# PIC12F752/HV752 Family Silicon Errata and Data Sheet Clarification

The PIC12F752/HV752 family devices that you have received conform functionally to the current Device Data Sheet (DS41576**B**), except for the anomalies described in this document.

The silicon issues discussed in the following pages are for silicon revisions with the Device and Revision IDs listed in Table 1. The silicon issues are summarized in Table 2.

The errata described in this document will be addressed in future revisions of the PIC12F752/HV752 silicon.

Note: This document summarizes all silicon errata issues from all revisions of silicon, previous as well as current. Only the issues indicated in the last column of Table 2 apply to the current silicon revision (B1).

Data Sheet clarifications and corrections start on page 4, following the discussion of silicon issues.

The silicon revision level can be identified using the current version of MPLAB® IDE and Microchip's programmers, debuggers, and emulation tools, which are available at the Microchip corporate web site (www.microchip.com).

For example, to identify the silicon revision level using MPLAB IDE in conjunction with MPLAB ICD 3 or PICkit™ 3:

- Using the appropriate interface, connect the device to the MPLAB ICD 3 programmer/ debugger or PICkit™ 3.
- 2. From the main menu in MPLAB IDE, select <u>Configure>Select Device</u>, and then select the target part number in the dialog box.
- Select the MPLAB hardware tool (<u>Debugger>Select Tool</u>).
- Perform a "Connect" operation to the device (<u>Debugger>Connect</u>). Depending on the development tool used, the part number and Device Revision ID value appear in the **Output** window.

**Note:** If you are unable to extract the silicon revision level, please contact your local Microchip sales office for assistance.

The DEVREV values for the various PIC12F752/HV752 silicon revisions are shown in Table 1.

TABLE 1: SILICON DEVREV VALUES

	DEVICE ID<13:0>				
Part Number	DEV<8:0> <sup>(1)</sup>	REV<4:0> Sili	con Revision <sup>(2)</sup>		
		В0	B1		
PIC12F752	01 0101 000	0 0011	0 0100		
PIC12HV752	01 0101 001	0 0011	0 0100		

- Note 1: The Device ID is located at 2006h. The 5 Least Significant bits comprise the revision ID.
  - **2:** Refer to the "PIC12F752/HV752 Flash Memory Programming Specification" (DS41561) for detailed information on Device and Revision IDs for your specific device.

# TABLE 2: SILICON ISSUE SUMMARY

Module	Feature	Item Number	Issue Summary	Affected Revisions	
				В0	B1
Complementary Output Generator (COG) Module	Event Detection		Event detection is missed when selected sources are the same.	Х	

## Silicon Errata Issues

Note:

This document summarizes all silicon errata issues from all revisions of silicon, previous as well as current. Only the issues indicated by the shaded column in the following tables apply to the current silicon revision (as applicable).

# 1. Module: Complementary Output Generator (COG) Module

## 1.1 Event Detection

When the rising event input is configured for edge detection (GxRSIM = 1) and the falling event input is configured for level detection (GxFSIM = 0) and both rising and falling event sources are the same source, then the rising event will not be detected.

## Work around

Use any of the other three event detection possibilities: Rising edge and falling edge, or rising level and falling level, or rising level and falling edge.

# **Affected Silicon Revisions**

В0	B1		
Χ			

# **Data Sheet Clarifications**

None.

APPENDIX A: DOCUMENT

**REVISION HISTORY** 

**Rev. A Document (12/2011)** 

Initial release of this document.

**Rev. B Document (03/2012)** 

Added Silicon Revision B1.

NOTES:

## Note the following details of the code protection feature on Microchip devices:

- Microchip products meet the specification contained in their particular Microchip Data Sheet.
- Microchip believes that its family of products is one of the most secure families of its kind on the market today, when used in the
  intended manner and under normal conditions.
- There are dishonest and possibly illegal methods used to breach the code protection feature. All of these methods, to our knowledge, require using the Microchip products in a manner outside the operating specifications contained in Microchip's Data Sheets. Most likely, the person doing so is engaged in theft of intellectual property.
- Microchip is willing to work with the customer who is concerned about the integrity of their code.
- Neither Microchip nor any other semiconductor manufacturer can guarantee the security of their code. Code protection does not mean that we are guaranteeing the product as "unbreakable."

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