




A Leading Provider of Microcontrollers & Analog Semiconductors

Product Change Notification - CYER-05QVMR670

Date: 08 Nov 2010
Product Category: 8-bit Microcontrollers; Analog (Linear & Mixed Signal) AND Interface; 16-bit Microcontrollers and Digital Signal Controllers
Device Family: 
Notification subject: CCB 998.01: Qualification of CRM-1064L die attach in 28L & 40L PDIP (.600) packages at the MTAI assembly site
Notification text:

PCN Status:
Initial notification

Microchip Part#s Affected:
See attachments of affected catalog part numbers (CPN) labeled as...
PCN_CYER-05QVMR670_Affected_CPN.xls
PCN_CYER-05QVMR670_Affected_CPN.pdf

Description of Change:
Qualification of CRM-1064L die attach in 28L & 40L PDIP (.600) packages at the MTAI assembly site.

Impacts to Data Sheet:
None

Reason for Change:
To Improve on-time delivery performance

Change Implementation Status:
In Progress

Estimated First Ship Date:
January 30, 2011 (Date code 1106)

Markings to Distinguish:
Traceability code

Attachment(s): [PCN_CYER-05QVMR670_Affected_CPN.pdf](#)
[PCN_CYER-05QVMR670_Affected_CPN.xls](#)
[PCN_CYER-05QVMR670_Qual Plan.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."

PCN#: CYER-05QVMR670
CATALOG PART_NBR
AP7675/P
AY0438/P
AY0438-I/P
CF775-04/P
DSPIC30F3011-20E/P
DSPIC30F3011-20I/P
DSPIC30F3011-30I/P
DSPIC30F3014-20E/P
DSPIC30F3014-20I/P
DSPIC30F3014-30I/P
DSPIC30F4011-20E/P
DSPIC30F4011-20I/P
DSPIC30F4011-30I/P
DSPIC30F4011-30I/PV01
DSPIC30F4013-20E/P
DSPIC30F4013-20I/P
DSPIC30F4013-30I/P
PIC16C55-10/P
PIC16C55-10I/P
PIC16C557-I/P
PIC16C55A-04/P
PIC16C55A-04I/P
PIC16C55A-20/P
PIC16C55A-20I/P
PIC16C55A-40/P
PIC16C55-HS/P
PIC16C55-HSI/P
PIC16C55-LP/P
PIC16C55-LPI/P
PIC16C55-RC/P
PIC16C55-RCI/P
PIC16C55-XT/P
PIC16C55-XTI/P
PIC16C57-10/P
PIC16C57-10I/P
PIC16C57C-04/P
PIC16C57C-04/P072
PIC16C57C-04/P073
PIC16C57C-04E/P
PIC16C57C-04I/P
PIC16C57C-04I/P019
PIC16C57C-04I/P026
PIC16C57C-04I/P027
PIC16C57C-04I/P063
PIC16C57C-04I/P064
PIC16C57C-04I/P066
PIC16C57C-04I/P067
PIC16C57C-04I/P068
PIC16C57C-04I/P069
PIC16C57C-04I/P071

PIC16C57C-04I/P076
PIC16C57C-04I/P077
PIC16C57C-04I/P078
PIC16C57C-04I/PVAO
PIC16C57C-20/P
PIC16C57C-20I/P
PIC16C57C-40/P
PIC16C57-HS/P
PIC16C57-HSE/P
PIC16C57-HSI/P
PIC16C57-LP/P
PIC16C57-LPI/P
PIC16C57-RC/P
PIC16C57-RCE/P
PIC16C57-RCI/P
PIC16C57-RCI/P126
PIC16C57-RCI/P175
PIC16C57-XT/P
PIC16C57-XTE/P
PIC16C57-XTI/P
PIC16C622-ME
PIC16C64A-04/P
PIC16C64A-04I/P
PIC16C64A-10/P
PIC16C64A-20/P
PIC16C64A-20I/P
PIC16C65A-04/P
PIC16C65A-04I/PVAO
PIC16C65A-10/P
PIC16C65A-20/P
PIC16C65A-20I/P
PIC16C65B-04/P
PIC16C65B-04I/P
PIC16C65B-20/P
PIC16C65B-20I/P
PIC16C662-04I/P
PIC16C662-10/P
PIC16C67-04/P
PIC16C67-04I/P
PIC16C67-10/P
PIC16C67-20/P
PIC16C67-20I/P
PIC16C711-ME/P
PIC16C715-ME/P
PIC16C71-ME/P
PIC16C74A-04/P
PIC16C74A-04I/P
PIC16C74A-10/P
PIC16C74A-10I/P
PIC16C74A-20/P
PIC16C74A-20E/P
PIC16C74A-20I/P

PIC16C74B-04/P
PIC16C74B-04I/P
PIC16C74B-04I/P4AP
PIC16C74B-20/P
PIC16C74B-20E/P
PIC16C74B-20I/P
PIC16C765-I/P
PIC16C77-04/P
PIC16C77-04E/P
PIC16C77-04I/P
PIC16C77-10/P
PIC16C77-10I/P
PIC16C77-20/P
PIC16C77-20E/P
PIC16C77-20I/P
PIC16C774/P
PIC16C774-E/P
PIC16C774-I/P
PIC16F1934-E/P
PIC16F1934-I/P
PIC16F1937-E/P
PIC16F1937-I/P
PIC16F1939-E/P
PIC16F1939-I/P
PIC16F57-E/P
PIC16F57-E/PG
PIC16F57-I/P
PIC16F57-I/P022
PIC16F57-I/P032
PIC16F57-I/P033
PIC16F57-I/P034
PIC16F57-I/P037
PIC16F57-I/PC02
PIC16F57-I/PG
PIC16F59-E/P
PIC16F59-I/P
PIC16F707-E/P
PIC16F707-I/P
PIC16F724-E/P
PIC16F724-I/P
PIC16F727-E/P
PIC16F727-I/P
PIC16F747-I/P
PIC16F74-E/P
PIC16F74-I/P
PIC16F74-I/P147
PIC16F74-I/P4AP
PIC16F777-E/P
PIC16F777-I/P
PIC16F77-E/P
PIC16F77-I/P
PIC16F77-I/P4AP

PIC16F77-I/PG
PIC16F871-E/P
PIC16F871-I/P
PIC16F874-04/P
PIC16F874-04I/P
PIC16F874-20/P
PIC16F874-20I/P
PIC16F874A-E/P
PIC16F874A-I/P
PIC16F877-04/P
PIC16F877-04E/P
PIC16F877-04I/P
PIC16F877-10E/P
PIC16F877-20/P
PIC16F877-20I/P
PIC16F877A-E/P
PIC16F877A-H/PVAO
PIC16F877A-I/P
PIC16F877A-I/PG
PIC16F884-E/P
PIC16F884-I/P
PIC16F887-E/P
PIC16F887-I/P
PIC16F914-E/P
PIC16F914-I/P
PIC16F917-E/P
PIC16F917-I/P
PIC16F917-I/P028
PIC16F917-I/P032
PIC16LC55A-04/P
PIC16LC55A-04I/P
PIC16LC57C-04/P
PIC16LC57C-04I/P
PIC16LC64A-04/P
PIC16LC64A-04I/P
PIC16LC65A-04/P
PIC16LC65B-04/P
PIC16LC65B-04I/P
PIC16LC74A-04/P
PIC16LC74B-04/P
PIC16LC74B-04I/P
PIC16LC77-04/P
PIC16LC77-04I/P
PIC16LC774/P
PIC16LF1934-E/P
PIC16LF1934-I/P
PIC16LF1937-E/P
PIC16LF1937-I/P
PIC16LF1939-E/P
PIC16LF1939-I/P
PIC16LF707-E/P
PIC16LF707-I/P

PIC16LF724-E/P
PIC16LF724-I/P
PIC16LF727-E/P
PIC16LF727-I/P
PIC16LF747-I/P
PIC16LF74-I/P
PIC16LF777-I/P
PIC16LF77-I/P
PIC16LF871-I/P
PIC16LF874-04/P
PIC16LF874-04I/P
PIC16LF874A-I/P
PIC16LF877-04/P
PIC16LF877-04I/P
PIC16LF877A-I/P
PIC17C42A-16/P
PIC17C42A-16I/P
PIC17C42A-25/P
PIC17C42A-33/P
PIC17C42A-33I/P
PIC17C43-16/P
PIC17C43-16I/P
PIC17C43-25/P
PIC17C43-33/P
PIC17C43-33I/P
PIC17C44-16/P
PIC17C44-16I/P
PIC17C44-25/P
PIC17C44-25E/P
PIC17C44-25I/P
PIC17C44-33/P
PIC17C44-33I/P
PIC17LC43-08/P
PIC17LC44-08I/P
PIC18C442-I/P
PIC18C452-E/P
PIC18C452-I/P
PIC18F4220-E/P
PIC18F4220-I/P
PIC18F4221-E/P
PIC18F4221-I/P
PIC18F4320-E/P
PIC18F4320-I/P
PIC18F4320-I/PC05
PIC18F4321-E/P
PIC18F4321-I/P
PIC18F4331-E/P
PIC18F4331-I/P
PIC18F43K20-E/P
PIC18F43K20-I/P
PIC18F43K22-E/P
PIC18F43K22-I/P

PIC18F4410-E/P
PIC18F4410-I/P
PIC18F4420-E/P
PIC18F4420-I/P
PIC18F4420-I/PVAO
PIC18F4423-E/P
PIC18F4423-I/P
PIC18F442-E/P
PIC18F442-I/P
PIC18F4431-E/P
PIC18F4431-I/P
PIC18F4439-I/P
PIC18F4450-I/P
PIC18F4450-I/PXXX
PIC18F4455-I/P
PIC18F4455-I/PC03
PIC18F4458-I/P
PIC18F4480-E/P
PIC18F4480-I/P
PIC18F448-E/P
PIC18F448-I/P
PIC18F44J10-I/P
PIC18F44J10-I/PXXX
PIC18F44K20-E/P
PIC18F44K20-I/P
PIC18F44K22-E/P
PIC18F44K22-I/P
PIC18F4510-E/P
PIC18F4510-I/P
PIC18F4515-E/P
PIC18F4515-I/P
PIC18F4520-E/P
PIC18F4520-I/P
PIC18F4523-E/P
PIC18F4523-I/P
PIC18F4525-E/P
PIC18F4525-I/P
PIC18F452-E/P
PIC18F452-I/P
PIC18F452-I/P039
PIC18F452-I/PG
PIC18F4539-I/P
PIC18F4550-I/P
PIC18F4553-I/P
PIC18F4580-E/P
PIC18F4580-I/P
PIC18F4585-E/P
PIC18F4585-H/P
PIC18F4585-I/P
PIC18F458-E/P
PIC18F458-I/P
PIC18F45J10-I/P

PIC18F45J10-I/PXXX
PIC18F45K20-E/P
PIC18F45K20-I/P
PIC18F45K22-E/P
PIC18F45K22-I/P
PIC18F4610-E/P
PIC18F4610-I/P
PIC18F4620-E/P
PIC18F4620-I/P
PIC18F4680-E/P
PIC18F4680-H/P
PIC18F4680-I/P
PIC18F4682-E/P
PIC18F4682-I/P
PIC18F4685-E/P
PIC18F4685-I/P
PIC18F4685-I/PXXX
PIC18F46J11-I/PAQL
PIC18F46J50-I/PAQL
PIC18F46K20-E/P
PIC18F46K20-I/P
PIC18F46K20T-I/P
PIC18F46K22-E/P
PIC18F46K22-I/P
PIC18LC452-I/P
PIC18LF4220-I/P
PIC18LF4221-I/P
PIC18LF4320-I/P
PIC18LF4321-I/P
PIC18LF4331-I/P
PIC18LF43K22-E/P
PIC18LF43K22-I/P
PIC18LF4410-I/P
PIC18LF4420-I/P
PIC18LF4423-I/P
PIC18LF442-I/P
PIC18LF4431-I/P
PIC18LF4450-I/P
PIC18LF4455-I/P
PIC18LF4458-I/P
PIC18LF4480-I/P
PIC18LF448-I/P
PIC18LF44J10-I/P
PIC18LF44K22-E/P
PIC18LF44K22-I/P
PIC18LF4510-I/P
PIC18LF4515-I/P
PIC18LF4520-I/P
PIC18LF4523-I/P
PIC18LF4525-I/P
PIC18LF452-I/P
PIC18LF4539-I/P

PIC18LF4550-I/P
PIC18LF4553-I/P
PIC18LF4580-I/P
PIC18LF4585-I/P
PIC18LF458-I/P
PIC18LF45J10-I/P
PIC18LF45K22-E/P
PIC18LF45K22-I/P
PIC18LF4610-I/P
PIC18LF4620-I/P
PIC18LF4620-I/PLB4
PIC18LF4680-I/P
PIC18LF4682-I/P
PIC18LF4685-I/P
PIC18LF46J50-I/PAQQ
PIC18LF46K22-E/P
PIC18LF46K22-I/P
TC534CPL
TC7106ACPL
TC7106AIPL
TC7106CPL
TC7106IPL
TC7107ACPL
TC7107AIPL
TC7107CPL
TC7107IPL
TC7109ACPL
TC7109ACPL514
TC7109CPL
TC7116ACPL
TC7116CPL
TC7117ACPL
TC7117CPL
TC7126ACPL
TC7126CPL
TC7126IPL
TC7129CPL
TC850CPL



MICROCHIP

QUALIFICATION PLAN

RELIABILITY LABORATORY

PCN#: CYER-05QVMR670

Date:

October 28, 2010

Qualification of CRM-1064L die attach in 40L PDIP (600) package at the MTAI assembly site. The 28L PDIP (600) package will qualify by similarity

Distribution

Surasit P.
Wanphen L.
J. Fernandez
Chalermpon P.
CCB Chandler

Rangsun K.
A. Navarro
R.Sharma
DCC. Thailand

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 CRM-1064L die attach in 40L PDIP (600) package at the MTAI assembly site. The 28L PDIP (600) package will qualify by similarity.

MP Code _____ A5AF11S2XC20

Part No. _____ PIC16F877

CCB No. _____ 998.01

Package Type _____ 40L PDIP 600"

Die Thickness _____ 15 mils

Lead frame _____ A194

Die Size _____ 179.2 x 199.6 mils

Paddle Size _____ 260 x 266 mils

Surface _____ Ag spot

Process _____ Stamped

Lead Lock _____ Yes

Die Attach Epoxy _____ Sumotomo CRM-1064L

Wire _____ Au

Compound _____ GE-800

Plating composition _____ Matte Sn

Test Name	Conditions	Reliability Stress Read Point -40°C to +85°C datasheet operating range (Temp)	Pre & Post Reliability Stress Test Temperature (°C) -40°C to +85°C datasheet operating range (Temp)	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Duration (Days)	Special Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011			5	0	1	5	0 fails after TC	5	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001			5	0	1	5	0	5	30 bonds from a min. 5 devices.
External Visual	Mil. Std. 883-2009/2010			All devices prior to submission for qualification testing	0	3	AL L	0	5	
HTSL (High Temp Storage Life)	+175°C	500 hrs	+25 +85	45	5	1	50	0	10	Spares should be properly identified.
HAST	+130°C/85% RH for 96 hours. 1 lot to be tested at 85 and 125C	96 hrs	+25 +85	77	5	3	24 6	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Autoclave	+121°C/15 psig for 96 hours.	96 hrs	+25	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Test Name	Conditions	Reliability Stress Read Point -40°C to +85°C datasheet operating range (Temp)	Pre & Post Reliability Stress Test Temperature (°C) +85 operating range (Temp)	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Duration (Days)	Special Instructions
Temp Cycle	-65°C to +150°C. 3 gram force WBP on 5 devices from 1 lot, test following Temp Cycle stress. 1 lot to be tested at 85 and 125C	500 cycles		77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Parts Affected

PIC18F4458
PIC18F448
PIC18F4480
PIC18F44J10
PIC18F44K20
PIC18F44K22
PIC18F4510
PIC18F4515
PIC18F452
PIC18F4520
PIC18F4523
PIC18F4525
PIC18F4539
PIC18F4550
PIC18F4553
PIC18F458
PIC18F4580
PIC18F4585
PIC18F45J10
PIC18F45K20
PIC18F45K22
PIC18F4610
PIC18F4620
PIC18F4680
PIC18F4682
PIC18F4685
PIC18F46J11
PIC18F46J50
PIC18F46K20
PIC18F46K22
TC534
TC7106
TC7106A
TC7107
TC7107A
TC7109
TC7109A
TC7116
TC7116A
TC7117
TC7117A
TC7126
TC7126A

TC7129
TC850
AY0438
dsPIC30F3011
dsPIC30F3014
dsPIC30F4011
dsPIC30F4013
PIC16C55
PIC16C55A
PIC16C57
PIC16C57C
PIC16C622
PIC16C64A
PIC16C65A
PIC16C65B
PIC16C662
PIC16C67
PIC16C71
PIC16C711
PIC16C715
PIC16C74A
PIC16C74B
PIC16C765
PIC16C77
PIC16C774
PIC16F1934
PIC16F1937
PIC16F1939
PIC16F57
PIC16F59
PIC16F707
PIC16F724
PIC16F727
PIC16F74
PIC16F747
PIC16F77
PIC16F777
PIC16F871
PIC16F874
PIC16F874A
PIC16F877
PIC16F877A
PIC16F884
PIC16F887
PIC16F914

PIC16F917
PIC17C42A
PIC17C43
PIC17C44
PIC18C442
PIC18C452
PIC18F4220
PIC18F4221
PIC18F4320
PIC18F4321
PIC18F4331
PIC18F43K20
PIC18F43K22
PIC18F4410
PIC18F442
PIC18F4420
PIC18F4423
PIC18F4431
PIC18F4439
PIC18F4450
PIC18F4455