Errata

- **Clearing Lockbits at High V_{CC} or temperature**
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- **High I_{CC} in Power Down with External Clock Running**
- **Wrong Latching of RCEN Fuse**

7. Clearing Lockbits at High V_{CC} or Temperature

If the temperature is too high, and/or the programming voltage is too high, the clearing of lockbits might fail.

Problem Fix/Workaround

Keep V_{CC} below 5.0 volts at room temperature when performing a chip erase.

6. Wrong Clearing of XTRF in MCUSR

The XTRF flag in MCUSR will be cleared when clearing the PORF flag. The flag does not get cleared by writing a "0" to it.

Problem Fix/Workaround

Finish the test of both flags before clearing any of them. Clear both flags simultaneously by writing 0 to both PORF and XTRF in MCUCR.

5. Reset During EEPROM Write

If reset is activated during EEPROM write the result is not what should be expected. The EEPROM write cycle completes as normal, but the address registers are reset to 0. The result is that both the address written and address 0 in the EEPROM can be corrupted.

Problem Fix/Workaround

Avoid using address 0 for storage, unless you can guarantee that you will not get a reset during EEPROM write.

4. Verifying EEPROM in System

EEPROM verify in In-System Programming mode cannot operate with maximum clock frequency. This is independent of the SPI clock frequency.

Problem Fix/Workaround

Reduce the clock speed, or avoid using the EEPROM verify feature.

3. Serial Programming at Voltages below 3.0 Volts

At voltages below 3.0 volts, serial programming might fail.

Problem Fix/Workaround

Keep V_{CC} at 3.0 volts or higher during in-system programming.

2. High I_{CC} in Power Down with External Clock Running

When the external clock is running while the device is in power down, the power consumption will be higher that specified.

Problem Fix/Workaround

Stop the external clock while the device is in power down.

8-bit AVR® Microcontroller with 2K bytes of In-System Programmable Flash

AT90S/LS2343 Rev. F Errata Sheet

1. Wrong Latching of RCEN fuse

If V_{CC} goes below GND and then up to the operating voltage, the RCEN fuse can be read as unprogrammed even if it is programmed. The result of this is that the device starts looking for a clock signal on the external clock input instead of from the internal RC oscillator, making it look as if it "hangs".

Problem Fix/Workaround

If internal oscillator is required, use the 100% pin and code compatible ATtiny22L which has internal RC option only.

Errata Sheet

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