



SMG810

Angular rate sensor for rollover sensing in airbag ECUs

Application & Technical Summary



SMG810 is a single axis (Ω_x) gyroscope (gyro) for rollover applications. It is derived from the successful SMI8xy inertial sensor family and detects the chassis roll rate during a rollover event. The sensor communicates via a digital 16-bit SPI interface.

Product benefits

Excellent vibration robustness and offset stability

Developed for systems with requirements up to ASIL D

Target applications:

Roll-over sensing

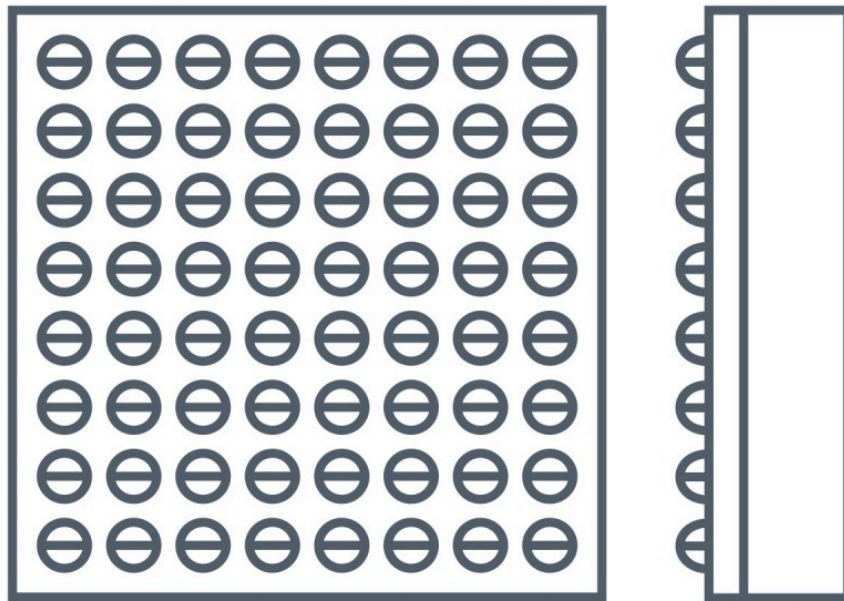
reliable operation

due to excellent vibration resistance

Technical Features

Type	Angular rate sensor
Package	BGA64
Sensing axes	X (Ω)
Range	± 300 °/s (Ω)
Interface	SafeSPI
Data resolution	16-bit (SPI)
Sensitivity	100 LSB/°/s (Ω)

Tolerance	$\pm 3\%$ (Ω)
Supply voltage	3.3 V, 5 V or 6.7 V
Supply current	< 18 mA
Operating temperature	-40 to 125°C



Ball grid array package (BGA): 7 mm x 7 mm x 1.5 mm

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