Key features

- Small (CAS200: 10.4 x 6.0 x 2.2mm, CAS290: 10.4 x 6.7x 2.7mm)
- Excellent bias repeatability over temperature
- Flat and orthogonal mounting options (CAS21x and CAS29x)
- Dual-axis MEMS accelerometer in a hermetically sealed ceramic LCC surface mount package for temperature and humidity resistance
- Five dynamic range options; ±0.85g, ±2.5g, ±10g, ±30g and ±96g
- Analogue outputs for linear acceleration, temperature and BIT
- Digital output via SPI® interface
- Wide bandwidth (typically 170Hz digital, 250Hz analogue)
- Temperature range -40 to +125ºC
- High shock and vibration rejection
- Low power consumption (3mA typical) from a 3.3V supply
- Integral temperature sensor
- RoHS compliant

Typical applications

- Aerospace and industrial
- Aircraft AHRS and controls
- Platform stabilisation
- Drilling guidance
- Surveying and mapping
- Land and marine navigation
- Transportation
- Inertial measurement units
### Dual-Axis Accelerometer

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

**CAS20x**

All dimensions in millimetres

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**Specifications**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of sense axes</td>
<td>2-axis</td>
</tr>
<tr>
<td>Ordering Part Number</td>
<td></td>
</tr>
<tr>
<td>CAS211-12</td>
<td>CAS213-14</td>
</tr>
<tr>
<td>CAS215</td>
<td></td>
</tr>
<tr>
<td>Dynamic range</td>
<td>±0.85g</td>
</tr>
<tr>
<td>SF over temperature</td>
<td>±2.5g</td>
</tr>
<tr>
<td>Non-linearity</td>
<td>±10g</td>
</tr>
<tr>
<td>Bias run to run @ +25ºC</td>
<td>±50g</td>
</tr>
<tr>
<td>Noise spectral density</td>
<td>150μg/√Hz</td>
</tr>
<tr>
<td>Vibration rectification (20Hz to 2kHz)</td>
<td>0.15mg/g² @ 0.5gms</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>2.7V – 3.6V</td>
</tr>
<tr>
<td>Current consumption</td>
<td>3mA</td>
</tr>
<tr>
<td>Bandwidth</td>
<td>&gt; 170Hz (Digital), &gt; 250Hz (Analog)</td>
</tr>
<tr>
<td>Temperature</td>
<td>Operating: -40ºC to +125ºC, Storage: -55ºC to +150ºC</td>
</tr>
<tr>
<td>Shock</td>
<td>Operating: 1,000g 1ms ½ sine, Survival: &gt; 6,500g</td>
</tr>
<tr>
<td>Start-up time</td>
<td>20ms</td>
</tr>
<tr>
<td>Mass</td>
<td>0.4 gram typical</td>
</tr>
</tbody>
</table>

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**Gemini™ Evaluation Board - CAS200 (P/N CAS21x-02-0302) and CAS290 (P/N CAS21x-02-0302)**

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