ANALOG DEVICES

MicroConverter®, Small Package 12-bit ADC with Embedded Flash MCU

Silicon Errata Sheet   ADuC814

A. This Errata sheet represents the known bugs, anomalies and work-arounds for the ADuC814 MicroConverter.

B. The Errata listed, apply to all ADuC814 packaged material branded as follows:

First Line: **ADuC814**
Second Line: **XRU**   **(where X is A or B)**
Third Line: **D20**

C. Errata Sheets referring to previous silicon revisions are available on our web-site at
http://www.analog.com/microconverter/erratasheets.html

D. Because of silicon revisions and improved work-arounds, this Errata Sheet will be updated periodically. Please find the latest Errata Sheet listed on the World Wide Web at :
http://www.analog.com/microconverter/erratasheets.html

E. Analog Devices Inc. is committed, through future silicon revisions to continuously improve silicon functionality. Analog Devices Inc. will use its best endeavors to ensure that these future silicon revisions remain compatible with your present software/systems implementing the recommended work-arounds outlined in this document.

REV. D.0 April/02

814_S02. RESET FUNCTION - TIME INTERVAL COUNTER FUNCTION ON RESET :

Background: The Time Interval Counter can be configured to time intervals ranging from 128th of a second to 255 hours. The Time Interval Counter will continue to count after a reset i.e. bit 0 in TIMECON will remain active after a reset event (Watchdog Timer or Reset Pin Toggle) and will only be cleared after a power cycle event.

Issue: If the part is in 24 hour mode (TIMECON.6 = 1) this bit will be cleared after any reset event and the part will now count in 255 hour mode.

Work-Around :   Adding the following code at the start of the main program ensures the Time Interval Counter will count in 24 hour mode after a reset.

```
        MOV A,TIMECON               ; TIMECON -> A
        RRC A                       ; TIMECON.0 -> C
        JNC NOTSET                  ; TIC Enabled?
        ORL TIMECON,#01000000B      ; If enabled set TIMECON.6

NOTSET:                             ; continue normal code
```

Related Issues :   None