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## MPLAB<sup>®</sup> ICE 2000 Processor Module Errata Sheet

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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™ 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
```

0xf9c 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.

### Emulation Limitations

Full speed emulation is limited to 25 MHz.

# PCM18XA0/B0

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NOTES:

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**Note the following details of the code protection feature on PICmicro® MCUs.**

- The PICmicro family meets the specifications contained in the Microchip Data Sheet.
- Microchip believes that its family of PICmicro microcontrollers is one of the most secure products 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 PICmicro microcontroller in a manner outside the operating specifications contained in the data sheet. The person doing so may be 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 product.

If you have any further questions about this matter, please contact the local sales office nearest to you.

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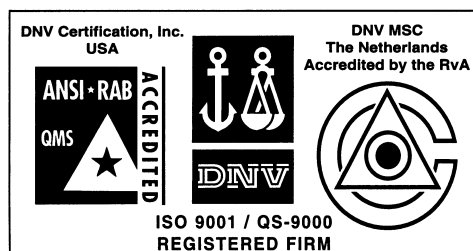
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