



January 27, 2009

Si4330 Errata (Rev. V2)

Errata Status Summary

Errata #	Title	Impact	Status
1	General-purpose ADC in differential mode	Minor	Will be fixed in the next revision
2	RX current consumption does not meet specified value in datasheet	Minor	Will be fixed in a future revision
3	30 MHz sensitivity de-sense	Minor	Will be fixed in a future revision
4	Register modifications needed for correct operation	Minor	Will be fixed in the next revision
5	Register settings for RSSI	Informational	Will be fixed in the next revision
6	LBD voltage read-back	Informational	Will be fixed in a future revision

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 acceptable; the data sheet will be changed to match the device behavior.

Errata Details

1. **Description:** The general-purpose ADC does not function in differential mode.
Impacts: Only able to use the general-purpose ADC in single-ended mode.
Workaround: No workaround exists.
Resolution: Will be fixed in the next revision.
2. **Description:** RX current does not meet specified value in data sheet.
Impacts: Battery life may be affected.
Workaround: Use the recommend register settings to adjust the current consumption.
Resolution: Problem will be addressed in a future die revision.
3. **Description:** When tuned to a channel that is a multiple of 30 MHz, the sensitivity will be degraded.
Impacts: Sensitivity will not meet specified value.
Workaround: Avoid using channels that are a multiple of 30 MHz. Contact Silicon Labs' customer support for instructions on shifting the XTAL frequency if a specific frequency is required.
Resolution: Will be fixed in a future revision.
4. **Description:** Register modifications needed for correct operation.
Impacts: PLL, RX current consumption.
Workaround: Change Registers 59 = 00, 5A = 03h, and 66 = 02h.
Resolution: Default values will be updated in the next revision.
5. **Description:** RSSI will not be correct with default settings.
Impacts: No impact.
Workaround: Set the following registers: Reg 6Ah Inacomp[3:0] = 0010 and pgathres[1:0] = 11.
Resolution: Will be fixed in the next revision.
6. **Description:** LBD voltage read-back can occasionally be incorrect. If the LBD battery voltage register is read during the same cycle that the register is being updated, it will report the previously read value and not the updated value. The LBD measurement cycle is 250 μ s, and the update period is 30 μ s.
Impacts: May need to use majority polling or use the LBD interrupt.
Workaround: Read the register two or three consecutive times to ensure it is correct, or use the LBD interrupt.
Resolution: Will be fixed in a future revision.