June 13, 2012

C8051F960 Rev A Errata

Errata Status Summary

Errata #	Title	Impact	Status
1	EMIF Split Mode Operation	Minor	Fixed – Rev A Date codes 1221 and later
2	Flash Lock Byte	Minor	Fixed – Rev A Date codes 1221 and later

Impact definition: Each erratum is marked with an impact, as defined below:

- Minor – Workaround exists.
- Major – Errata that do not conform to the data sheet or standard.
- Information – The device behavior is not ideal but acceptable. Typically, the data sheet will be changed to match the device behavior.

Errata Details

1. **Description:**
   This issue may affect device functionality when using the external memory interface (EMIF) in the Split Mode configuration. In the split mode configuration, the EMIF may not function properly. In the Split Mode configuration, the behavior of the affected devices is similar to the EMIF internal only mode.

   Impact:
   Only designs using the EMIF in the Split Mode are impacted. Please note that this does NOT affect devices when using the EMIF in the Internal Only or External Only configurations. Designs not using the EMIF are not impacted.

   Workaround:
   If access to an external parallel peripheral is required, using the affected devices, the workaround is to configure the EMIF in the external only memory configuration.

   Resolution:
   Fixed for product with date code 1221 and later.
   This date code is for year 2012, work week 21 (Week ending May 26th 2012).

2. **Description:**
   On C8051F96x devices with 128k Flash memory (C8051F960-A-GM, C8051F960-A-GQ, C8051F961-A-GM, C8051F962-A-GM, C8051F962-A-GQ, C8051F963-A-GM), writing 0x00 to the lock byte will lock the device and prevent future erases.

   Impact
   Affected devices programmed and then locked by writing 0x00 to the lock byte are locked and cannot be erased. Please note that this does NOT affect devices with on-chip Flash memory < 128k bytes.

   Workaround
   The workaround is to write 0x80 to lock the entire flash on the affected devices. This will not prevent future erases. It is not necessary to write 0x00 to lock the entire Flash. On devices with date code 1221 and later, writing 0x00 to the lock byte will lock the entire Flash, and the device can be erased.

   Resolution
   Fixed for product with date code 1221 and later.
   This date code is for year 2012, work week 21 (Week ending May 26th 2012).