

## PIC12LF1840T48A/T39A Programming Specification

This document includes the programming specifications for the following devices:

- PIC12LF1840T48A
- PIC12LF1840T39A

### 1.0 OVERVIEW

The PIC12LF1840T48A/T39A is a dual-die device containing a Microchip PIC12LF1840 microcontroller and an integrated transmitter. The dies are electrically isolated.

Since the microcontroller portion of this device is a standard PIC12LF1840, programming should be done according to its programming specification, “PIC16(L)F1847/12(L)F1840 Memory Programming Specification” (DS41439).

The transmitter contains no user-programmable memory.

Care should be taken to prevent the transmitter from transmitting during the programming cycle. In-Circuit Serial Programming™ (ICSP™) pins should not be connected to the DATA pin. If the transmitter VDD supply is separate from the microcontroller, it should be kept at VSS during the programming cycle.

### 1.1 Pin Utilization

Five pins are needed for ICSP™ programming. Two additional pins should be connected to ground during programming. The pins are listed in [Table 1-1](#).

**TABLE 1-1: PIN DESCRIPTIONS DURING PROGRAMMING**

Pin Name	During Programming		
	Function	Pin Type	Pin Description
RA1	ICSPCLK	I/O	Clock Input – Schmitt Trigger Input
RA0	ICSPDAT	I/O	Data Input/Output – Schmitt Trigger Input
RA3/MCLR/VPP	Program/Verify mode	P <sup>(1)</sup>	Program mode Select/Programming Power Supply
VDD	VDD	P	Microcontroller Power Supply
VSS	VSS	P	Microcontroller Ground
VDDRF	VDD	P	RF Power Supply
VSSRF	VSS	P	RF Ground

**Legend:** I = Input, O = Output, P = Power

**Note 1:** The programming high voltage is internally generated. To activate the Program/Verify mode, high voltage needs to be applied to MCLR input. Since the MCLR is used for a level source, MCLR does not draw any significant current.

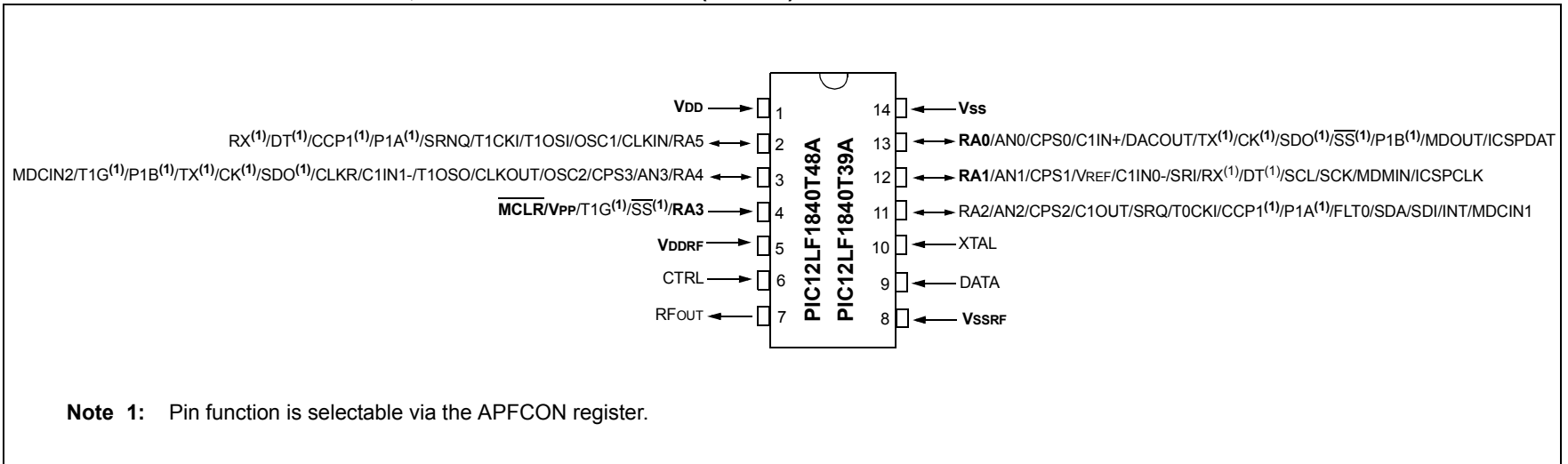
# PIC12LF1840T48A/T39A

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## 2.0 DEVICE PINOUTS

The pin diagram for the PIC12LF1840T48A/T39A is shown in [Figure 2-1](#). The pins that are required for programming are listed in [Table 1-1](#) and shown in bold lettering in the pin diagram.

**FIGURE 2-1: 14-PIN DIAGRAM, PIC12LF1840T48A/T39A (TSSOP)**



# PIC12LF1840T48A/T39A

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## APPENDIX A: REVISION HISTORY

### Revision A (08/2011)

Initial release of this document.

### Revision B (03/2012)

Added the PIC12LF1840T39A device.

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