

MCP2140

MCP2140 Rev. A Silicon/Data Sheet Errata

The MCP2140 Rev. A parts you have received conform functionally to the MCP2140 device data sheets (DS21790**A**), with the exception of the anomaly described below.

These issues has been addressed in the MCP2140 Rev. B devices.

1. IR Protocol Handler

Increased number of BOF characters to 11 when in Normal Disconnect Mode (NDM). The IrDA® standard required delay was met, but there were reports of some Primary devices desiring to "see" 11 BOF characters.

Work around

None.

2. IR Protocol Handler

During IR communication from the MCP2140 to the Primary device, if a frame with "data" is corrupted, the IR link will be dropped.

Work around

None.

If the link is dropped, have a method to reconnect the IR link.

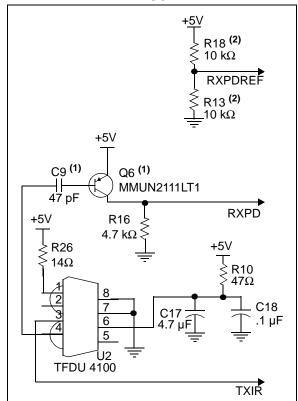
To minimize the IR link being dropped, have the embedded system (MCP2140) and the Primary device held stable. Also minimize any obstructions occurring between the Primary device and Secondary device IR transceivers.

Clarifications/Corrections to the Data Sheet:

In the MCP2140 device data sheet (DS21790A), the following clarifications and corrections should be noted:

1. Figure 2-12 should be corrected to the circuit shown in Figure 1.

FIGURE 1: CIRCUIT FOR AN INTEGRATED OPTICAL TRANSCEIVER



Note 1: These components are used to control the width of the TFDU 4100 RXD output signal

2: These components are used to set the reference voltage that the RXPD signal needs to cross to detect a bit.

MCP2140

APPENDIX A: REVISION HISTORY

Revision A (May 2005)

• 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 MCP2140 device. The revision information can be determined by the Year and Week Code of the manufacture, printed on the device as shown in Table B-1. The revision information is also available via the IrDA standard device ID.

TABLE B-1: SILICON REVISION/DEVICE MARKING

Silicon	YYWWNNN		Device ID
Revision	Start Date	End Date	Device ID
Rev B	0512NNN ⁽²⁾		"MCP2140 Bx" (Note 1)
Rev A	_	0515NNN	"MCP2140 Ax" (Note 1)

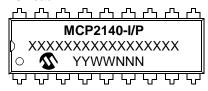
Legend: "N" is any alphanumeric character.

Note 1: The "x" indicates the sub rev of the devices (such as A5 or B0).

2: For this small overlap, the easiest way to determine the device revision is with the device ID that the device transmits during the NDM/Discover modes of the connection sequence. A PC with an IR port will display this information when the mouse cursor is placed over the IR icon in the system tray.

Package Marking Information

18-Lead PDIP



18-Lead SOIC



20-Lead SSOP



Legend:	XXX	Customer-specific information*
	Υ	Year code
		(last digit of calendar year)
	YY	Year code
		(last 2 digits of calendar year)
	WW	Week code
		(week of January 1 is week '01')
	NNN	Alphanumeric traceability code
		Pb-free JEDEC designator for
		Matte Tin (Sn)
	(P3)	This package is Pb-free.
	6	The Pb-free JEDEC designator
		(@3) can be found on the outer
		packaging for this package.
1		

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.

MCP2140

NOTES:

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