
PIC16F87XA Rev. B2 Silicon/Data Sheet Errata

The PIC16F87XA Rev. B2 parts you have received conform functionally to the Device Data Sheet (DS39582A), except for the anomalies described below.

All the problems listed here will be addressed in future revisions of the PIC16F87XA silicon.

1. Module: A/D (Operation)

The ADC is disabled when $ADCON1\langle 3:0 \rangle = 011x$ (all inputs digital) and $CMCON\langle 2:0 \rangle = 111$ (comparators are off). This is a special case that conflicts with the second sentence of Note 1 on page 129 of the data sheet: "Pins configured as digital inputs will convert an analog input."

Work around

For the ADC module to be enabled, it is necessary to either:

- 1.) enable the comparators ($CMCON\langle 2:0 \rangle \neq 011x$);
or
- 2.) configure at least one ADC channel as an analog input ($ADCON1\langle 3:0 \rangle \neq 011x$).

2. Module: Data EEPROM

Placing the device in SLEEP mode while the EEADR register points to an EEPROM address that contains a value other than FFh may result in a power-down current (IPD) that exceeds the published specifications (when the temperature is higher than 60°C).

Work around

Before entering SLEEP mode, make sure that EEADR is pointing to a data EEPROM address that contains the value FFh.

If EEADR is not used elsewhere in the code, be sure to initialize its value to a known address that contains the value FFh following any device RESET, including POR.

PIC16F87XA

Clarifications/Corrections to the Data Sheet:

In the Device Data Sheet (DS39582A), the following clarifications and corrections should be noted.

1. Module: Comparator

In Figure 12-1, "Comparator I/O Operating Modes", the POR default value is CMCON<2:0> = 111, not CMCON<2:0> = 000 as shown.

APPENDIX A: REVISION HISTORY

Rev A Document (7/2002)

First revision of this document.

Added silicon issue 1 (A/D - Operation) and data sheet clarification 1 (Comparator).

Rev B Document (10/2002)

Added silicon issue 2 (Data EEPROM).

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.
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- Code protection is constantly evolving. We at Microchip are committed to continuously improving the code protection features of our product.

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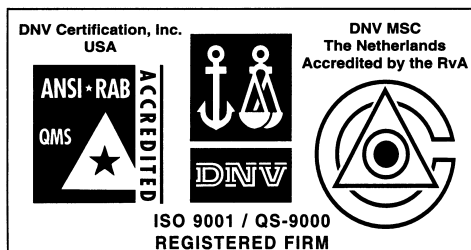
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