This anomaly list describes the known bugs, anomalies, and workarounds for the ADIS16136.

Analog Devices, Inc., is committed, through future silicon revisions, to continuously improve silicon functionality. Analog Devices tries to ensure that these future silicon revisions remain compatible with your present software/systems by implementing the recommended workarounds outlined here.

PERFORMANCE ISSUES

Table 1. Alarm Variation with Temperature [er001]

Background	The ADIS16136 provides user-programmable alarms for monitoring.
Issue	On units that have earlier date codes than 1146, the alarm trip points vary with temperature when using the unfiltered data option (ALM_CTRL[3] = 0).
Workaround	On units that have earlier date codes than 1146, use the filtered data option (set ALM_CTRL[3] = 1) to achieve best stability in the alarm trip points. On units that have date codes of 1146 or later, this issue has been fixed
Related Issues	None.

Table 2. GYRO_OUT Oscillation [er002]

Background	The ADIS16136 provides angular rate output data through two registers: GYRO_OUT and GYRO_OUT2. GYRO_OUT represents the upper 16-bits of the angular rate data, while GYRO_OUT2 represents up the lower bits. The bits in GYRO_OUT2 capture the bit growth associated with the averaging/decimation filter stage. When the decimation rate is equal to zero, the bits in GYRO_OUT2 will not represent angular rate information. In general, this register configuration preserves a normal distribution for the noise that has an even distribution on each side of the gyroscope's bias.
Issue	On some units that have Date Code 1317 (or lower), the signal processing experiences a quantization error that introduces peaks in the distribution at 1 LSB increments, in relation to the GYRO_OUT register. This behavior can influence bias stability during any thermal changes to the device.
Workaround	Units that have Date Code 1318 (and newer) will not experience this behavior.
Related Issues	None.

ANOMALY STATUS

Reference Number	Description	Status	Date Code
er001	Alarm variation with temperature	Fixed	1146
er002	GYRO_OUT oscillation	Fixed	1317

Rev. A

NOTES

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