

SCA3060 Digital Low Cost Low Power Automotive Qualified 3-axis Accelerometer



- 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

SCA3060

Digital Low Cost Low Power

Automotive Qualified 3-axis Accelerometer

KEY FEATURES

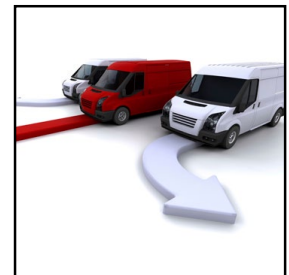
- Size 7.6 x 3.3 x 8.6 mm (w x h x l)
- ± 2 g measurement range
- -40...+105 °C temperature range
- 3.0 V - 3.6 V supply voltage
- Low current consumption
- Measurement mode 150 μ A
- Total offset error ± 200 mg
- Includes effects over supply voltage, temperature and life time
- RoHS compliant
- AEC Q-100 qualified



APPLICATIONS

SCA3060 is targeted to non-safety critical automotive 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	SCA3060-D01 (SPI)			SCA3060-D02 (I ² C)			Units
		Min	Typ.	Max	Min	Nom	Max	
Analog and digital Vdd		3.0	3.3	3.6	3.0	3.3	3.6	V
Operating temperature		-40	-	105	-40	-	105	°C
Current consumption	Reset Measurement / MD mode	-	<9 150	-	-	<9 250	-	μ A μ A
Acceleration range	Nominal	-	± 2	-	-	± 2	-	g
Total offset error	-40 ... +105 °C	-200	± 200	+200	-200	± 200	+200	mg
Sensitivity		-	1000	-	-	1000	-	Count/g
Total sensitivity error		-	± 2	± 4	-	± 2	± 4	%
Non-linearity		-	± 1	± 3	-	± 1	± 3	% FS
Cross-axis sensitivity		-	± 3	-	-	± 3	-	%
Bandwidth	Measurement mode Wide band mode		9 35			11 40		Hz Hz
Noise	Measurement mode Wide band mode		9 16			9 16		mg RMS mg RMS
Output data rate	Measurement mode Wide band mode		50 100			63 130		Hz Hz
Start-up time		-	200	-	-	200	-	ms
Output load		-	-	35	-	-	35	pF
SPI clock rate / I ² C clock rate			-	325		-	100	kHz

For more detailed information, please check SCA3060 datasheet available at www.vtitechnologies.com.

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