The PIC16F87XA Rev. B2 parts you have received conform functionally to the Device Data Sheet (DS39582B), 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<3:0> = 011x (all inputs digital) and CMCON<2:0> = 111 (comparators are off). This is a special case that conflicts with the second sentence of Note 1 on page 131 of the device 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<2:0> ≠ 111); or
2. Configure at least one ADC channel as an analog input (ADCON1<3:0> ≠ 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.

Clarifications/Corrections to the Data Sheet:
In the Device Data Sheet (DS39582B), the following clarifications and corrections should be noted.

None.
APPENDIX A: REVISION HISTORY

First revision of this document.
Added silicon issue 1 (A/D – Operation) and data sheet clarification issue 1 (Comparator).

Added silicon issue 2 (Data EEPROM).

Typographic corrections to silicon issue 1 (A/D – Operation).

Added data sheet clarification issue 2 (Packaging – Pinout and Product Identification).

Added data sheet clarification issue 3 (Voltage Reference Specifications).

Removed all data sheet clarification issues because of updated data sheet revision.
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.