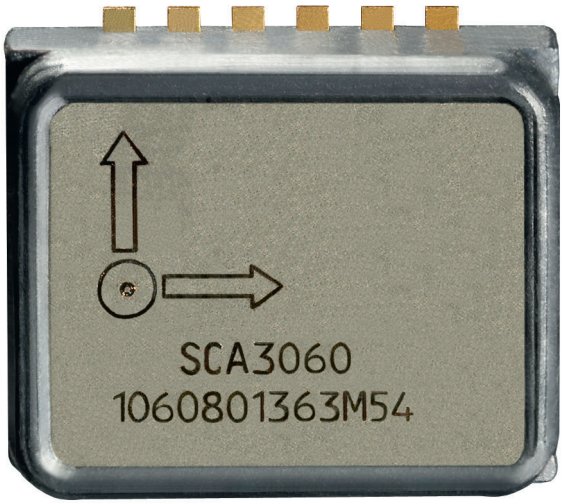
SCA3060

Digital Low Cost Low Power
Automotive Qualified 3-axis
Accelerometer



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Key features

- Size 7.6 x 3.3 x 8.6 mm (w x h x l)
- ± 2 g measurement range
- -40...+105 ºC temperature range
- 3.0 V – 3.6 V supply voltage
- Low current consumption
- Measurement mode 150 µA
- Total offset error ±200 mg
- Includes effects over supply voltage, temperature and life time
- RoHS compliant
- AEC Q-100 qualified
- High shock durability
- Interrupt signal triggered by motion
- Selectable frequency response
- 64 samples/axis ring buffer memory and advanced features enable significant power and resource savings

Applications

SCA3060 is targeted to automotive security applications such as

- Inertial navigation
- Vehicle alarms
- Inclination sensing
- Motion activation
- Black box systems

Robust packaging makes the sensor also suitable for Industrial applications.

SCA3060 PERFORMANCE CHARACTERISTICS

Parameter	Condition	SCA 3060-D01 (SPI)			Units
		Min	Typ.	Max	
Analog and digital Vdd		3.0	3.3	3.6	V
Operating temperature		-40	-	105	ºC
Current consumption	Reset Measurement/MD mode	-	<9 150	-	µA µA
Acceleration range	Nominal	-	±2		g
Total offset error	-40 ... +105 ºC	-200	-	200	mg
Sensitivity		-	1000	-	Count/g
Total sensitivity error		-4	±2	4	%
Non-linearity		-3	±1	3	% FS
Cross-axis sensitivity		-	±3	-	%
Bandwidth	Measurement mode Wide band mode		9 35		Hz Hz
Noise	Measurement mode Wide band mode		9 16		mg RMS mg RMS
Output data rate	Measurement mode Wide band mode		50 100		Hz Hz
Start-up time		-	200	-	ms
Output load		-	-	35	pF
SPI clock rate / I²C clock rate			-	325	kHz

FOR MORE INFORMATION, PLEASE REFER TO THE PRODUCT DATASHEETS AVAILABLE ONLINE AT WWW.MURATAMEMS.FI

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