

PIC16C72A Rev. A Silicon Errata Sheet

The PIC16C72A (Rev. A) parts you have received conform functionally to the Device Data Sheet (DS35008A), except for the anomalies described below.

All the problems listed here will be addressed in future revisions of the PIC16C72A silicon.

1. Module: RESET

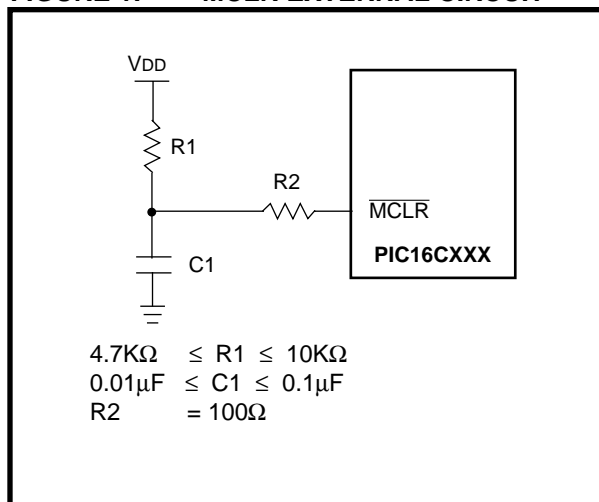
The minimum specification for the $\overline{\text{MCLR}}$ must be met in order to RESET the PIC16CXXX. If a $\overline{\text{MCLR}}$ pulse occurs that is less than the minimum specification (parameter #30), improper device operation can occur.

If the Minimum specification cannot be met, then an external circuit must be used to insure that any pulse width less than the specification will be filtered before it reaches the $\overline{\text{MCLR}}$ pin.

Work Around

A possible circuit is shown in Figure 1. Proper design validation needs to be done to ensure desired operation over the applications operating conditions

FIGURE 1: $\overline{\text{MCLR}}$ EXTERNAL CIRCUIT



Note: As with any windowed EPROM device, please cover the window at all times, except when erasing.

PIC16C72A

2. Module: OSCILLATOR

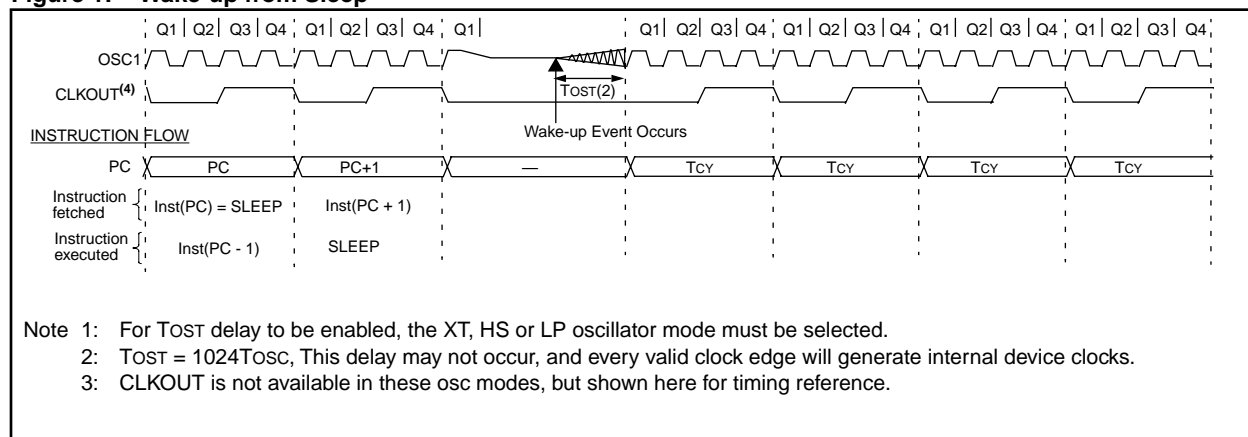
The Oscillator Start-up Timer (TOST) delay may not occur when the device wakes-up from sleep.

Figure 1 shows the start-up of the crystal after the event that causes the device to wake up from sleep mode (as specified in device data sheet). The start-up time (TOST) may not occur.

The events that wake-up the device from sleep are:

- An interrupt
- A WDT overflow (wake-up)
- A Brown-out Reset
- A $\overline{\text{MCLR}}$ reset

Figure 1: Wake-up from Sleep



In applications where time based measurements are started immediately after wake-up from sleep, the suggested work around should be implemented.

Work Around

After the SLEEP instruction, do a software delay of 256 Tcy (same as 1024 TOSC). At the Reset and Interrupt vector addresses, test to see if the device woke from sleep (the $\overline{\text{TO}}$ and $\overline{\text{PD}}$ bits), and if the device did wake from sleep, ensure that the total cycle delay is 256 Tcy.

Clarifications/Corrections to the Data Sheet:

In the Device Data Sheet (DS35008A), the following clarifications and corrections should be noted.

none



MICROCHIP

WORLDWIDE SALES AND SERVICE

AMERICAS

Corporate Office

Microchip Technology Inc.
2355 West Chandler Blvd.
Chandler, AZ 85224-6199
Tel: 602-786-7200 Fax: 602-786-7277
Technical Support: 602 786-7627
Web: <http://www.microchip.com>

Atlanta

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

Boston

Microchip Technology Inc.
5 Mount Royal Avenue
Marlborough, MA 01752
Tel: 508-480-9990 Fax: 508-480-8575

Chicago

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

Dallas

Microchip Technology Inc.
14651 Dallas Parkway, Suite 816
Dallas, TX 75240-8809
Tel: 972-991-7177 Fax: 972-991-8588

Dayton

Microchip Technology Inc.
Two Prestige Place, Suite 150
Miamisburg, OH 45342
Tel: 937-291-1654 Fax: 937-291-9175

Detroit

Microchip Technology Inc.
42705 Grand River, Suite 201
Novi, MI 48375-1727
Tel: 248-374-1888 Fax: 248-374-2874

Los Angeles

Microchip Technology Inc.
18201 Von Karman, Suite 1090
Irvine, CA 92612
Tel: 714-263-1888 Fax: 714-263-1338

New York

Microchip Technology Inc.
150 Motor Parkway, Suite 202
Hauppauge, NY 11788
Tel: 516-273-5305 Fax: 516-273-5335

San Jose

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

AMERICAS (continued)

Toronto

Microchip Technology Inc.
5925 Airport Road, Suite 200
Mississauga, Ontario L4V 1W1, Canada
Tel: 905-405-6279 Fax: 905-405-6253

ASIA/PACIFIC

Hong Kong

Microchip Asia Pacific
RM 3801B, Tower Two
Metroplaza
223 Hing Fong Road
Kwai Fong, N.T., Hong Kong
Tel: 852-2-401-1200 Fax: 852-2-401-3431

India

Microchip Technology Inc.
India Liaison Office
No. 6, Legacy, Convent Road
Bangalore 560 025, India
Tel: 91-80-229-0061 Fax: 91-80-229-0062

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

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

Shanghai

Microchip Technology
RM 406 Shanghai Golden Bridge Bldg.
2077 Yan'an Road West, Hong Qiao District
Shanghai, PRC 200335
Tel: 86-21-6275-5700 Fax: 86 21-6275-5060

ASIA/PACIFIC (continued)

Singapore

Microchip Technology Singapore Pte Ltd.
200 Middle Road
#07-02 Prime Centre
Singapore 188980
Tel: 65-334-8870 Fax: 65-334-8850

Taiwan, R.O.C

Microchip Technology Taiwan
10F-1C 207
Tung Hua North Road
Taipei, Taiwan, ROC
Tel: 886-2-2717-7175 Fax: 886-2-2545-0139

EUROPE

United Kingdom

Arizona Microchip Technology Ltd.
505 Eskdale Road
Winkers Triangle
Wokingham
Berkshire, England RG41 5TU
Tel: 44-1189-21-5858 Fax: 44-1189-21-5835

France

Arizona Microchip Technology SARL
Zone Industrielle de la Bonde
2 Rue du Buisson aux Fraises
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 München, Germany
Tel: 49-89-627-144 0 Fax: 49-89-627-144-44

Italy

Arizona Microchip Technology SRL
Centro Direzionale Colleoni
Palazzo Taurus 1 V. Le Colleoni 1
20041 Agrate Brianza
Milan, Italy
Tel: 39-39-6899939 Fax: 39-39-6899883

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Microchip received ISO 9001 Quality System certification for its worldwide headquarters, design, and wafer fabrication facilities in January, 1997. Our field-programmable PICmicro® 8-bit MCUs, Serial EEPROMs, related specialty memory products and development systems conform to the stringent quality standards of the International Standard Organization (ISO).

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