



**MICROCHIP**  
The Embedded Control Solutions Company®

**Product / Process Change Archive**

## Product / Process Change Notification CYAR-7U7T6Z

[Home](#)

The information below reflects a change that is being implemented.

Notice Date: [07/22/2009](#)

Product Category: [dsPIC; PIC12xxx; PIC16xxx; PIC17xxx; PIC18xxx; PIC24xxx; PIC32xxx](#)

Notification Subject: [CCB#: 906 Qualification of TQFP package with SG-8300ECM mold compound at MTAI assembly site.](#)

Notification Body:  
PCN Status:  
[Initial notification](#)

Microchip Part#s Affected:  
[See attachments of Affected Part#s Labeled as...](#)  
[Microchip\\_Catalog\\_Part#s\\_Affected.xls](#)  
[Microchip\\_Catalog\\_Part#s\\_Affected.pdf](#)

Description of Change:  
[Qualification of TQFP package with SG-8300ECM mold compound at MTAI assembly site.](#)

Pre Change:  
[G700HA Mold Compound](#)

Post Change:  
[SG-8300ECM Mold Compound](#)

Impacts to Data Sheet:  
[None](#)

Reason for Change:  
[To improve manufacturability](#)

Change Implementation Status:  
[In Progress](#)

Estimated First Ship Date:

October 23, 2009 (0943)

NOTE: Please be advised that during the transition period customers may receive pre and post change parts, due to existing inventory of the pre changed parts.

Markings to Distinguish Revised from Unrevised Devices: (e.g.: Date Code, Device Marking, Ship Container Marking)  
Traceability code

Attachment(s):

PCN\_CYAR-7U7T6Z\_TQFP\_MTAI\_CCB# 906\_Qual Plan.pdf

Microchip\_Catalog\_Part#s\_Affected.xls    Microchip\_Catalog\_Part#s\_Affected.pdf



**MICROCHIP**

# **QUALIFICATION PLAN**

## **RELIABILITY LABORATORY**

**CCB#: 906**  
**PCN#: CYAR-7U7T6Z**

Date:  
Jun.22,2009

**Qualification of TQFP package with SG-8300ECM  
mold compound at MTAI assembly site.**

Distribution

Surasit P.	Rangsun K.
Wanphen L.	A. Navarro
J. Fernandez	R.Sharma
Wichai K.	
CCB Chandler	DCC. Thailand

Microchip Technology (Thailand) Co, Ltd.  
Moo 1 T.Wangtakien A. Muangchacherngsao,  
Chacherngsao, Thailand, 24000  
Tel. (6638) 857119-45, 857311-19 ext. 1231  
Fax (6638) 857149-50

14

**Purpose:** Qualification of TQFP package with SG-8300ECM mold compound at MTAI assembly site.

**MP Code** \_\_\_\_\_ 64L TQFP : DFAJ17V2XA30  
\_\_\_\_\_ 64L TQFP : DFAK14V2XB20  
\_\_\_\_\_ 100L TQFP: YGAG1TV7XC22

**Part No.** \_\_\_\_\_ 64L TQFP : DSPIC30F6011A  
\_\_\_\_\_ 64L TQFP : DSPIC30F6015  
\_\_\_\_\_ 100L TQFP: DSPIC33FJ128MC

**Package Type** \_\_\_\_\_ 44L/64L TQFP, 10X10X1mm  
\_\_\_\_\_ 80L/100L TQFP, 12X12X1mm

**Die Thickness** \_\_\_\_\_ 11 mils

**Lead frame** \_\_\_\_\_ C7025

**Die Size and Paddle Size**

Packages	MPC	Die Size(mils)	Paddle Size(mils)
64L TQFP	DFAJ1	265.1X264.4	275X275
64L TQFP	DFAK1	265.1X267.6	300X300
100L TQFP	YGAG1	207.9X196.0	280X280

**Surface** \_\_\_\_\_ Ag ring plating

**Process** \_\_\_\_\_ MEP or Brown Oxide Lead Frame

**Lead Lock** \_\_\_\_\_ Yes

**Die Attach Epoxy** \_\_\_\_\_ 3280

**Wire** \_\_\_\_\_ Au

**Compound** \_\_\_\_\_ SG-8300ECM (supplier: Samsung)

**Plating composition** \_\_\_\_\_ Matte tin

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	# of Lots	Total Units	Fail Accept #	Est. Dur. Days	Special Instructions
Package Reliability Tests								
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	ALL	0	5	
Preconditioning - * Required for surface mount devices	+150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020D for package type; Electrical test pre and post stress at +25°C. Perform SAM analysis using the standard sample size (MSL1/265C)	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	# of Lots	Total Units	Fail Accept #	Est. Dur. Days	Special Instructions
HAST *	+130 deg C/85% RH for 96 hours. Electrical test pre and post stress at +25 and +85°C.	77	5	3		0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Autoclave *	+121 deg C/15 psig for 96 hours. Electrical test pre and post stress at +25 deg 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 following Temp Cycle stress.	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

CATALOG_PART_NBR
DSPIC30F2023-20E/PT
DSPIC30F2023-30I/PT
DSPIC30F2023-30I/PTD32
DSPIC30F2023-30V/PTD31
DSPIC30F2023T-20E/PT
DSPIC30F2023T-30I/PT
DSPIC30F2023T-30I/PTD32
DSPIC30F2023T-30V/PTD31
DSPIC30F3011-10E/PTB23
DSPIC30F3011-10I/PTB22
DSPIC30F3011-20E/PT
DSPIC30F3011-20I/PT
DSPIC30F3011-30I/PT
DSPIC30F3011T-10E/PTB23
DSPIC30F3011T-10I/PTB22
DSPIC30F3011T-20E/PT
DSPIC30F3011T-20I/PT
DSPIC30F3011T-30I/PT
DSPIC30F3014-20E/PT
DSPIC30F3014-20I/PT
DSPIC30F3014-30I/PT
DSPIC30F3014T-20E/PT
DSPIC30F3014T-20I/PT
DSPIC30F3014T-30I/PT
DSPIC30F4011-20E/PT
DSPIC30F4011-20E/PTA22
DSPIC30F4011-20I/PT
DSPIC30F4011-30I/PT
DSPIC30F4011T-20E/PT
DSPIC30F4011T-20I/PT
DSPIC30F4011T-30I/PT
DSPIC30F4013-20E/PT
DSPIC30F4013-20I/PT
DSPIC30F4013-30I/PT
DSPIC30F4013T-20E/PT
DSPIC30F4013T-20I/PT
DSPIC30F4013T-30I/PT
DSPIC30F5011-20E/PT
DSPIC30F5011-20I/PT
DSPIC30F5011-20I/PTG
DSPIC30F5011-30I/PT
DSPIC30F5011T-20E/PT
DSPIC30F5011T-20I/PT
DSPIC30F5011T-30I/PT
DSPIC30F5011T-30I/PTG
DSPIC30F5013-20E/PT
DSPIC30F5013-20I/PT
DSPIC30F5013-30I/PT
DSPIC30F5013T-20E/PT
DSPIC30F5013T-20I/PT
DSPIC30F5013T-30I/PT

DSPIC30F5015-20E/PT
DSPIC30F5015-20I/PT
DSPIC30F5015-30I/PT
DSPIC30F5015T-20E/PT
DSPIC30F5015T-20I/PT
DSPIC30F5015T-30I/PT
DSPIC30F5016-20E/PT
DSPIC30F5016-20I/PT
DSPIC30F5016-30I/PT
DSPIC30F5016T-20E/PT
DSPIC30F5016T-20I/PT
DSPIC30F5016T-30I/PT
DSPIC30F6010A-20E/PT
DSPIC30F6010A-30I/PT
DSPIC30F6010AT-20E/PT
DSPIC30F6010AT-30I/PT
DSPIC30F6011A-20E/PT
DSPIC30F6011A-20I/PT
DSPIC30F6011A-30I/PT
DSPIC30F6011AT-20E/PT
DSPIC30F6011AT-20I/PT
DSPIC30F6011AT-30I/PT
DSPIC30F6012A-20E/PT
DSPIC30F6012A-20I/PT
DSPIC30F6012A-30I/PT
DSPIC30F6012AT-20E/PT
DSPIC30F6012AT-20I/PT
DSPIC30F6012AT-30I/PT
DSPIC30F6013A-20E/PT
DSPIC30F6013A-20E/PTC21
DSPIC30F6013A-20I/PT
DSPIC30F6013A-30I/PT
DSPIC30F6013AT-20E/PT
DSPIC30F6013AT-20I/PT
DSPIC30F6013AT-30I/PT
DSPIC30F6014A-20E/PT
DSPIC30F6014A-20I/PT
DSPIC30F6014A-30I/PT
DSPIC30F6014A-30I/PTD31
DSPIC30F6014A-30I/PTD32
DSPIC30F6014AT-20E/PT
DSPIC30F6014AT-20I/PT
DSPIC30F6014AT-30I/PT
DSPIC30F6015-20E/PT
DSPIC30F6015-30I/PT
DSPIC30F6015T-20E/PT
DSPIC30F6015T-30I/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
DSPIC33FJ128GP306AT-E/PT
DSPIC33FJ128GP306AT-I/PT
DSPIC33FJ128GP306-I/PT
DSPIC33FJ128GP306T-I/PT
DSPIC33FJ128GP310A-E/PT
DSPIC33FJ128GP310A-I/PT
DSPIC33FJ128GP310AT-E/PT
DSPIC33FJ128GP310AT-I/PT
DSPIC33FJ128GP310-I/PT
DSPIC33FJ128GP310T-I/PT
DSPIC33FJ128GP706A-E/PT
DSPIC33FJ128GP706A-I/PT
DSPIC33FJ128GP706AT-E/PT
DSPIC33FJ128GP706AT-I/PT
DSPIC33FJ128GP706-I/PT
DSPIC33FJ128GP706-I/PTB23
DSPIC33FJ128GP706T-I/PT
DSPIC33FJ128GP706T-I/PT025
DSPIC33FJ128GP706T-I/PTB23
DSPIC33FJ128GP708A-E/PT
DSPIC33FJ128GP708A-I/PT
DSPIC33FJ128GP708AT-E/PT
DSPIC33FJ128GP708AT-I/PT
DSPIC33FJ128GP708-I/PT
DSPIC33FJ128GP708T-I/PT
DSPIC33FJ128GP710A-E/PT
DSPIC33FJ128GP710A-I/PT
DSPIC33FJ128GP710AT-E/PT
DSPIC33FJ128GP710AT-I/PT
DSPIC33FJ128GP710-I/PT
DSPIC33FJ128GP710T-I/PT
DSPIC33FJ128GP804-E/PT
DSPIC33FJ128GP804-I/PT
DSPIC33FJ128GP804T-E/PT
DSPIC33FJ128GP804T-I/PT
DSPIC33FJ128MC204-E/PT
DSPIC33FJ128MC204-I/PT
DSPIC33FJ128MC204T-E/PT
DSPIC33FJ128MC204T-I/PT
DSPIC33FJ128MC506A-E/PT
DSPIC33FJ128MC506A-I/PT
DSPIC33FJ128MC506AT-E/PT
DSPIC33FJ128MC506AT-I/PT
DSPIC33FJ128MC506-I/PT
DSPIC33FJ128MC506T-I/PT

DSPIC33FJ128MC510A-E/PT
DSPIC33FJ128MC510A-I/PT
DSPIC33FJ128MC510AT-E/PT
DSPIC33FJ128MC510AT-I/PT
DSPIC33FJ128MC510-I/PT
DSPIC33FJ128MC510-I/PTC21
DSPIC33FJ128MC510-I/PTC22
DSPIC33FJ128MC510T-I/PT
DSPIC33FJ128MC510T-I/PTC21
DSPIC33FJ128MC510T-I/PTC22
DSPIC33FJ128MC706A-E/PT
DSPIC33FJ128MC706A-I/PT
DSPIC33FJ128MC706AT-E/PT
DSPIC33FJ128MC706AT-I/PT
DSPIC33FJ128MC706-I/PT
DSPIC33FJ128MC706-I/PTC26
DSPIC33FJ128MC706T-I/PT
DSPIC33FJ128MC706T-I/PTC26
DSPIC33FJ128MC708A-E/PT
DSPIC33FJ128MC708A-I/PT
DSPIC33FJ128MC708AT-E/PT
DSPIC33FJ128MC708AT-I/PT
DSPIC33FJ128MC708-I/PT
DSPIC33FJ128MC708-I/PTC21
DSPIC33FJ128MC708T-I/PT
DSPIC33FJ128MC708T-I/PTC21
DSPIC33FJ128MC710A-E/PT
DSPIC33FJ128MC710A-I/PT
DSPIC33FJ128MC710AT-E/PT
DSPIC33FJ128MC710AT-I/PT
DSPIC33FJ128MC710-I/PT
DSPIC33FJ128MC710-I/PTC26
DSPIC33FJ128MC710T-I/PT
DSPIC33FJ128MC804-E/PT
DSPIC33FJ128MC804-I/PT
DSPIC33FJ128MC804T-E/PT
DSPIC33FJ128MC804T-I/PT
DSPIC33FJ16GP304-E/PT
DSPIC33FJ16GP304-I/PT
DSPIC33FJ16GP304T-E/PT
DSPIC33FJ16GP304T-I/PT
DSPIC33FJ16GS404-E/PT
DSPIC33FJ16GS404-I/PT
DSPIC33FJ16GS404T-E/PT
DSPIC33FJ16GS404T-I/PT
DSPIC33FJ16GS504-E/PT
DSPIC33FJ16GS504-E/PTD22
DSPIC33FJ16GS504-I/PT
DSPIC33FJ16GS504T-E/PT
DSPIC33FJ16GS504T-E/PTD22
DSPIC33FJ16GS504T-I/PT
DSPIC33FJ16MC304-E/PT

DSPIC33FJ16MC304-I/PT
DSPIC33FJ16MC304T-E/PT
DSPIC33FJ16MC304T-I/PT
DSPIC33FJ256GP506-I/PT
DSPIC33FJ256GP506T-I/PT
DSPIC33FJ256GP510-I/PT
DSPIC33FJ256GP510T-I/PT
DSPIC33FJ256GP710-I/PT
DSPIC33FJ256GP710-I/PTB10
DSPIC33FJ256GP710-I/PTB21
DSPIC33FJ256GP710T-I/PT
DSPIC33FJ256GP710T-I/PTB10
DSPIC33FJ256GP710T-I/PTB21
DSPIC33FJ256MC510-I/PT
DSPIC33FJ256MC510T-I/PT
DSPIC33FJ256MC710-I/PT
DSPIC33FJ256MC710T-I/PT
DSPIC33FJ32GP204-E/PT
DSPIC33FJ32GP204-I/PT
DSPIC33FJ32GP204T-E/PT
DSPIC33FJ32GP204T-I/PT
DSPIC33FJ32GP304-E/PT
DSPIC33FJ32GP304-I/PT
DSPIC33FJ32GP304T-E/PT
DSPIC33FJ32GP304T-I/PT
DSPIC33FJ32MC204-E/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
DSPIC33FJ64GP206-I/PT
DSPIC33FJ64GP206T-I/PT
DSPIC33FJ64GP206T-I/PT021
DSPIC33FJ64GP306A-E/PT
DSPIC33FJ64GP306A-I/PT
DSPIC33FJ64GP306AT-E/PT
DSPIC33FJ64GP306AT-I/PT
DSPIC33FJ64GP306-I/PT
DSPIC33FJ64GP306-I/PT020
DSPIC33FJ64GP306T-I/PT
DSPIC33FJ64GP310A-E/PT

DSPIC33FJ64GP310A-I/PT
DSPIC33FJ64GP310AT-E/PT
DSPIC33FJ64GP310AT-I/PT
DSPIC33FJ64GP310-I/PT
DSPIC33FJ64GP310T-I/PT
DSPIC33FJ64GP706A-E/PT
DSPIC33FJ64GP706A-I/PT
DSPIC33FJ64GP706AT-E/PT
DSPIC33FJ64GP706AT-I/PT
DSPIC33FJ64GP706-I/PT
DSPIC33FJ64GP706T-I/PT
DSPIC33FJ64GP708A-E/PT
DSPIC33FJ64GP708A-I/PT
DSPIC33FJ64GP708AT-E/PT
DSPIC33FJ64GP708AT-I/PT
DSPIC33FJ64GP708-I/PT
DSPIC33FJ64GP708-I/PTB25
DSPIC33FJ64GP708T-I/PT
DSPIC33FJ64GP710A-E/PT
DSPIC33FJ64GP710A-I/PT
DSPIC33FJ64GP710AT-E/PT
DSPIC33FJ64GP710AT-I/PT
DSPIC33FJ64GP710-I/PT
DSPIC33FJ64GP710T-I/PT
DSPIC33FJ64GP804-E/PT
DSPIC33FJ64GP804-I/PT
DSPIC33FJ64GP804T-E/PT
DSPIC33FJ64GP804T-I/PT
DSPIC33FJ64MC204-E/PT
DSPIC33FJ64MC204-I/PT
DSPIC33FJ64MC204T-E/PT
DSPIC33FJ64MC204T-I/PT
DSPIC33FJ64MC204T-I/PTC21
DSPIC33FJ64MC506A-E/PT
DSPIC33FJ64MC506A-I/PT
DSPIC33FJ64MC506AT-E/PT
DSPIC33FJ64MC506AT-I/PT
DSPIC33FJ64MC506-I/PT
DSPIC33FJ64MC506-I/PTC21
DSPIC33FJ64MC506-I/PTC22
DSPIC33FJ64MC506T-I/PT
DSPIC33FJ64MC506T-I/PT028
DSPIC33FJ64MC506T-I/PT029
DSPIC33FJ64MC506T-I/PT030
DSPIC33FJ64MC506T-I/PTC21
DSPIC33FJ64MC506T-I/PTC22
DSPIC33FJ64MC508A-E/PT
DSPIC33FJ64MC508A-I/PT
DSPIC33FJ64MC508AT-E/PT
DSPIC33FJ64MC508AT-I/PT
DSPIC33FJ64MC508-I/PT
DSPIC33FJ64MC508T-I/PT

DSPIC33FJ64MC510A-E/PT
DSPIC33FJ64MC510A-I/PT
DSPIC33FJ64MC510AT-E/PT
DSPIC33FJ64MC510AT-I/PT
DSPIC33FJ64MC510-I/PT
DSPIC33FJ64MC510T-I/PT
DSPIC33FJ64MC706A-E/PT
DSPIC33FJ64MC706A-I/PT
DSPIC33FJ64MC706AT-E/PT
DSPIC33FJ64MC706AT-I/PT
DSPIC33FJ64MC706-I/PT
DSPIC33FJ64MC706-I/PTC25
DSPIC33FJ64MC706T-I/PT
DSPIC33FJ64MC710A-E/PT
DSPIC33FJ64MC710A-I/PT
DSPIC33FJ64MC710AT-E/PT
DSPIC33FJ64MC710AT-I/PT
DSPIC33FJ64MC710-I/PT
DSPIC33FJ64MC710T-I/PT
DSPIC33FJ64MC804-E/PT
DSPIC33FJ64MC804-I/PT
DSPIC33FJ64MC804T-E/PT
DSPIC33FJ64MC804T-I/PT
ENC424J600-I/PT
ENC424J600-I/PTC01
ENC424J600T-I/PT
ENC624J600-I/PT
ENC624J600T-I/PT
HA1570T-I/PTC04
HA1572T-I/PTC06
HA1574-I/PT
HA1574T-I/PT
HA9546-I/PT
HA9546T-I/PT
HA9566-I/PT
HA9566T-I/PT
HA9576T-I/PT
HA9586-I/PT
HA9586T-I/PT
HA9597-I/PT
HA9597T-I/PT
HA9600-I/PT
HA9600T-I/PT
IC164035-2X
MTR1202-I/PT
MTR1585-I/PT
MTR5321-I/PT
MTR5934-I/PT
MTR6067-I/PT
MTR6618-I/PT
MTR6677-I/PT
MTR6853-I/PT

MTR7208-I/PT
MTR8059-I/PT
MTR9416-I/PT
PIC12C67X-ME/PT
PIC16C64A-10/PT
PIC16C64A-10I/PT
PIC16C64A-20/PT
PIC16C64A-20E/PT
PIC16C64A-20I/PT
PIC16C65A-04/PT
PIC16C65A-04I/PT
PIC16C65A-10/PT
PIC16C65A-20/PT
PIC16C65AT-04I/PT
PIC16C65B-04/PT
PIC16C65B-04E/PT
PIC16C65B-04I/PT
PIC16C65B-20/PT
PIC16C65B-20I/PT
PIC16C65B-E/PTPKG
PIC16C662-20I/PT
PIC16C67-04/PT
PIC16C67-04I/PT
PIC16C67-10/PT
PIC16C67-10I/PT
PIC16C67-20/PT
PIC16C67-20E/PT
PIC16C67-20I/PT
PIC16C711-ME/PT
PIC16C715-ME/PT
PIC16C74A-04/PT
PIC16C74A-04I/PT
PIC16C74A-10/PT
PIC16C74A-20/PT
PIC16C74A-20I/PT
PIC16C74B-04/PT
PIC16C74B-04I/PT
PIC16C74B-20/PT
PIC16C74B-20E/PT
PIC16C74B-20I/PT
PIC16C74B-E/PTPKG
PIC16C74BT-20I/PT
PIC16C765-I/PT
PIC16C765T-I/PT
PIC16C77-04/PT
PIC16C77-04I/PT
PIC16C77-10I/PT
PIC16C771-ME/PT
PIC16C77-20/PT
PIC16C77-20I/PT
PIC16C774/PT
PIC16C774-E/PT

PIC16C774-I/PT
PIC16C774T-I/PT
PIC16C77T-04I/PT
PIC16C77T-04I/PT022
PIC16C77T-20I/PT
PIC16C782-ME/PT
PIC16C923-04/PT
PIC16C923-04I/PT
PIC16C923-08/PT
PIC16C923-08I/PT
PIC16C923T-04I/PT
PIC16C923T-04I/PT023
PIC16C924-04/PT
PIC16C924-04I/PT
PIC16C924-08/PT
PIC16C924-08I/PT
PIC16C925-I/PT
PIC16C926-I/PT
PIC16C926-I/PTC02
PIC16C926-I/PTC07
PIC16C926T-I/PT
PIC16C926T-I/PT022
PIC16C926T-I/PTC02
PIC16CE625-ME/TQ
PIC16F1934-E/PT
PIC16F1934-I/PT
PIC16F1934T-I/PT
PIC16F1937-E/PT
PIC16F1937-I/PT
PIC16F1937T-I/PT
PIC16F59-E/PT
PIC16F59-I/PT
PIC16F59T-E/PT
PIC16F59T-I/PT
PIC16F628-ME/PT
PIC16F648A-ME/PT
PIC16F676-ME/PT
PIC16F690-ICD/PT
PIC16F716-ME/PT
PIC16F724-E/PT
PIC16F724-I/PT
PIC16F724-I/PTC02
PIC16F724T-I/PT
PIC16F724T-I/PTC02
PIC16F727-E/PT
PIC16F727-I/PT
PIC16F727-I/PTC01
PIC16F727-I/PTHP1
PIC16F727T-I/PT
PIC16F727T-I/PTC01
PIC16F747-E/PT
PIC16F747-I/PT

PIC16F747T-I/PT
PIC16F74-E/PT
PIC16F74-I/PT
PIC16F74-I/PT149
PIC16F74-I/PTG
PIC16F74T-E/PT
PIC16F74T-I/PT
PIC16F74T-I/PT129
PIC16F74T-I/PT149
PIC16F74T-I/PT152
PIC16F74T-I/PTG
PIC16F777-E/PT
PIC16F777-E/PTC02
PIC16F777-I/PT
PIC16F777-I/PTC01
PIC16F777T-I/PT
PIC16F77-E/PT
PIC16F77-I/PT
PIC16F77-I/PT4AP
PIC16F77-I/PTG
PIC16F77T-I/PT
PIC16F77T-I/PT058
PIC16F77T-I/PT065
PIC16F77T-I/PT066
PIC16F77T-I/PT078
PIC16F77T-I/PT089
PIC16F77T-I/PT090
PIC16F77T-I/PTG
PIC16F84A-ME/PT
PIC16F871-I/PT
PIC16F871T-I/PT
PIC16F874-04/PT
PIC16F874-04E/PT
PIC16F874-04I/PT
PIC16F874-10E/PT
PIC16F874-20/PT
PIC16F874-20/PTC06
PIC16F874-20I/PT
PIC16F874A-E/PT
PIC16F874A-I/PT
PIC16F874A-I/PTG
PIC16F874AT-E/PT
PIC16F874AT-E/PTC06
PIC16F874AT-I/PT
PIC16F874AT-I/PTC06
PIC16F874AT-I/PTG
PIC16F874-E/PTPKG
PIC16F874T-04/PT
PIC16F874T-04I/PT
PIC16F874T-20/PT
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/PTC34
PIC16F877AT-E/PT
PIC16F877AT-I/PT
PIC16F877AT-I/PTC29
PIC16F877AT-I/PTC37
PIC16F877AT-I/PTG
PIC16F877-E/PTPKG
PIC16F877T-04/PT
PIC16F877T-04I/PT
PIC16F877T-04I/PT034
PIC16F877T-20/PT
PIC16F877T-20I/PT
PIC16F884-E/PT
PIC16F884-I/PT
PIC16F884T-I/PT
PIC16F884T-I/PT020
PIC16F887-E/PT
PIC16F887-I/PT
PIC16F887T-E/PT
PIC16F887T-I/PT
PIC16F88-ME/PT
PIC16F914-E/PT
PIC16F914-I/PT
PIC16F914-I/PTC01
PIC16F914T-I/PT
PIC16F917-E/PT
PIC16F917-I/PT
PIC16F917-I/PT020
PIC16F917-I/PT021
PIC16F917-I/PT022
PIC16F917-I/PT023
PIC16F917-I/PT024
PIC16F917-I/PT026
PIC16F917-I/PTGC01
PIC16F917T-E/PT
PIC16F917T-I/PT
PIC16F917T-I/PTGC01
PIC16F946-E/PT
PIC16F946-I/PT
PIC16F946T-I/PT
PIC16F946T-I/PT020
PIC16F946T-I/PT021
PIC16LC64A-04/PT
PIC16LC64A-04I/PT
PIC16LC64AT-04/PT
PIC16LC64AT-04I/PT

PIC16LC65A-04/PT
PIC16LC65B-04/PT
PIC16LC65B-04I/PT
PIC16LC67-04/PT
PIC16LC67-04I/PT
PIC16LC74A-04/PT
PIC16LC74A-04I/PT
PIC16LC74B-04/PT
PIC16LC74B-04I/PT
PIC16LC74B-16/PTL16
PIC16LC77-04/PT
PIC16LC77-04I/PT
PIC16LC774/PT
PIC16LC774-I/PT
PIC16LC77T-04/PT
PIC16LC77T-04I/PT
PIC16LC923-04/PT
PIC16LC923-04I/PT
PIC16LC923T-04/PT
PIC16LC923T-04I/PT
PIC16LC924-04/PT
PIC16LC924-04I/PT
PIC16LC924-04I/PT020
PIC16LC924T-04I/PT
PIC16LC925-I/PT
PIC16LC926-I/PT
PIC16LC926-I/PTC01
PIC16LC926-I/PTC03
PIC16LC926-I/PTC06
PIC16LC926T-I/PT
PIC16LC926T-I/PT023
PIC16LC926T-I/PTC03
PIC16LF1934-E/PT
PIC16LF1934-I/PT
PIC16LF1934T-I/PT
PIC16LF1937-E/PT
PIC16LF1937-I/PT
PIC16LF1937T-I/PT
PIC16LF724-E/PT
PIC16LF724-I/PT
PIC16LF724T-I/PT
PIC16LF727-E/PT
PIC16LF727-I/PT
PIC16LF727T-I/PT
PIC16LF747-I/PT
PIC16LF747T-I/PT
PIC16LF74-I/PT
PIC16LF74-I/PTG
PIC16LF74T-I/PTG
PIC16LF777-I/PT
PIC16LF777T-I/PT
PIC16LF77-E/PTC18

PIC16LF77-I/PT
PIC16LF77T-I/PT
PIC16LF77T-I/PTC10
PIC16LF77T-I/PTG
PIC16LF871-I/PT
PIC16LF871T-I/PT
PIC16LF874-04/PT
PIC16LF874-04I/PT
PIC16LF874A-I/PT
PIC16LF874A-I/PTG
PIC16LF874AT-I/PT
PIC16LF874AT-I/PTG
PIC16LF874T-04I/PT
PIC16LF877-04/PT
PIC16LF877-04/PTC05
PIC16LF877-04I/PT
PIC16LF877A-I/PT
PIC16LF877A-I/PT033
PIC16LF877A-I/PTG
PIC16LF877AT-I/PT
PIC16LF877AT-I/PT033
PIC16LF877AT-I/PT034
PIC16LF877AT-I/PTG
PIC16LF877T-04/PT
PIC16LF877T-04I/PT
PIC17C42A-16/PT
PIC17C42A-16I/PT
PIC17C42A-25/PT
PIC17C42A-33/PT
PIC17C42A-33I/PT
PIC17C43-16/PT
PIC17C43-25/PT
PIC17C43-25I/PT
PIC17C43-33/PT
PIC17C43-33I/PT
PIC17C43T-16/PT
PIC17C43T-16I/PT
PIC17C43T-25/PT
PIC17C43T-25I/PT
PIC17C44-16/PT
PIC17C44-16I/PT
PIC17C44-25/PT
PIC17C44-33/PT
PIC17C44-33I/PT
PIC17C44T-16/PT
PIC17C44T-25/PT
PIC17C44T-25I/PT
PIC17C752-16/PT
PIC17C752-16I/PT
PIC17C752-33/PT
PIC17C752-33I/PT
PIC17C752-E/PTPKG

PIC17C752T-16/PT
PIC17C752T-16I/PT
PIC17C756A-16/PT
PIC17C756A-16I/PT
PIC17C756A-33/PT
PIC17C756A-33I/PT
PIC17C756A-33I/PTC03
PIC17C756A-E/PTPKG
PIC17C756AT-16/PT
PIC17C756AT-33/PT
PIC17C762-16/PT
PIC17C762-16I/PT
PIC17C762-33/PT
PIC17C762-33I/PT
PIC17C762-E/PTPKG
PIC17C766-16/PT
PIC17C766-16I/PT
PIC17C766-33/PT
PIC17C766-33I/PT
PIC17C766-E/PTPKG
PIC17LC42A-08/PT
PIC17LC43-08I/PT
PIC17LC43T-08/PT
PIC17LC44-08/PT
PIC17LC44-08I/PT
PIC17LC44T-08/PT
PIC17LC752-08/PT
PIC17LC752-08I/PT
PIC17LC752-16/PTL16
PIC17LC752T-08I/PT
PIC17LC756A-08/PT
PIC17LC756A-08I/PT
PIC17LC756A-16/PTL16
PIC17LC756AT-08I/PT
PIC17LC756AT-08I/PT031
PIC17LC756AT-08I/PT032
PIC17LC762-08/PT
PIC17LC762-08I/PT
PIC17LC766-08/PT
PIC17LC766-08I/PT
PIC18C442-E/PTPKG
PIC18C442-I/PT
PIC18C452-E/PTPKG
PIC18C452-I/PT
PIC18C452T-I/PT
PIC18C601-I/PT
PIC18C658-E/PT
PIC18C658-I/PT
PIC18C801-I/PT
PIC18C858-E/PT
PIC18C858-I/PT
PIC18CR6627-I/PT

PIC18CR8627-I/PT
PIC18F4220-E/PT
PIC18F4220-I/PT
PIC18F4220T-I/PT
PIC18F4221-E/PT
PIC18F4221-I/PT
PIC18F4221T-I/PT
PIC18F4320-E/PT
PIC18F4320-I/PT
PIC18F4320-I/PT220
PIC18F4320-I/PT221
PIC18F4320-I/PT222
PIC18F4320-I/PT223
PIC18F4320-I/PT225
PIC18F4320-I/PT227
PIC18F4320-I/PT229
PIC18F4320-I/PT230
PIC18F4320-I/PT233
PIC18F4320-I/PT234
PIC18F4320-I/PT235
PIC18F4320-I/PT236
PIC18F4320-I/PT237
PIC18F4320-I/PT238
PIC18F4320-I/PT239
PIC18F4320-I/PT241
PIC18F4320-I/PT243
PIC18F4320-I/PT244
PIC18F4320-I/PTG
PIC18F4320T-E/PT
PIC18F4320T-I/PT
PIC18F4320T-I/PT220
PIC18F4320T-I/PT221
PIC18F4320T-I/PT222
PIC18F4320T-I/PT223
PIC18F4320T-I/PT225
PIC18F4320T-I/PT227
PIC18F4320T-I/PT229
PIC18F4320T-I/PT230
PIC18F4320T-I/PT233
PIC18F4320T-I/PT234
PIC18F4320T-I/PT235
PIC18F4320T-I/PT236
PIC18F4320T-I/PT237
PIC18F4320T-I/PT238
PIC18F4320T-I/PT239
PIC18F4320T-I/PT241
PIC18F4320T-I/PT243
PIC18F4320T-I/PT244
PIC18F4320T-I/PTB3
PIC18F4320T-I/PTC1
PIC18F4320T-I/PTC2
PIC18F4320T-I/PTG

PIC18F4321-E/PT
PIC18F4321-I/PT
PIC18F4321T-E/PT
PIC18F4321T-I/PT
PIC18F4331-E/PT
PIC18F4331-I/PT
PIC18F4331T-E/PT
PIC18F4331T-I/PT
PIC18F43K20-E/PT
PIC18F43K20-I/PT
PIC18F43K20T-I/PT
PIC18F4410-E/PT
PIC18F4410-I/PT
PIC18F4410-I/PTB3
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
PIC18F442-I/PTG
PIC18F442T-E/PT
PIC18F442T-I/PT
PIC18F4431-E/PT
PIC18F4431-I/PT
PIC18F4431T-E/PT
PIC18F4431T-I/PT
PIC18F4431T-I/PT020
PIC18F4439-E/PT
PIC18F4439-I/PT
PIC18F4439T-E/PT
PIC18F4439T-I/PT
PIC18F4450-I/PT
PIC18F4450T-I/PT
PIC18F4455-I/PT
PIC18F4455-I/PTC02
PIC18F4455T-I/PT
PIC18F4458-I/PT
PIC18F4458T-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
PIC18F44J10T-I/PT

PIC18F44J11-I/PT
PIC18F44J11T-I/PT
PIC18F44J50-I/PT
PIC18F44J50T-I/PT
PIC18F44K20-E/PT
PIC18F44K20-I/PT
PIC18F44K20-I/PTC01
PIC18F44K20T-I/PT
PIC18F44K20T-I/PTC01
PIC18F4510-E/PT
PIC18F4510-I/PT
PIC18F4510T-I/PT
PIC18F4515-E/PT
PIC18F4515-I/PT
PIC18F4515T-I/PT
PIC18F4520-E/PT
PIC18F4520-I/PT
PIC18F4520-I/PTB3
PIC18F4520-I/PTB4
PIC18F4520-I/PTC02
PIC18F4520-I/PTC05
PIC18F4520-I/PTC10
PIC18F4520T-E/PT
PIC18F4520T-I/PT
PIC18F4520T-I/PTB3
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
PIC18F452-I/PTFC5
PIC18F452T-E/PT
PIC18F452T-I/PT
PIC18F452T-I/PTC17
PIC18F452T-I/PTG
PIC18F4539-E/PT
PIC18F4539-I/PT
PIC18F4539T-E/PT
PIC18F4539T-I/PT
PIC18F4550-I/PT
PIC18F4550T-I/PT
PIC18F4553-I/PT
PIC18F4553T-I/PT
PIC18F4580-E/PT
PIC18F4580-I/PT
PIC18F4580-I/PTC01
PIC18F4580T-E/PT

PIC18F4580T-I/PT
PIC18F4585-E/PT
PIC18F4585-I/PT
PIC18F4585T-I/PT
PIC18F458-E/PT
PIC18F458-I/PT
PIC18F458-I/PTG
PIC18F458T-I/PT
PIC18F458T-I/PTG
PIC18F45J10-I/PT
PIC18F45J10-I/PT022
PIC18F45J10-I/PTC04
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/PTLPR
PIC18F45K20T-I/PT
PIC18F45K20T-I/PTC02
PIC18F45K20T-I/PTLPR
PIC18F4610-E/PT
PIC18F4610-I/PT
PIC18F4610T-I/PT
PIC18F4620-E/PT
PIC18F4620-E/PTB4
PIC18F4620-I/PT
PIC18F4620-I/PTB4
PIC18F4620T-I/PT
PIC18F4680-E/PT
PIC18F4680-E/PTC02
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
PIC18F46J50-I/PT
PIC18F46J50T-I/PT
PIC18F46K20-E/PT
PIC18F46K20-I/PT
PIC18F46K20T-E/PT
PIC18F46K20T-I/PT
PIC18F6310-E/PT



PIC18F6310-I/PT
PIC18F6310T-I/PT
PIC18F6390-E/PT
PIC18F6390-I/PT
PIC18F6390-I/PTXXX
PIC18F6390T-I/PT
PIC18F6393-I/PT
PIC18F6393-I/PTXXX
PIC18F6393T-I/PT
PIC18F63J11-I/PT
PIC18F63J11T-I/PT
PIC18F63J90-I/PT
PIC18F63J90-I/PTXXX
PIC18F63J90T-I/PT
PIC18F63J90T-I/PT020
PIC18F6410-E/PT
PIC18F6410-I/PT
PIC18F6410T-I/PT
PIC18F6490-E/PT
PIC18F6490-I/PT
PIC18F6490T-I/PT
PIC18F6493-I/PT
PIC18F6493-I/PTREL
PIC18F6493-I/PTXXX
PIC18F6493T-I/PT
PIC18F64J11-I/PT
PIC18F64J11T-I/PT
PIC18F64J90-I/PT
PIC18F64J90-I/PTXXX
PIC18F64J90T-I/PT
PIC18F6520-E/PT
PIC18F6520-I/PT
PIC18F6520-I/PTC06
PIC18F6520-I/PTG
PIC18F6520T-E/PT
PIC18F6520T-I/PT
PIC18F6520T-I/PTC06
PIC18F6520T-I/PTG
PIC18F6525-E/PT
PIC18F6525-I/PT
PIC18F6525T-E/PT
PIC18F6525T-I/PT
PIC18F6525T-I/PTC05
PIC18F6527-I/PT
PIC18F6527-I/PT022
PIC18F6527T-I/PT
PIC18F6585-E/PT
PIC18F6585-I/PT
PIC18F6585-I/PTC11
PIC18F6585T-E/PT
PIC18F6585T-I/PT
PIC18F65J10-I/PT

PIC18F65J10T-I/PT
PIC18F65J11-I/PT
PIC18F65J11T-I/PT
PIC18F65J15-I/PT
PIC18F65J15T-I/PT
PIC18F65J50-I/PT
PIC18F65J50T-I/PT
PIC18F65J90-I/PT
PIC18F65J90-I/PTXXX
PIC18F65J90T-I/PT
PIC18F6620-E/PT
PIC18F6620-I/PT
PIC18F6620-I/PTC01
PIC18F6620T-E/PT
PIC18F6620T-I/PT
PIC18F6621-E/PT
PIC18F6621-I/PT
PIC18F6621-I/PT020
PIC18F6621-I/PT021
PIC18F6621-I/PT023
PIC18F6621T-E/PT
PIC18F6621T-I/PT
PIC18F6621T-I/PTC04
PIC18F6621T-I/PTG
PIC18F6622-E/PT
PIC18F6622-I/PT
PIC18F6622-I/PT026
PIC18F6622T-E/PT
PIC18F6622T-I/PT
PIC18F6622T-I/PT020
PIC18F6622T-I/PT026
PIC18F6627-E/PT
PIC18F6627-E/PXXX
PIC18F6627-I/PT
PIC18F6627T-E/PT
PIC18F6627T-I/PT
PIC18F6627T-I/PT024
PIC18F6627T-I/PT026
PIC18F6627T-I/PT030
PIC18F6628-E/PT
PIC18F6628-I/PT
PIC18F6628T-I/PT
PIC18F6680-E/PT
PIC18F6680-I/PT
PIC18F6680-I/PT020
PIC18F6680-I/PTC01
PIC18F6680-I/PTC04
PIC18F6680-I/PTC05
PIC18F6680-I/PTG
PIC18F6680T-E/PT
PIC18F6680T-I/PT
PIC18F6680T-I/PTG

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
PIC18F66J16T-I/PT
PIC18F66J50-I/PT
PIC18F66J50T-I/PT
PIC18F66J55-I/PT
PIC18F66J55T-I/PT
PIC18F66J60-I/PT
PIC18F66J60T-I/PT
PIC18F66J60T-I/PT020
PIC18F66J65-I/PT
PIC18F66J65T-I/PT
PIC18F66J90-I/PT
PIC18F66J90T-I/PT
PIC18F66J93-I/PT
PIC18F66J93T-I/PT
PIC18F6720-E/PT
PIC18F6720-I/PT
PIC18F6720-I/PTC01
PIC18F6720-I/PTG
PIC18F6720T-E/PT
PIC18F6720T-I/PT
PIC18F6720T-I/PT023
PIC18F6720T-I/PTC01
PIC18F6720T-I/PTG
PIC18F6722-E/PT
PIC18F6722-E/PXXX
PIC18F6722-I/PT
PIC18F6722-I/PT024
PIC18F6722-I/PTB1
PIC18F6722-I/PTC01
PIC18F6722T-E/PT
PIC18F6722T-I/PT
PIC18F6722T-I/PT020
PIC18F6722T-I/PT024
PIC18F6722T-I/PTB1
PIC18F6722T-I/PTC01
PIC18F6723-E/PREL
PIC18F6723-E/PT
PIC18F6723-I/PREL
PIC18F6723-I/PT
PIC18F6723T-I/PT
PIC18F67J10-I/PT
PIC18F67J10-I/PTC01
PIC18F67J10-I/PTXXX

PIC18F67J10T-I/PT
PIC18F67J10T-I/PT020
PIC18F67J11-I/PT
PIC18F67J11T-I/PT
PIC18F67J50-I/PT
PIC18F67J50T-I/PT
PIC18F67J60-I/PT
PIC18F67J60-I/PTC01
PIC18F67J60T-I/PT
PIC18F67J90-I/PT
PIC18F67J90T-I/PT
PIC18F67J93-I/PT
PIC18F67J93T-I/PT
PIC18F8310-E/PT
PIC18F8310-I/PT
PIC18F8390-I/PT
PIC18F8393-I/PT
PIC18F8393-I/PTXXX
PIC18F8393T-I/PT
PIC18F83J11-I/PT
PIC18F83J11T-I/PT
PIC18F83J90-I/PT
PIC18F83J90-I/PTXXX
PIC18F83J90T-I/PT
PIC18F8410-E/PT
PIC18F8410-I/PT
PIC18F8410T-I/PT
PIC18F8490-E/PT
PIC18F8490-I/PT
PIC18F8490T-I/PT
PIC18F8493-I/PT
PIC18F8493-I/PTREL
PIC18F8493-I/PTXXX
PIC18F8493T-I/PT
PIC18F84J11-I/PT
PIC18F84J11T-I/PT
PIC18F84J90-I/PT
PIC18F84J90-I/PTXXX
PIC18F84J90T-I/PT
PIC18F8520-E/PT
PIC18F8520-I/PT
PIC18F8520-I/PT020
PIC18F8520-I/PT021
PIC18F8520-I/PT024
PIC18F8520-I/PT025
PIC18F8520T-E/PT
PIC18F8520T-I/PT
PIC18F8525-E/PT
PIC18F8525-I/PT
PIC18F8525T-E/PT
PIC18F8525T-I/PT
PIC18F8527-I/PT

PIC18F8527T-I/PT
PIC18F8585-E/PT
PIC18F8585-E/PTC10
PIC18F8585-E/PTC11
PIC18F8585-I/PT
PIC18F8585-I/PTC06
PIC18F8585T-E/PT
PIC18F8585T-I/PT
PIC18F85J10-I/PT
PIC18F85J10T-I/PT
PIC18F85J11-I/PT
PIC18F85J11T-I/PT
PIC18F85J15-I/PT
PIC18F85J15T-I/PT
PIC18F85J50-I/PT
PIC18F85J50T-I/PT
PIC18F85J90/PTC01
PIC18F85J90-I/PT
PIC18F85J90-I/PTXXX
PIC18F85J90T-I/PT
PIC18F8620-E/PT
PIC18F8620-I/PT
PIC18F8620-I/PTC01
PIC18F8620-I/PTC06
PIC18F8620T-E/PT
PIC18F8620T-I/PT
PIC18F8621-E/PT
PIC18F8621-I/PT
PIC18F8621-I/PTC03
PIC18F8621T-E/PT
PIC18F8621T-I/PT
PIC18F8622-E/PT
PIC18F8622-I/PT
PIC18F8622T-E/PT
PIC18F8622T-I/PT
PIC18F8622T-I/PT021
PIC18F8627-E/PT
PIC18F8627-E/PXXX
PIC18F8627-I/PT
PIC18F8627T-E/PT
PIC18F8627T-I/PT
PIC18F8627T-I/PT023
PIC18F8627T-I/PT025
PIC18F8627T-I/PT027
PIC18F8627T-I/PT029
PIC18F8628-E/PT
PIC18F8628-I/PT
PIC18F8628T-I/PT
PIC18F8680-E/PT
PIC18F8680-I/PT
PIC18F8680-I/PTC02
PIC18F8680-I/PTC05

PIC18F8680T-E/PT
PIC18F8680T-I/PT
PIC18F8680T-I/PTC05
PIC18F86J10-I/PT
PIC18F86J10T-I/PT
PIC18F86J11-I/PT
PIC18F86J11T-I/PT
PIC18F86J15-I/PT
PIC18F86J15-I/PTC02
PIC18F86J15T-I/PT
PIC18F86J16-I/PT
PIC18F86J16T-I/PT
PIC18F86J50-I/PT
PIC18F86J50T-I/PT
PIC18F86J55-I/PT
PIC18F86J55T-I/PT
PIC18F86J60-I/PT
PIC18F86J60T-I/PT
PIC18F86J65-I/PT
PIC18F86J65T-I/PT
PIC18F86J90-I/PT
PIC18F86J90-I/PTC01
PIC18F86J90T-I/PT
PIC18F86J93-I/PT
PIC18F86J93T-I/PT
PIC18F8720-E/PT
PIC18F8720-I/PT
PIC18F8720-I/PTC01
PIC18F8720T-E/PT
PIC18F8720T-I/PT
PIC18F8722-E/PT
PIC18F8722-E/PTC02
PIC18F8722-E/PXXX
PIC18F8722-I/PT
PIC18F8722-I/PTB1
PIC18F8722T-E/PT
PIC18F8722T-I/PT
PIC18F8723-E/PREL
PIC18F8723-E/PT
PIC18F8723-I/PREL
PIC18F8723-I/PT
PIC18F8723T-I/PT
PIC18F87J10-I/PT
PIC18F87J10T-I/PT
PIC18F87J11-I/PT
PIC18F87J11-I/P4A4
PIC18F87J11T-I/PT
PIC18F87J50-I/PT
PIC18F87J50T-I/PT
PIC18F87J60-I/PT
PIC18F87J60-I/PTXXX
PIC18F87J60T-I/PT

PIC18F87J90-I/PT
PIC18F87J90T-I/PT
PIC18F87J93-I/PT
PIC18F87J93T-I/PT
PIC18F96J60-I/PT
PIC18F96J60T-I/PT
PIC18F96J65-I/PT
PIC18F96J65T-I/PT
PIC18F97J60-I/PT
PIC18F97J60T-I/PT
PIC18LC442-I/PT
PIC18LC452-I/PT
PIC18LC601-I/PT
PIC18LC658-I/PT
PIC18LC801/PTG022
PIC18LC801-I/PT
PIC18LC858-I/PT
PIC18LF4220-I/PT
PIC18LF4220T-I/PT
PIC18LF4221-I/PT
PIC18LF4221T-I/PT
PIC18LF4320-I/PT
PIC18LF4320-I/PTG
PIC18LF4320T-I/PT
PIC18LF4320T-I/PTG
PIC18LF4321-I/PT
PIC18LF4321T-I/PT
PIC18LF4331-I/PT
PIC18LF4331T-I/PT
PIC18LF4410-I/PT
PIC18LF4410-I/PT020
PIC18LF4410T-I/PT
PIC18LF4410T-I/PT021
PIC18LF4420-I/PT
PIC18LF4420T-I/PT
PIC18LF4423-I/PT
PIC18LF4423T-I/PT
PIC18LF442-I/PT
PIC18LF442-I/PTG
PIC18LF4431-I/PT
PIC18LF4431T-I/PT
PIC18LF4439-I/PT
PIC18LF4439T-I/PT
PIC18LF4450-I/PT
PIC18LF4450T-I/PT
PIC18LF4455-I/PT
PIC18LF4455T-I/PT
PIC18LF4458-I/PT
PIC18LF4458T-I/PT
PIC18LF4480-I/PT
PIC18LF4480T-I/PT
PIC18LF448-I/PT

PIC18LF448T-I/PT
PIC18LF44J10-I/PT
PIC18LF44J10T-I/PT
PIC18LF44J11-I/PT
PIC18LF44J11T-I/PT
PIC18LF44J50-I/PT
PIC18LF44J50T-I/PT
PIC18LF4510-I/PT
PIC18LF4510T-I/PT
PIC18LF4515-I/PT
PIC18LF4515T-I/PT
PIC18LF4520-I/PT
PIC18LF4520-I/PTB3
PIC18LF4520T-I/PT
PIC18LF4520T-I/PTB3
PIC18LF4523-I/PT
PIC18LF4523T-I/PT
PIC18LF4525-I/PT
PIC18LF4525-I/PTLB4
PIC18LF4525T-I/PT
PIC18LF452-I/PT
PIC18LF452-I/PTC21
PIC18LF452-I/PTC35
PIC18LF452-I/PTLC5
PIC18LF452T-I/PT
PIC18LF452T-I/PTC35
PIC18LF4539-I/PT
PIC18LF4539T-I/PT
PIC18LF4550-I/PT
PIC18LF4550T-I/PT
PIC18LF4550T-I/PT020
PIC18LF4553-I/PT
PIC18LF4553T-I/PT
PIC18LF4580-I/PT
PIC18LF4580T-I/PT
PIC18LF4585-I/PT
PIC18LF4585T-I/PT
PIC18LF458-I/PT
PIC18LF458T-I/PT
PIC18LF458T-I/PTG
PIC18LF45J10-I/PT
PIC18LF45J10T-I/PT
PIC18LF45J11-I/PT
PIC18LF45J11T-I/PT
PIC18LF45J50-I/PT
PIC18LF45J50T-I/PT
PIC18LF4610-I/PT
PIC18LF4610T-I/PT
PIC18LF4620-I/PT
PIC18LF4620T-I/PT
PIC18LF4620T-I/PT022
PIC18LF4620T-I/PT023



PIC18LF4620T-I/PT024
PIC18LF4620T-I/PT025
PIC18LF4680-I/PT
PIC18LF4680T-I/PT
PIC18LF4682-I/PT
PIC18LF4685-I/PT
PIC18LF46J11-I/PT
PIC18LF46J11T-I/PT
PIC18LF46J50-I/PT
PIC18LF46J50T-I/PT
PIC18LF6310-I/PT
PIC18LF6310T-I/PT
PIC18LF6390-I/PT
PIC18LF6390T-I/PT
PIC18LF6410-I/PT
PIC18LF6410T-I/PT
PIC18LF6490-I/PT
PIC18LF6490T-I/PT
PIC18LF6520-I/PT
PIC18LF6520-I/PTG
PIC18LF6520T-I/PT
PIC18LF6520T-I/PTG
PIC18LF6525-I/PT
PIC18LF6525T-I/PT
PIC18LF6527-I/PT
PIC18LF6527T-I/PT
PIC18LF6527T-I/PT023
PIC18LF6527T-I/PT024
PIC18LF6527T-I/PT025
PIC18LF6585-I/PT
PIC18LF6585T-I/PT
PIC18LF6620-I/PT
PIC18LF6620-I/PTC01
PIC18LF6620T-I/PT
PIC18LF6621-I/PT
PIC18LF6621-I/PTG
PIC18LF6621T-I/PT
PIC18LF6621T-I/PT022
PIC18LF6621T-I/PTG
PIC18LF6622-I/PT
PIC18LF6622-I/PTC04
PIC18LF6622T-I/PT
PIC18LF6622T-I/PTC04
PIC18LF6627-I/PT
PIC18LF6627T-I/PT
PIC18LF6627T-I/PT021
PIC18LF6627T-I/PT022
PIC18LF6628-I/PT
PIC18LF6628T-I/PT
PIC18LF6680-I/PT
PIC18LF6680-I/PTG
PIC18LF6680T-I/PT

PIC18LF6680T-I/PTG
PIC18LF6720-I/PT
PIC18LF6720-I/PTC01
PIC18LF6720T-I/PT
PIC18LF6722-I/PT
PIC18LF6722T-I/PT
PIC18LF6723-I/PT
PIC18LF6723T-I/PT
PIC18LF8390-I/PT
PIC18LF8410-I/PT
PIC18LF8410T-I/PT
PIC18LF8490-I/PT
PIC18LF8490T-I/PT
PIC18LF8520-I/PT
PIC18LF8520T-I/PT
PIC18LF8525-I/PT
PIC18LF8525T-I/PT
PIC18LF8527-I/PT
PIC18LF8527T-I/PT
PIC18LF8585-I/PT
PIC18LF8585T-I/PT
PIC18LF8620-I/PT
PIC18LF8620-I/PTC01
PIC18LF8620T-I/PT
PIC18LF8621-I/PT
PIC18LF8621T-I/PT
PIC18LF8622-I/PT
PIC18LF8622-I/PTC05
PIC18LF8622T-I/PT
PIC18LF8627-I/PT
PIC18LF8627T-I/PT
PIC18LF8628-I/PT
PIC18LF8628T-I/PT
PIC18LF8680-I/PT
PIC18LF8680T-I/PT
PIC18LF8720-I/PT
PIC18LF8720-I/PTC01
PIC18LF8720T-I/PT
PIC18LF8722-I/PT
PIC18LF8722-I/PTB1
PIC18LF8722-I/PTC02
PIC18LF8722T-I/PT
PIC18LF8723-I/PT
PIC18LF8723T-I/PT
PIC24FJ128GA006-I/PT
PIC24FJ128GA006-I/PTC02
PIC24FJ128GA006-I/PTC2
PIC24FJ128GA006T-I/PT
PIC24FJ128GA006T-I/PTC02
PIC24FJ128GA006T-I/PTC2
PIC24FJ128GA008-I/PT
PIC24FJ128GA008-I/PTC2

PIC24FJ128GA008T-I/PT
PIC24FJ128GA008T-I/PTC2
PIC24FJ128GA010-I/PT
PIC24FJ128GA010-I/PTC2
PIC24FJ128GA010T-I/PT
PIC24FJ128GA010T-I/PTC2
PIC24FJ128GA106-E/PT
PIC24FJ128GA106-I/PT
PIC24FJ128GA106T-E/PT
PIC24FJ128GA106T-I/PT
PIC24FJ128GA108-E/PT
PIC24FJ128GA108-I/PT
PIC24FJ128GA108T-E/PT
PIC24FJ128GA108T-I/PT
PIC24FJ128GA110-E/PT
PIC24FJ128GA110-I/PT
PIC24FJ128GA110T-E/PT
PIC24FJ128GA110T-I/PT
PIC24FJ128GB106-I/PT
PIC24FJ128GB106T-I/PT
PIC24FJ128GB108-I/PT
PIC24FJ128GB108T-I/PT
PIC24FJ128GB110-I/PT
PIC24FJ128GB110T-I/PT
PIC24FJ16GA004-E/PT
PIC24FJ16GA004-I/PT
PIC24FJ16GA004-I/PTB5
PIC24FJ16GA004-I/PTC01
PIC24FJ16GA004T-I/PT
PIC24FJ16GA004T-I/PTB4
PIC24FJ192GA106-E/PT
PIC24FJ192GA106-I/PT
PIC24FJ192GA106T-E/PT
PIC24FJ192GA106T-I/PT
PIC24FJ192GA108-E/PT
PIC24FJ192GA108-I/PT
PIC24FJ192GA108T-E/PT
PIC24FJ192GA108T-I/PT
PIC24FJ192GA110-E/PT
PIC24FJ192GA110-I/PT
PIC24FJ192GA110T-E/PT
PIC24FJ192GA110T-I/PT
PIC24FJ192GB106-I/PT
PIC24FJ192GB106T-I/PT
PIC24FJ192GB108-I/PT
PIC24FJ192GB108T-I/PT
PIC24FJ192GB110-I/PT
PIC24FJ192GB110T-I/PT
PIC24FJ256GA106-E/PT
PIC24FJ256GA106-I/PT
PIC24FJ256GA106T-E/PT
PIC24FJ256GA106T-I/PT

PIC24FJ256GA108-E/PT
PIC24FJ256GA108-I/PT
PIC24FJ256GA108T-E/PT
PIC24FJ256GA108T-I/PT
PIC24FJ256GA110-E/PT
PIC24FJ256GA110-I/PT
PIC24FJ256GA110T-E/PT
PIC24FJ256GA110T-I/PT
PIC24FJ256GB106-I/PT
PIC24FJ256GB106T-I/PT
PIC24FJ256GB108-I/PT
PIC24FJ256GB108T-I/PT
PIC24FJ256GB110-I/PT
PIC24FJ256GB110T-I/PT
PIC24FJ32GA004-E/PT
PIC24FJ32GA004-E/PTC01
PIC24FJ32GA004-I/PT
PIC24FJ32GA004-I/PTB4
PIC24FJ32GA004-I/PTB5
PIC24FJ32GA004-I/PTC03
PIC24FJ32GA004T-I/PT
PIC24FJ48GA004-E/PT
PIC24FJ48GA004-I/PT
PIC24FJ48GA004-I/PTB5
PIC24FJ48GA004T-I/PT
PIC24FJ64GA004-E/PT
PIC24FJ64GA004-I/PT
PIC24FJ64GA004-I/PTB4
PIC24FJ64GA004-I/PTB5
PIC24FJ64GA004T-I/PT
PIC24FJ64GA004T-I/PT026
PIC24FJ64GA006-I/PT
PIC24FJ64GA006-I/PTC03
PIC24FJ64GA006-I/PTC2
PIC24FJ64GA006T-I/PT
PIC24FJ64GA006T-I/PTC03
PIC24FJ64GA006T-I/PTC2
PIC24FJ64GA008-I/PT
PIC24FJ64GA008-I/PTC01
PIC24FJ64GA008-I/PTC2
PIC24FJ64GA008T-I/PT
PIC24FJ64GA008T-I/PTC01
PIC24FJ64GA008T-I/PTC2
PIC24FJ64GA010-I/PT
PIC24FJ64GA010-I/PTC2
PIC24FJ64GA010T-I/PT
PIC24FJ64GA010T-I/PTC2
PIC24FJ64GA106-I/PT
PIC24FJ64GA106T-I/PT
PIC24FJ64GA108-I/PT
PIC24FJ64GA108T-I/PT
PIC24FJ64GA110-I/PT

PIC24FJ64GA110T-I/PT
PIC24FJ64GB106-I/PT
PIC24FJ64GB106T-I/PT
PIC24FJ64GB108-I/PT
PIC24FJ64GB108T-I/PT
PIC24FJ64GB110-I/PT
PIC24FJ64GB110T-I/PT
PIC24FJ96GA006-I/PT
PIC24FJ96GA006-I/PTC2
PIC24FJ96GA006T-I/PT
PIC24FJ96GA006T-I/PTC2
PIC24FJ96GA008-I/PT
PIC24FJ96GA008-I/PTC2
PIC24FJ96GA008T-I/PT
PIC24FJ96GA008T-I/PTC2
PIC24FJ96GA010-I/PT
PIC24FJ96GA010-I/PTC2
PIC24FJ96GA010T-I/PT
PIC24FJ96GA010T-I/PTC2
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
PIC24HJ128GP210A-E/PT
PIC24HJ128GP210A-I/PT
PIC24HJ128GP210AT-E/PT
PIC24HJ128GP210AT-I/PT
PIC24HJ128GP210-I/PT
PIC24HJ128GP210T-I/PT
PIC24HJ128GP306A-I/PT
PIC24HJ128GP306AT-E/PT
PIC24HJ128GP306-I/PT
PIC24HJ128GP306T-I/PT
PIC24HJ128GP310A-E/PT
PIC24HJ128GP310A-I/PT
PIC24HJ128GP310AT-E/PT
PIC24HJ128GP310-I/PT
PIC24HJ128GP310T-I/PT
PIC24HJ128GP504-E/PT
PIC24HJ128GP504-I/PT
PIC24HJ128GP504T-E/PT
PIC24HJ128GP504T-I/PT
PIC24HJ128GP506A-E/PT
PIC24HJ128GP506A-I/PT
PIC24HJ128GP506AT-E/PT
PIC24HJ128GP506AT-I/PT

PIC24HJ128GP506-I/PT
PIC24HJ128GP506T-I/PT
PIC24HJ128GP510A-E/PT
PIC24HJ128GP510A-I/PT
PIC24HJ128GP510AT-E/PT
PIC24HJ128GP510AT-I/PT
PIC24HJ128GP510-I/PT
PIC24HJ128GP510T-I/PT
PIC24HJ16GP304-E/PT
PIC24HJ16GP304-I/PT
PIC24HJ16GP304T-E/PT
PIC24HJ16GP304T-I/PT
PIC24HJ256GP206-I/PT
PIC24HJ256GP206-I/PTA21
PIC24HJ256GP206T-I/PT
PIC24HJ256GP206T-I/PTA21
PIC24HJ256GP210-I/PT
PIC24HJ256GP210T-I/PT
PIC24HJ256GP610-I/PT
PIC24HJ256GP610T-I/PT
PIC24HJ32GP204-E/PT
PIC24HJ32GP204-I/PT
PIC24HJ32GP204T-E/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-E/PTA26
PIC24HJ64GP206-I/PT
PIC24HJ64GP206T-E/PTA26
PIC24HJ64GP206T-I/PT
PIC24HJ64GP210A-E/PT
PIC24HJ64GP210A-I/PT
PIC24HJ64GP210AT-E/PT
PIC24HJ64GP210AT-I/PT
PIC24HJ64GP210-I/PT
PIC24HJ64GP210T-I/PT
PIC24HJ64GP504-E/PT
PIC24HJ64GP504-I/PT
PIC24HJ64GP504T-E/PT
PIC24HJ64GP504T-I/PT

PIC24HJ64GP506A-E/PT
PIC24HJ64GP506A-I/PT
PIC24HJ64GP506AT-E/PT
PIC24HJ64GP506AT-I/PT
PIC24HJ64GP506-I/PT
PIC24HJ64GP506T-I/PT
PIC24HJ64GP510A-E/PT
PIC24HJ64GP510A-I/PT
PIC24HJ64GP510AT-E/PT
PIC24HJ64GP510AT-I/PT
PIC24HJ64GP510-I/PT
PIC24HJ64GP510T-I/PT
PIC32MX320F032H-40I/PT
PIC32MX320F032HT-40I/PT
PIC32MX320F064H-40I/PT
PIC32MX320F064H-80I/PT
PIC32MX320F064HT-40I/PT
PIC32MX320F064HT-80I/PT
PIC32MX320F128H-80I/PT
PIC32MX320F128HT-80I/PT
PIC32MX320F128L-80I/PT
PIC32MX320F128LT-80I/PT
PIC32MX340F128H-80I/PT
PIC32MX340F128HT-80I/PT
PIC32MX340F128L-80I/PT
PIC32MX340F128LT-80I/PT
PIC32MX340F256H-80I/PT
PIC32MX340F256HT-80I/PT
PIC32MX340F512H-80I/PT
PIC32MX340F512HT-80I/PT
PIC32MX360F256L-80I/PT
PIC32MX360F256LT-80I/PT
PIC32MX360F512L-80I/PT
PIC32MX360F512LT-80I/PT
PIC32MX420F032H-40I/PT
PIC32MX420F032HT-40I/PT
PIC32MX440F128H-80I/PT
PIC32MX440F128HT-80I/PT
PIC32MX440F128L-80I/PT
PIC32MX440F128LT-80I/PT
PIC32MX440F256H-80I/PT
PIC32MX440F256HT-80I/PT
PIC32MX440F512H-80I/PT
PIC32MX440F512HT-80I/PT
PIC32MX460F256L-80I/PT
PIC32MX460F256LT-80I/PT
PIC32MX460F512L-80I/PT
PIC32MX460F512LT-80I/PT