

# PCM18XA0/B0

# MPLAB® ICE 2000 Processor Module Errata Sheet

For MPLAB ICE 2000 processor modules PCM18XA0 and PCM18XB0, the following operational issues should be noted:

- · Initialization code for table reads needed
- I<sup>2</sup>C<sup>™</sup> Master Mode Opcode xxC9 Execution Clears BF Bit

Please note that these are emulator-only issues. Operation of the actual device is not affected.

#### Initialization code for table reads needed

The following initialization code needs to be added to your firmware for proper Table Reads when using interrupts with the MPLAB ICE 2000 PCM18XA0/B0 Processor Module. This code snippet can be removed when you program an actual part.

If your firmware is in C, the following code needs to be added as the first instruction in main(), (i.e., your code should look like this):

```
void main(void)
{
     { asm movlw 0xb0 movwf 0xf9c,0 endasm}
```

If your firmware is in assembly, the following code needs to be added to the initialization code:

```
movlw 0xb0 movwf 0xf9c
```

Oxf9c is a reserved location and you should not perform any other writes to 0xf9c in your code – a read at address 0xf9c will always return a zero. As a general precaution, do not read or write unused Special Function Registers.

If this code snippet is not executed in your code, you may experience extra cycles on Table Read instructions and faulty instruction execution on the instruction following a Table Read instruction, if an interrupt occurs when executing the Table Read.

# I<sup>2</sup>C Master Mode – Opcode xxC9 Execution Clears BF Bit

For I<sup>2</sup>C Master Mode, an execution of any opcode of the form xxC9 (where x is any hexadecimal digit) will clear the SSPSTAT BF bit. That is, an execution of an xxC9 opcode will cause SSPBUF to be read, thus clearing the SSPSTAT bit BF.

Many opcodes can be encoded as xxC9, such as GOTO, Branches, ANDLW, etc. These instructions will clear the BF bit in the emulator only. The actual PIC18Cxxx micro will function properly.



NOTES:

"All rights reserved. Copyright © 2001, Microchip Technology Incorporated, USA. Information contained in this publication regarding device applications and the like is intended through suggestion only and may be superseded by updates. No representation or warranty is given and no liability is assumed by Microchip Technology Incorporated with respect to the accuracy or use of such information, or infringement of patents or other intellectual property rights arising from such use or otherwise. Use of Microchip's products as critical components in life support systems is not authorized except with express written approval by Microchip. No licenses are conveyed, implicitly or otherwise, under any intellectual property rights. The Microchip logo and name are registered trademarks of Microchip Technology Inc. in the U.S.A. and other countries. All rights reserved. All other trademarks mentioned herein are the property of their respective companies. No licenses are conveyed, implicitly or otherwise, under any intellectual property rights."

#### **Trademarks**

The Microchip name, logo, PIC, PICmicro, PICMASTER, PIC-START, PRO MATE, KEELOQ, SEEVAL, MPLAB and The Embedded Control Solutions Company are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries.

Total Endurance, In-Circuit Serial Programming (ICSP), Filter-Lab, FlexROM, fuzzyLAB, ICEPIC, microID, MPASM, MPLIB, MPLINK, MXDEV, PICDEM and Migratable Memory are trademarks of Microchip Technology Incorporated in the U.S.A.

Serialized Quick Term Programming (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.

© 2001, Microchip Technology Incorporated, Printed in the U.S.A., All Rights Reserved.



Microchip received QS-9000 quality system certification for its worldwide headquarters, design and wafer fabrication facilities in Chandler and Tempe, Arizona in July 1999. The Company's quality system processes and procedures are QS-9000 compliant for its PICmicro® 8-bit MCUs, KEELO© code hopping devices, Serial EEPROMs and microperipheral products. In addition, Microchip's quality system for the design and manufacture of development systems is ISO 9001 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: 480-792-7627 Web Address: http://www.microchip.com

## Rocky Mountain

2355 West Chandler Blvd. Chandler, AZ 85224-6199 Tel: 480-792-7966 Fax: 480-792-7456

#### Atlanta

500 Sugar Mill Road, Suite 200B Atlanta, GA 30350 Tel: 770-640-0034 Fax: 770-640-0307

#### Austin

Analog Product Sales 8303 MoPac Expressway North Suite A-201 Austin, TX 78759 Tel: 512-345-2030 Fax: 512-345-6085

#### **Boston**

2 Lan Drive, Suite 120 Westford, MA 01886 Tel: 978-692-3848 Fax: 978-692-3821

#### **Boston**

Analog Product Sales Unit A-8-1 Millbrook Tarry Condominium 97 Lowell Road Concord, MA 01742 Tel: 978-371-6400 Fax: 978-371-0050

### Chicago

333 Pierce Road, Suite 180 Itasca, IL 60143 Tel: 630-285-0071 Fax: 630-285-0075

#### **Dallas**

4570 Westgrove Drive, Suite 160 Addison, TX 75001

#### Tel: 972-818-7423 Fax: 972-818-2924 Dayton

Two Prestige Place, Suite 130 Miamisburg, OH 45342 Tel: 937-291-1654 Fax: 937-291-9175

### Detroit

Tri-Atria Office Building 32255 Northwestern Highway, Suite 190 Farmington Hills, MI 48334 Tel: 248-538-2250 Fax: 248-538-2260

#### Los Angeles

18201 Von Karman, Suite 1090 Irvine, CA 92612 Tel: 949-263-1888 Fax: 949-263-1338

#### **Mountain View**

Analog Product Sales 1300 Terra Bella Avenue Mountain View, CA 94043-1836 Tel: 650-968-9241 Fax: 650-967-1590

#### **New York**

150 Motor Parkway, Suite 202 Hauppauge, NY 11788 Tel: 631-273-5305 Fax: 631-273-5335

#### San Jose

Microchip Technology Inc. 2107 North First Street, Suite 590 San Jose, CA 95131 Tel: 408-436-7950 Fax: 408-436-7955

#### **Toronto**

6285 Northam Drive, Suite 108 Mississauga, Ontario L4V 1X5, Canada Tel: 905-673-0699 Fax: 905-673-6509

#### ASIA/PACIFIC

#### Australia

Microchip Technology Australia Pty Ltd Suite 22, 41 Rawson Street Epping 2121, NSW

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

#### China - Beijing

Microchip Technology Beijing Office New China Hong Kong Manhattan Bldg. No. 6 Chaoyangmen Beidajie Beijing, 100027, No. China Tel: 86-10-85282100 Fax: 86-10-85282104

#### China - Shanghai

Microchip Technology Shanghai Office Room 701, Bldg. B Far East International Plaza No. 317 Xian Xia Road Shanghai, 200051 Tel: 86-21-6275-5700 Fax: 86-21-6275-5060

#### Hong Kong

Microchip Asia Pacific RM 2101, Tower 2, Metroplaza 223 Hing Fong Road Kwai Fong, N.T., Hong Kong Tel: 852-2401-1200 Fax: 852-2401-3431

#### India

Microchip Technology Inc. India Liaison Office Divyasree Chambers 1 Floor, Wing A (A3/A4) No. 11, O'Shaugnessey Road Bangalore, 560 025, India Tel: 91-80-2290061 Fax: 91-80-2290062

#### Japan

Microchip Technology Intl. Inc. Benex S-1 6F 3-18-20, Shinyokohama Kohoku-Ku, Yokohama-shi Kanagawa, 222-0033, Japan Tel: 81-45-471- 6166 Fax: 81-45-471-6122

#### ASIA/PACIFIC (continued)

#### Korea

Microchip Technology Korea 168-1, Youngbo Bldg. 3 Floor Samsung-Dong, Kangnam-Ku Seoul, Korea

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

### Singapore

Microchip Technology Singapore Pte Ltd. 200 Middle Road #07-02 Prime Centre Singapore, 188980

Tel: 65-334-8870 Fax: 65-334-8850

#### Taiwan

Microchip Technology Taiwan 11F-3, No. 207 Tung Hua North Road Taipei, 105, Taiwan Tel: 886-2-2717-7175 Fax: 886-2-2545-0139

#### **EUROPE**

#### Denmark

Microchip Technology Denmark ApS Regus Business Centre Lautrup hoj 1-3 Ballerup DK-2750 Denmark Tel: 45 4420 9895 Fax: 45 4420 9910

#### France

Arizona Microchip Technology SARL Parc d'Activite du Moulin de Massy 43 Rue du Saule Trapu Batiment A - Ier Etage 91300 Massy, France Tel: 33-1-69-53-63-20 Fax: 33-1-69-30-90-79

**Germany** Arizona Microchip Technology GmbH Gustav-Heinemann Ring 125 D-81739 Munich, Germany Tel: 49-89-627-144 0 Fax: 49-89-627-144-44

## Germany

Analog Product Sales Lochhamer Strasse 13 D-82152 Martinsried, Germany Tel: 49-89-895650-0 Fax: 49-89-895650-22

Arizona Microchip Technology SRL Centro Direzionale Colleoni Palazzo Taurus 1 V. Le Colleoni 1 20041 Agrate Brianza Milan, Italy

Tel: 39-039-65791-1 Fax: 39-039-6899883

#### **United Kingdom**

Arizona Microchip Technology Ltd. 505 Eskdale Road Winnersh Triangle Wokingham Berkshire, England RG41 5TU Tel: 44 118 921 5869 Fax: 44-118 921-5820

01/30/01

All rights reserved. © 2001 Microchip Technology Incorporated. Printed in the USA. 3/01 Printed on recycled paper.

Information contained in this publication regarding device applications and the like is intended through suggestion only and may be superseded by updates. It is your responsibility to ensure that your application meets with your specifications. No representation or warranty is given and no liability is assumed by Microchip Technology Incorporated with respect to the accuracy or use of such information, or infringement of patents or other intellectual property rights arising from such use or otherwise. Use of Microchip's products as critical components in life support systems is not authorized except with express written approval by Microchip. No licenses are conveyed, implicitly or otherwise, except as maybe explicitly expressed herein, under any intellectual property rights. The Microchip logo and name are registered trademarks of Microchip Technology Inc. in the U.S.A. and other countries. All rights reserved. All other trademarks mentioned herein are the property of their respective companies.