

gemini™

SILICON SENSING®

Dual-Axis Accelerometer

CAS200



Actual size

Key features

- Small (10.4 x 6.0 x 2.2mm)
- Excellent bias repeatability over temperature
- Dual-axis MEMS accelerometer in a hermetically sealed ceramic LCC surface mount package for temperature and humidity resistance
- Five dynamic range options; $\pm 0.85g$, $\pm 2.5g$, $\pm 10g$, $\pm 30g$, $\pm 96g$
- Analogue and digital (SPI®) outputs for linear acceleration and temperature
- Wide bandwidth (typically 170Hz digital, 250Hz analogue)
- Temperature range -40 to +125°C
- Low power consumption (3mA Typ) from a 3.3V supply
- Integral temperature sensor
- RoHS compliant

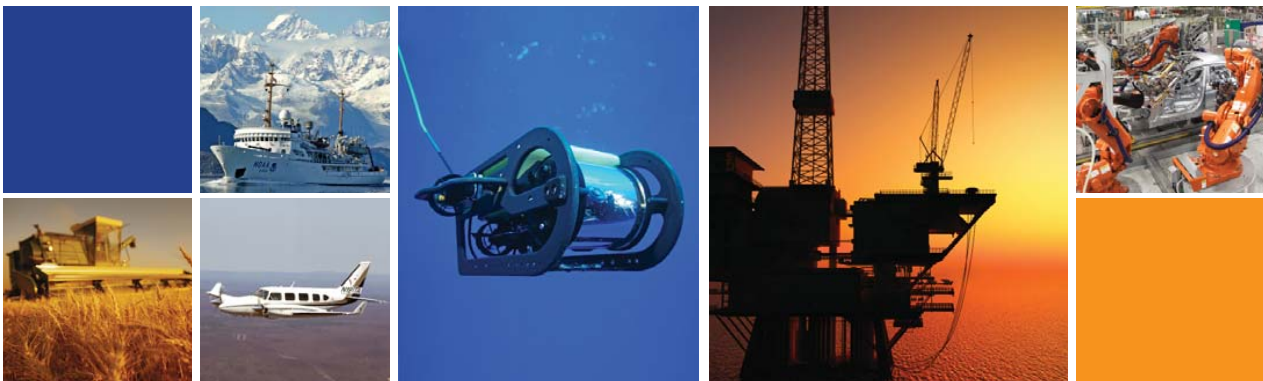
CAS290



Actual size

Typical applications

- Aerospace and industrial
- Aircraft AHRS and controls
- Platform stabilisation
- Drilling guidance
- Surveying and mapping
- Land and marine navigation
- Transportation
- Inertial measurement units
- Levelling and tilt sensing



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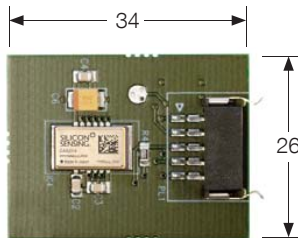
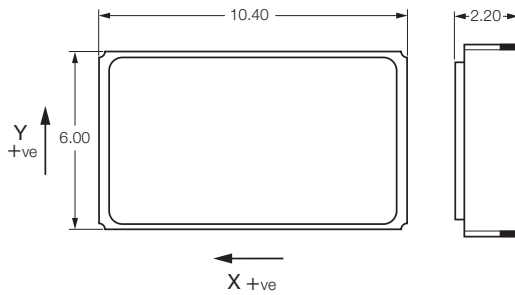
Dual-Axis Accelerometer

For full technical datasheets please go to our website where the documents can be downloaded

SILICON SENSING®

CAS20x

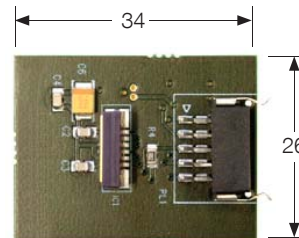
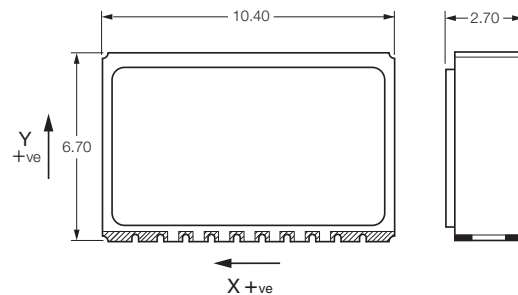
All dimensions in millimetres



Gemini™ Evaluation Board -
CAS200 (P/N CAS21x-EVB)

CAS29x

All dimensions in millimetres



Gemini™ Evaluation Board -
CAS290 (P/N CAS29x-EVB)

Parameter	Specification				
Number of sense axes	2-axis				
Ordering Part Number	CAS211	CAS212	CAS213	CAS214	CAS215
	CAS291	CAS292	CAS293	CAS294	CAS295
Dynamic range	±0.85g	±2.5g	±10g	±30g	±96g
SF over temperature	1.2% (Digital), 1.5% (Analogue)				
SF non-linearity	0.5%	0.5%	2.0%	2.0%	2.0%
Bias run to run @ +25°C	0.35mg	0.75mg	0.75mg	3.0mg	8.0mg
Noise spectral density	50µg/√Hz	150µg/√Hz	150µg/√Hz	350µg/√Hz	1,200µg/√Hz
Vibration rectification (20Hz to 2KHz)	0.15mg/g² @ 0.5gms	0.15mg/g² @ 2.0gms	0.15mg/g² @ 8.0gms	0.1mg/g² @ 12gms	0.1mg/g² @ 12gms
Supply voltage	2.7V ~ 3.6V				
Current consumption	3mA				
Bandwidth	> 170Hz (Digital), > 250Hz (Analogue)				
Temperature	Operating: -40°C to +125°C. Storage: -55°C to +150°C				
Shock	Operating: 1,000g 1ms ½ sine. Survival: > 6,500g 0.1ms ½ sine				
Start-up time	20ms				
Mass	0.4 gram typical				

Silicon Sensing Systems Limited
Clifford Road, Southway,
Plymouth, Devon
PL6 6DE United Kingdom

T +44 (0)1752 723330
F +44 (0)1752 723331
E sales@siliconsensing.com
W siliconsensing.com

Silicon Sensing Systems
Japan Limited
1-10 Fuso-Cho,
Amagasaki,
Hyogo 6600891, Japan

T +81 (0)6 6489 5868
F +81 (0)6 6489 5919
E sssj@spp.co.jp
W siliconsensing.com

Specification subject to change
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We are here for you. Addresses and Contacts.

Headquarter Switzerland:

Angst+Pfister Sensors and Power AG
Thurgauerstrasse 66
CH-8050 Zurich
Phone +41 44 877 35 00
sensorsandpower@angst-pfister.com

Office Germany:

Angst+Pfister Sensors and Power Deutschland GmbH
Edisonstraße 16
D-85716 Unterschleißheim
Phone +49 89 374 288 87 00
sensorsandpower.de@angst-pfister.com

Scan here and get an overview of personal contacts!



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