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This Errata Sheet is applicable to the following devices:

- AT89S51
- AT89S52

The following are known problems with Rev. D of the AT89S51/AT89S52 E.S. (Engineering Sample) devices:

### 1. Serial (In-System) Programming

In the Serial Programming mode, there is a need for over-programming in the byte mode (up to 10 times per byte); page mode is not functional.

### 2. In the Serial Programming mode

Activating the lock bits does not prevent MOV<sub>C</sub> from reading out internal code memory bytes.

#### Problem Fix/Workaround

The user should activate lock bits via the parallel programming method.

### 3. V<sub>OH</sub> Levels do not Meet the Current Datasheet Specifications

For an I<sub>OH</sub> level of 60 μA, the V<sub>OH</sub> level falls below the minimum spec of 2.4V.

These problems will be corrected in production versions of the devices.



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## Microcontrollers

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**AT89S51**

**AT89S52**

**Rev. D**

**Errata Sheet**





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