
Bosch Sensor Fusion Firmware Addendum

Sensor Fusion Firmware

- Sensor fusion firmware is licensed from Bosch. Features include:
 - Self-contained 9-axis sensor fusion
 - Sensor data pass-through
 - Fast in-use background calibration of all sensors and calibration monitor
 - Magnetic immunity: Enhanced magnetic distortion, detection and suppression
 - Gyroscope drift cancellation
 - Supports higher output data rate (ODR) of Accelerometer and Gyroscope and supports up to 100Hz Fusion data
 - Fully Certified for Windows 8 and 8.1
- Supported sensors are:
 - Bosch BMC150 Geomagnetic Sensor/Accelerometer
 - Bosch BMG160 Gyroscope

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1.0 CONNECTION INFORMATION

Reference: SSC7102 Sensor Fusion Bosch Module Schematic Revision 1.5 Assy. 6731

SSC7102 Signal	Board Connection
SENSOR_A_SIG1	BMG_INT1
SENSOR_A_SIG2	BMG_INT2
SENSOR_A_SIG3	This pin must be pulled to ground through a resistor. (Note 1-1)
SENSOR_B_SIG1	BMC_INT1
SENSOR_B_SIG2	BMC_INT2
SENSOR_B_SIG3	BMC_INT3
SENSOR_B_SIG4	BMC_DRDY
SENSOR_B_SIG5	This pin must be pulled to ground through a resistor. (Note 1-1)
SENSOR_C_SIG1	ISL_INT#

Note 1-1 A pull-down to ground is required on this pin. Use a 10K ohm resistor. Alternatively, these pins can be combined with others that require a pull-down and connected as a group through a 1k ohm resistor to ground.

APPENDIX A: ADDENDUM REVISION HISTORY

TABLE A-1: REVISION HISTORY

Revision	Section/Figure/Entry	Correction
DS00001657B (10-03-14)	Sensor Fusion Firmware	Removed “Ambient Light Sensor Support” from Features Removed Intersil ISL29029 Ambient Light and Proximity Sensor from supported sensors
	Section 1.0, Connection Information	Updated Connection Information for pins that must be pulled to ground through a resistor.
DS00001657A	Initial document release	

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