

MICROCHIP PIC18F2585/2680/4585/4680

PIC18F2585/2680/4585/4680 Rev. B1 Silicon Errata

The PIC18F2585/2680/4585/4680 Rev. B1 parts you have received conform functionally to the Device Data Sheet (DS39625**C**), except for the anomalies described below. Any Data Sheet Clarification issues related to the PIC18F2585/2680/4585/4680 will be reported in a separate Data Sheet errata. Please check the Microchip web site for any existing issues.

The following silicon errata apply only to PIC18F2585/2680/4585/4680 devices with these Device/Revision IDs:

Part Number	Device ID	Revision ID
PIC18F2585	0000 1110 111	0 0111
PIC18F2680	0000 1110 110	0 0111
PIC18F4585	0000 1110 101	0 0111
PIC18F4680	0000 1110 100	0 0111

The Device IDs (DEVID1 and DEVID2) are located at addresses 3FFFEh:3FFFFh in the device's configuration space. They are shown in binary in the format "DEVID2 DEVID1".

All of the issues listed here will be addressed in future revisions of the PIC18F2585/2680/4585/4680 silicon.

1. Module: Master Synchronous Serial Port (MSSP)

The MSSP module when configured for I²CTM slave reception, in extremely rare cases, the data received may not be correct. This occurs only if the Serial Receive/Transmit Buffer Register (SSPBUF) is not read within a window after the SSPIF interrupt (PIR1<3>) has occurred.

Work around

The issue can be resolved in either of these ways:

- Prior to the I²C slave reception, enable the clock stretching feature.
- This is done by setting the SEN bit (SSPCON2<0>).
- Each time the SSPIF is set, read the SSPBUF before the first rising clock edge of the next byte being received.

Date Codes that pertain to this issue:

All engineering and production devices.

PIC18F2585/2680/4585/4680

REVISION HISTORY

Rev A Document (10/2008)

Original errata document for this device. Includes silicon issue 1 (Master Synchronous Serial Port (MSSP).

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."

Code protection is constantly evolving. We at Microchip are committed to continuously improving the code protection features of our products. Attempts to break Microchip's code protection feature may be a violation of the Digital Millennium Copyright Act. If such acts allow unauthorized access to your software or other copyrighted work, you may have a right to sue for relief under that Act.

Information contained in this publication regarding device applications and the like is provided only for your convenience and may be superseded by updates. It is your responsibility to ensure that your application meets with your specifications. MICROCHIP MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, STATUTORY OR OTHERWISE, RELATED TO THE INFORMATION, INCLUDING BUT NOT LIMITED TO ITS CONDITION, QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR PURPOSE. Microchip disclaims all liability arising from this information and its use. Use of Microchip devices in life support and/or safety applications is entirely at the buyer's risk, and the buyer agrees to defend, indemnify and hold harmless Microchip from any and all damages, claims, suits, or expenses resulting from such use. No licenses are conveyed, implicitly or otherwise, under any Microchip intellectual property rights.

Trademarks

The Microchip name and logo, the Microchip logo, Accuron, dsPIC, KEELOQ, KEELOQ logo, MPLAB, PIC, PICmicro, PICSTART, rfPIC, SmartShunt and UNI/O are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries.

FilterLab, Linear Active Thermistor, MXDEV, MXLAB, SEEVAL, SmartSensor and The Embedded Control Solutions Company are registered trademarks of Microchip Technology Incorporated in the U.S.A.

Analog-for-the-Digital Age, Application Maestro, CodeGuard, dsPICDEM, dsPICDEM.net, dsPICworks, dsSPEAK, ECAN, ECONOMONITOR, FanSense, In-Circuit Serial Programming, ICSP, ICEPIC, Mindi, MiWi, MPASM, MPLAB Certified logo, MPLIB, MPLINK, mTouch, PICkit, PICDEM, PICDEM.net, PICtail, PIC³² logo, PowerCal, PowerInfo, PowerMate, PowerTool, REAL ICE, rfLAB, Select Mode, Total Endurance, WiperLock and ZENA are trademarks of Microchip Technology Incorporated in the U.S.A. and other countries.

SQTP is a service mark of Microchip Technology Incorporated in the U.S.A.

All other trademarks mentioned herein are property of their respective companies.

© 2008, Microchip Technology Incorporated, Printed in the U.S.A., All Rights Reserved.

Printed on recycled paper.

QUALITY MANAGEMENT SYSTEM CERTIFIED BY DNV ISO/TS 16949:2002

Microchip received ISO/TS-16949:2002 certification for its worldwide headquarters, design and wafer fabrication facilities in Chandler and Tempe, Arizona; Gresham, Oregon and design centers in California and India. The Company's quality system processes and procedures are for its PIC® MCUs and dsPIC® DSCs, KEELOQ® code hopping devices, Serial EEPROMs, microperipherals, nonvolatile memory and analog products. In addition, Microchip's quality system for the design and manufacture of development systems is ISO 9001:2000 certified.



WORLDWIDE SALES AND SERVICE

AMERICAS

Corporate Office

2355 West Chandler Blvd. Chandler, AZ 85224-6199 Tel: 480-792-7200

Fax: 480-792-7277 Technical Support:

http://support.microchip.com

Web Address: www.microchip.com

Atlanta

Duluth, GA Tel: 678-957-9614 Fax: 678-957-1455

Boston

Westborough, MA Tel: 774-760-0087 Fax: 774-760-0088

Chicago

Itasca, IL Tel: 630-285-0071 Fax: 630-285-0075

Dallas

Addison, TX Tel: 972-818-7423 Fax: 972-818-2924

Detroit

Farmington Hills, MI Tel: 248-538-2250 Fax: 248-538-2260

Kokomo

Kokomo, IN Tel: 765-864-8360 Fax: 765-864-8387

Los Angeles

Mission Viejo, CA Tel: 949-462-9523 Fax: 949-462-9608

Santa Clara

Santa Clara, CA Tel: 408-961-6444 Fax: 408-961-6445

Toronto

Mississauga, Ontario, Canada Tel: 905-673-0699

Fax: 905-673-6509

ASIA/PACIFIC

Asia Pacific Office

Suites 3707-14, 37th Floor Tower 6, The Gateway Harbour City, Kowloon

Hong Kong Tel: 852-2401-1200 Fax: 852-2401-3431

Australia - Sydney Tel: 61-2-9868-6733 Fax: 61-2-9868-6755

China - Beijing

Tel: 86-10-8528-2100 Fax: 86-10-8528-2104

China - Chengdu

Tel: 86-28-8665-5511 Fax: 86-28-8665-7889

China - Hong Kong SAR

Tel: 852-2401-1200 Fax: 852-2401-3431

China - Nanjing

Tel: 86-25-8473-2460 Fax: 86-25-8473-2470

China - Qingdao

Tel: 86-532-8502-7355 Fax: 86-532-8502-7205

China - Shanghai

Tel: 86-21-5407-5533 Fax: 86-21-5407-5066

China - Shenyang

Tel: 86-24-2334-2829 Fax: 86-24-2334-2393

China - Shenzhen

Tel: 86-755-8203-2660 Fax: 86-755-8203-1760

China - Wuhan

Tel: 86-27-5980-5300 Fax: 86-27-5980-5118

China - Xiamen

Tel: 86-592-2388138 Fax: 86-592-2388130

China - Xian Tel: 86-29-8833-7252 Fax: 86-29-8833-7256

China - Zhuhai Tel: 86-756-3210040

Fax: 86-756-3210049

ASIA/PACIFIC

India - Bangalore

Tel: 91-80-4182-8400 Fax: 91-80-4182-8422

India - New Delhi

Tel: 91-11-4160-8631 Fax: 91-11-4160-8632

India - Pune

Tel: 91-20-2566-1512 Fax: 91-20-2566-1513

Japan - Yokohama

Tel: 81-45-471- 6166 Fax: 81-45-471-6122

Korea - Daegu

Tel: 82-53-744-4301 Fax: 82-53-744-4302

Korea - Seoul

Tel: 82-2-554-7200 Fax: 82-2-558-5932 or 82-2-558-5934

Malaysia - Kuala Lumpur

Tel: 60-3-6201-9857 Fax: 60-3-6201-9859

Malaysia - Penang

Tel: 60-4-227-8870 Fax: 60-4-227-4068

Philippines - Manila

Tel: 63-2-634-9065 Fax: 63-2-634-9069

Singapore

Tel: 65-6334-8870 Fax: 65-6334-8850

Taiwan - Hsin Chu

Tel: 886-3-572-9526 Fax: 886-3-572-6459

Taiwan - Kaohsiung

Tel: 886-7-536-4818 Fax: 886-7-536-4803

Taiwan - Taipei

Tel: 886-2-2500-6610 Fax: 886-2-2508-0102

Thailand - Bangkok Tel: 66-2-694-1351

Fax: 66-2-694-1350

EUROPE

Austria - Wels

Tel: 43-7242-2244-39 Fax: 43-7242-2244-393

Denmark - Copenhagen

Tel: 45-4450-2828 Fax: 45-4485-2829

France - Paris

Tel: 33-1-69-53-63-20 Fax: 33-1-69-30-90-79

Germany - Munich

Tel: 49-89-627-144-0 Fax: 49-89-627-144-44

Italy - Milan

Tel: 39-0331-742611 Fax: 39-0331-466781

Netherlands - Drunen

Tel: 31-416-690399 Fax: 31-416-690340

Spain - Madrid

Tel: 34-91-708-08-90 Fax: 34-91-708-08-91 **UK - Wokingham**

Tel: 44-118-921-5869 Fax: 44-118-921-5820

01/02/08