Combining a 3D accelerometer and 3D gyroscope, ST’s ISM330DLC system-in-package are 6-axis MEMS inertial modules specifically designed for Industry 4.0. The ISM330DLC offers best-in-class accuracy and flexibility with ultra-low power consumption, enabling demanding applications, even battery-operated ones. High-performance, high-quality, small size and low power consumption together with high robustness to mechanical shock makes the ISM330DLC the right choice for the implementation in reliable industrial products.
Advanced features

**Dual output for General Purpose and control loop usage**
- Dedicated configurable signal processing path with low latency, low noise and dedicated filtering specifically intended for stabilization control loops.

**Advanced sensor hub**
- Data coming from external and internal sensors can be stored, elaborated and efficiently sent to the upper-layer MCU.

**Higher thermal stability**
- For both offset/sensitivity of accelerometer and gyroscope over the whole operating temperature range from -40 to +85 °C

**Advanced digital features**
- Event detection and fully configurable interrupts:
  - Free-fall and wakeup
  - 6D orientation
  - Tap and double-tap sensing
  - Activity/inactivity recognition
  - Tilt detection

Applications

- Industry 4.0
- Navigation
- Robotics
- Drones
- Antenna platform stabilization

Evaluation tools

<table>
<thead>
<tr>
<th>Part number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>X-NUCLEO-IKS01A3</td>
<td>Motion MEMS and environmental sensor expansion board for STM32 Nucleo</td>
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<tr>
<td>STEVAL-MKI182V2</td>
<td>ISM330DLC adapter board for a standard DIL24 socket</td>
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For further information please visit [http://www.st.com/inemo](http://www.st.com/inemo)