MAX32665–MAX32668
ERRATA SHEET

Revision A1 Errata

The errata listed below describe situations where components of this revision perform differently than expected or differently than described in the data sheet. Maxim Integrated Products, Inc. may, at its own discretion, take future steps to correct these errata when the opportunity to redesign the product presents itself. Prior to that, Maxim has determined the following potential workarounds that customers may want to consider when addressing one of the situations described below.

This errata sheet only applies to components of this revision. These components are branded on the topside of the package with a six-digit code in the form yywwRR, where yy and ww are two-digit numbers representing the year and work week of manufacture, respectively, and RR is the revision of the component. To obtain an errata sheet on other die revisions, visit our website at ***www.maximintegrated.com/errata****.*

1) SPIXF DOES NOT OPERATE AS EXPECTED

Description:
The SPIXF does not operate properly when program code is read (vs. fetched) with the reset default value of 0x0000 in the SPIXF_BUS_IDLE.busidle register. (14358)

Workaround:
Set the 16-bit value located in the SPIXF_BUS_IDLE.busidle to a small nonzero value.

2) QSPI IN SLAVE MODE 0 OR MODE 2 DOES NOT OPERATE AS EXPECTED IF Tx FIFIO IS FULL

Description:
When the QSPIn_SS0 signal transitions to its active state, the first bit of the first byte of the MISO signal is always 0 if the transaction starts when the Tx FIFO is full. (14354)

Workaround:
Ensure that the number of bytes in the Tx FIFO is always less than 32 (*QSPIn_DMA.tx_fifo_cnt < 32*).

3) ANALOG COMPARATOR OUTPUTS lpwkst[11:8] RETURN INCORRECT STATE

Description:
The *lpwkst[11:8]* bits do not return the correct value, so it is not possible to tell whether a positive or negative transition was the source of the comparator interrupt or comparator wakeup interrupt (14406).

Workaround:
The feature can be used as a power-fail monitor which can generate a wakeup event for an external voltage connected to one of the comparator inputs. Assume the comparator is enabled and an external voltage is valid (i.e., above the programmable threshold), before a device enters SLEEP mode. In this case, it is known that a wakeup event would only be generated by a negative transition, functioning like a power-fail monitor.

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4) EXTERNAL CAPACITORS REQUIRED FOR RTC OPERATION

Description:
External capacitors are required to meet the loading requirements for RTC accuracy (14416).

Workaround:
Specific values are based on PCB and internal oscillator capacitances. Contact factory for details on the characterization procedure.

5) AUDIO SYSTEM CLOCK AND SAMPLE RATE ACCURACIES GOVERNED BY HSCLK SPECIFICATION

Description:
The HSCLK clock is the source for the digital audio peripheral that has an accuracy of approximately ±2.5%. Refer to the MAX32665–MAX32668 data sheet *Electrical Characteristics* table for guaranteed minimum and maximum values of f_{HSCLK} (14416).

Workaround:
Ensure the application can tolerate audio clock and sample rate frequencies derived from the HSCLK.

Revision History

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	7/19	Initial release	—