

Revision A1 Errata

The errata listed below describe situations where DS3231M revision A1 components perform differently than expected or differently than described in the data sheet. Maxim Integrated Products, Inc., intends to correct these errata when the opportunity to redesign the product presents itself.

This errata sheet only applies to DS3231M revision A1 components. Revision A1 components are branded on the topside of the package with a six-digit code in the form yywwA1, where yy and ww are two-digit numbers representing the year and work week of manufacture, respectively. To obtain an errata sheet on another DS3231M die revision, visit our website at <u>www.maxim-ic.com/errata</u>.

1) CONV BIT DOES NOT AUTO CLEAR

Description:

Manual temperature conversion request bit (CONV) does not auto clear upon conversion completion.

Workaround:

Only write CONV bit to logic 0.

2) BBSQW BIT FUNCTION IS NOT IDENTICAL TO DS3231

Description:

DS3231 BBSQW bit (if = 1) enables SQW when operating on V_{BAT} supply. DS3231M BBSQW bit (if = 1) enables SQW and RTC alarm interrupt when operating on V_{BAT} supply.

Workaround:

Write BBSQW = 1 if user desires an RTC alarm interrupt during battery operation.

3) THERMAL SAMPLE RATE DEPENDS UPON V_{BAT} BIAS DURING V_{CC} OPERATION

Description:

Thermal sample rate should be defined by the **selected power supply** (i.e., sample once per second if V_{CC} is selected, or sample once per 10 seconds if V_{BAT} is selected).

If $(V_{BAT} > V_{CC})$, sample rate will be every 10s.

Workaround:

Set (V_{BAT} < V_{PF}) or (V_{BAT} < V_{CC}).

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4) REGISTER ADDRESSES BEYOND 12h MAY RESPOND TO READ COMMANDS

Description:

Nonexistent register addresses (> 12h) may respond to reads with 00h data.

Workaround:

Ignore register content above 12h.