Errata

- Lock Bits at High V_{CC}
- Reset During EEPROM Write
- Serial Programming at Voltages Below 2.9 Volts
- UART Loses Synchronisation if RDX Line is Low when UART Receive Disabled

4. Lock Bits at High V_{CC}

On some devices, the lock bits will not erase at high $V_{\rm CC}$. In this situation, it will not be possible to reprogram the devices when the lock bits are set.

Problem Fix/Workaround

Lower V_{CC} below 4.0V before you perform a chip-erase. Then the device will unlock, and it will be possible to reprogram the device at any V_{CC} .

3. 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.

2. Serial Programming at Voltages Below 2.9 Volts

At voltages below 2.9 Volts, serial programming might fail.

Problem Fix/Workaround

Keep V_{CC} above 2.9 Volts during in-system programming.

UART Loses Synchronization if RXD Line is Low when UART Receive Disabled.

The UART will detect a UART start-bit and start reception even if the UART is not enabled. If this occurs, the first byte after re-enabling the UART will be corrupted.

Problem Fix/Workaround

Make sure that the RX line is high at startup and when the UART is disabled. An external RS232 level converter keeps the line high during start-up.



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

AT90S2313 Rev. B Errata Sheet







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