This errata sheet is applicable to the following devices:

- AT89S8252
- AT89LS8252

Problem

In revisions “S” and earlier of the AT89S8252 and AT89LS8252 devices, inadvertent writes to either the Flash program memory or the data EEPROM memory can occur. An inadvertent write is a possibility in the following two scenarios.

Case A Conditions

1. A MOVX instruction is used to write to the internal EEPROM.
2. P2.4 = 0 (driven by external hardware)
   P2.5 = 1
3. The RST pin is asserted high during execution of any MOVX instruction that writes to the EEPROM, while V_{CC} is on.

In this case, an inadvertent write to the EEPROM address location corresponding to the value at Port 1 and pins P2.0 - P2.5 can occur.

Case B Conditions

1. A MOVX instruction is used to write to the internal EEPROM.
2. P2.4 = 0 (driven by external hardware)
   P2.5 = 0 (driven by external hardware)
3. The RST pin is asserted high during execution of any MOVX instruction that writes to the EEPROM, while V_{CC} is on.

In this case, an inadvertent write to the Flash memory address location corresponding to the value at Port 1 and pins P2.0 - P2.5 can occur.

Solutions

1. Avoid driving pins P2.4 and P2.5 to logic level “0” by external hardware before performing a “warm” (soft) reset.
2. Use revision “T” or later of the devices involved.

Microcontrollers

AT89S8252
AT89LS8252
Errata Sheet

Rev. 1963A–10/00

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