PT
PIC32MX775F256H-80I/PT
PIC32MX775F256H-80V/PT
PIC32MX775F256HT-80I/PT
PIC32MX775F256HT-80V/PT
PIC32MX775F512H-80I/PT
PIC32MX775F512H-80V/PT
PIC32MX775F512HT-80I/PT
PIC32MX775F512HT-80V/PT
PIC32MX795F512H-80I/PT
PIC32MX795F512H-80V/PT
PIC32MX795F512HT-80I/PT
PIC32MX795F512HT-80V/PT
TC7106ACPT713

TC7106AIPT713
TC7106CPT713
TC7106IPT713
TC7107ACPT713
TC7107AIPT713
TC7107CPT713
TC7107IPT713
TC7116ACPT713
TC7116CPT713
TC7117ACPT713
TC7117CPT713



MICROCHIP

QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN #: KSRA-20PIWE587

Date
November 14, 2017

**Qualification of CuPdAu bond wire in selected products
available in 64L and 44L TQFP package at MTAI assembly
site**



MICROCHIP **PACKAGE QUALIFICATION REPORT**

Purpose	Qualification of CuPdAu bond wire in selected products available in 64L and 44L TQFP package at MTAI assembly site
CN	ES108025-21326
QUAL ID	Q17130
MP CODE	YGAW19V2XVCE
Part No.	DSPIC33FJ128MC506A-H/PTVAO
Bonding No.	BDM-001373
CCB No.	2970.002
<u>Package</u>	
Type	64L TQFP
Package size	10x10x1 mm
Die thickness	11 mils
Die size	187.00 x 184.10 mils
<u>Lead Frame</u>	
Paddle size	275 x 275 mils
Material	C7025
Surface	Bare Cu on DAP
Process	Stamped
Lead Lock	No
Part Number	10106403
Treatment	Roughened
<u>Material</u>	
Epoxy	3280
Wire	CuPdAu wire
Mold Compound	G700HA
Plating Composition	Matte Tin



MICROCHIP PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MTAI181702333.000	TC03917461622.140	1729WYB
MTAI181702334.000	TC03917461622.150	1729WYC
MTAI181702335.000	TC03917461622.100	1729WYD

Result

Pass Fail _____

64L TQFP (10x10x1mm) assembled by MTAI 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-020D 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-020D)	IPC/JEDEC C J-STD-020D	198	0/198	Pass	
Precondition Prior Perform Reliability Tests (At MSL Level 1)	Electrical Test :+25°C and 150°C System: J750 Bake 150°C, 24 hrs System: CHINEE 85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH 3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243 Electrical Test :+25°C and 150°C System: J750	JESD22-A113	693(0)	693 693 693 0/693	 Pass	Good Devices
Temp Cycle	Stress Condition: (Standard) -65°C to +150°C, 500 Cycles System : TABAI ESPEC TSA-70H Electrical Test: + 150°C System: J750	JESD22-A104		231 0/231	 Pass	Parts had been pre-conditioned at 260°C
HAST	Stress Condition: (Standard) +130°C/85%RH, 96 hrs. Bias Volt: 3.6 Volts System: HAST 6000X Electrical Test: + 25°C and 150°C System: J750	JESD22-A110		231 0/231	 Pass	Parts had been pre-conditioned at 260°C 77 units / lot
UNBIASED-HAST	Stress Condition: (Standard) +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

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, 500 hrs System: SHEL LAB	JESD22-A103		45		45 units
	Electrical Test :+25°C and 150°C System: J750		45(0)	0/45	Pass	
Solderability Temp 215°C	Steam Aging: Temp 93°C,8Hrs System: SAS-3000 Solder Dipping: Solder Temp.215°C Solder material: SnPb Sn63,Pb37 System: ERSA RA 2200D Visual Inspection: External Visual Inspection	JESD22B-102E	22 (0)	22 22 0/22	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	JESD22B-102E	22 (0)	22 22 0/22	Pass	
Physical Dimensions	Physical Dimension, 30 units from 1 lot	JESD22-B100/B108	30(0) Units	0/30	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	