MCP215X

MCP215X Rev. B Silicon/Data Sheet Errata

The MCP215X parts you have received conform functionally to the MCP2150 and MCP2155 device data sheets (DS21655**B** and DS21690**A**), except for the anomalies described below.

MCP215X Rev. C devices have addressed these issues.

1. Module: IR Protocol Handler

The MCP215X device will ignore queries from the Primary device (PC, PDA) for the status of the non-data circuits (CTS, RTS, DTR, DSR, CD, RI).

Work around

Do not have the Primary device application request these signals for application operation.

2. Module: IR Protocol Handler

Some new Palm® PDA devices use a processor (TI OMAP31X) that sends a non-standard number of BOFs (4) prior to parameter negotiation. The MCP215X device expects 11 BOFs.

When the Primary device sends the SNRM command (including the requested number of BOFs (1) to use), the MCP215X responds with a UA response using this number of BOFs (1). Since the response only contains a single BOF, the TI OMAP31X processors ignore this response. Therefore, the communication link with the Primary device is not established.

Work around

Do not use Palm PDAs that use the TI (OMAP310 and OMAP311) processor. Some of the Palm PDAs that have this processor include the Tungsten™ E, Zire™ 71 and Zire 21.

The Tungsten T2 (TI OMAP1510 with OS V5.2.1) does not appear to have a connection issue with the MCP215X device and, therefore, can be used to establish a communication link with MCP215X devices.

The MCP2140 could be used, since it can connect to Palm PDAs that use this TI (OMAP310 and OMAP311) processor.

3. Module: IR Protocol Handler

The MCP215X IAS parser will supply LSAPSEL response for more than just an IrDA:IrCOMM LSAPSEL query. Some models of Pocket PC 2003 devices will issue an IrDA:IrObex LSAPSEL query once the Pocket PC 2003 device has been informed that its communicating with an IrCOMM device. This causes the Ir link to not be established.

Work around

None for the MCP215X. However, the MCP2140 could be used and will respond to this Pocket PC 2003 IrDA:IrObex LSAPSEL query, allowing the Ir link to be established.

4. Module: IR Protocol Handler

The MCP215X may supply an RR response instead of a TinyTP Credit response to a received data packet.

Work around

None.

> **Note:** Currently, we have not observed any loss of data or loss of communication link when interfacing to other existing IrDA® standard protocol stacks due to this issue.

MCP215X

Clarifications/Corrections to the Data Sheet:

In the MCP2150 and MCP2155 device data sheets (DS21655**B** and DS21690**A**), the following clarifications and corrections should be noted:

1. An IrDA standard operating system (Symbian OS™ for cell phones) has been encountered that only sends out XID commands with a Timeslot of 0. Since the MCP215X devices respond to Timeslot 2, MCP215X devices are not able to establish a link to an OS that is compliant with the IrDA standard. The MCP2140 can be used in these systems, since it responds to the XIP command with Timeslot 0.

2. The MCP2150 emulates the state of all the non-data circuits (CTS, RTS, DTR, DSR, CD and RI). These signals on the MCP2150 are used to interface with the embedded system's host controller. The values in the IrDA standard packet response would not reflect the value on the corresponding MCP2150 pin.

   The MCP2155 emulates the state of the CTS, RTS and DSR non-data circuits. These signals on the MCP2155 are used to interface with the embedded system's host controller. The DTR, CD and RI signal values are communicated to the IrDA standard Primary device in an IrCOMM packet. The MCP2155 will only send this information when the state of one of these signals change. The MCP2155 devices will ignore any request for the status of the non-data circuits from the IrDA standard Primary device.

APPENDIX A: REVISION HISTORY

Revision A (February 2006)

- Initial release of this document.

APPENDIX B: SILICON REVISION HISTORY

The following table and package marking information illustrates how to determine the revision of the MCP215X device. The revision information can be determined by the Year and Week Code of the manufacture printed on the device.
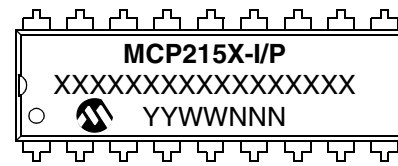
TABLE B-1: SILICON REVISION/DEVICE MARKING

Silicon Revision	YYWWNNN		Comments
	Start Date	End Date	
Rev. C	0419NNN	—	In Production
Rev. B	0231NNN	0418NNN	

Legend: "N" is any alphanumeric character.

Package Marking Information

18-Lead PDIP

```
MCP215X-I/P
XXXXXXXXXXXXXXXXX
     (M)    YYWWNNN
```

18-Lead SOIC

```
MCP215X-I/SO
XXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXX
   (M)    YYWWNNN
```

20-Lead SSOP

```
MCP215XI/SS

XXXXXXXXXXX

  (M)YYWWNNN
```
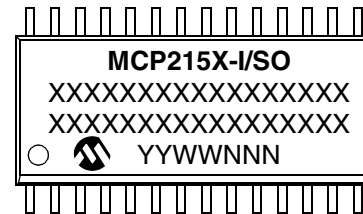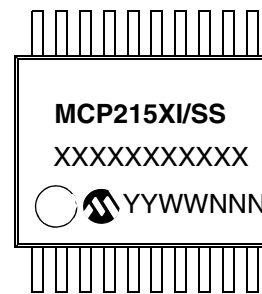
Legend:	XX...X	Customer specific information*
	YY	Year code (last 2 digits of calendar year)
	WW	Week code (week of January 1 is week '01')
	NNN	Alphanumeric traceability code

Note: In the event the full Microchip part number cannot be marked on one line, it will be carried over to the next line thus limiting the number of available characters for customer specific information.

* Standard marking consists of Microchip part number, year code, week code and traceability code.

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."

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.

Trademarks

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

AmpLab, FilterLab, Migratable Memory, MXDEV, MXLAB, PICMASTER, 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, dsPICDEM, dsPICDEM.net, dsPICworks, ECAN, ECONOMONITOR, FanSense, FlexROM, fuzzyLAB, In-Circuit Serial Programming, ICSP, ICEPIC, Linear Active Thermistor, MPASM, MPLIB, MPLINK, MPSIM, PICkit, PICDEM, PICDEM.net, PICLAB, PICtail, PowerCal, PowerInfo, PowerMate, PowerTool, Real ICE, rfLAB, rfPICDEM, Select Mode, Smart Serial, SmartTel, Total Endurance, UNI/O, 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.

© 2006, 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 logo]

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
Alpharetta, GA
Tel: 770-640-0034
Fax: 770-640-0307

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

San Jose
Mountain View, CA
Tel: 650-215-1444
Fax: 650-961-0286

Toronto
Mississauga, Ontario,
Canada
Tel: 905-673-0699
Fax: 905-673-6509

ASIA/PACIFIC

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: 86-28-8676-6200
Fax: 86-28-8676-6599

China - Fuzhou
Tel: 86-591-8750-3506
Fax: 86-591-8750-3521

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

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 - Shunde
Tel: 86-757-2839-5507
Fax: 86-757-2839-5571

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

China - Xian
Tel: 86-29-8833-7250
Fax: 86-29-8833-7256

ASIA/PACIFIC

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

India - New Delhi
Tel: 91-11-5160-8631
Fax: 91-11-5160-8632

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 - Gumi
Tel: 82-54-473-4301
Fax: 82-54-473-4302

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

Malaysia - Penang
Tel: 60-4-646-8870
Fax: 60-4-646-5086

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: 43-7242-2244-399
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

02/16/06