

P3570D

## **STMicroelectronics Automotive Accelerometer Makes the Call When in an Emergency**

*New device targets automotive telematics, black box, and emergency calling*

**Geneva, May 29, 2014** – STMicroelectronics, a global semiconductor leader serving customers across the spectrum of electronics applications, and the world's leading supplier<sup>1</sup> of accelerometers, has added another "world's first" device to its industry-leading portfolio of motion sensors. The new [AIS3624DQ](#), a 3-axis accelerometer with digital output, is the first to provide a full-scale range of +/-24g (acceleration of gravity) while meeting the automotive industry's demanding AEC-Q100 reliability stress tests.

Automotive suppliers are developing an important application to automatically contact emergency services in the event of a collision or vehicle problem. The application can supply potentially life-saving details such as the location of the vehicle and the estimated severity of the problem or accident to emergency service operators. Examples of these services include Onstar (USA), eCall (Europe), and ERA Glonass (Russia).

"In addition to all of the amazing safety innovations already built into today's vehicles, this tiny sensor may play a vital role in protecting the car's occupants," said Fabio Pasolini, General Manager of the Motion MEMS Division, STMicroelectronics. "ST's long-standing interest in augmenting peoples' lives and our leadership in Micro-Electro-Mechanical Systems (MEMS) have again come together in an important sensor that could potentially help consumers."

The major parameters in estimating the severity of a collision include the decelerations that occurred in all three dimensions at the moment of impact; for instance, the ERA Glonass specification for the Russian market requires that longitudinal accelerations up to +/-24g must be measurable with sufficient accuracy. The AIS3624DQ brings all the benefits of ST's market-proven stacked-chip technology to the automotive market.

STMicroelectronics solution is based on its 8" manufacturing of MEMS products and offers a more competitive solution than the others who produce on 6".

---

<sup>1</sup> Source: IHS iSuppli – Q3 2013 MEMS Market Tracker

Key features of the AIS3624DQ include:

- Selectable full-scale range: 6g / 12g / 24g
- 16-bit data output
- Two digital output lines (interrupt generators)
- 9 user-selectable Output Data Rates (ODR)
- Power down, low power and normal power modes
- SPI and I2C digital output protocols
- Embedded self-test
- [up to 10,000g shock survivability
- Temperature range: -40°C ... +105°

Housed in a QFN 24L (4x4x1.8 mm<sup>3</sup>) package, the [AIS3624DQ](#) is currently available as engineering samples. Volume production is scheduled for Q4 2014, with an anticipated price of \$4.54 in quantities of 1,000 units.

### **About STMicroelectronics**

ST is a global leader in the semiconductor market serving customers across the spectrum of sense and power and automotive products and embedded processing solutions. From energy management and savings to trust and data security, from healthcare and wellness to smart consumer devices, in the home, car and office, at work and at play, ST is found everywhere microelectronics make a positive and innovative contribution to people's life. By getting more from technology to get more from life, ST stands for life.augmented.

In 2013, the Company's net revenues were \$8.08 billion. Further information on ST can be found at [www.st.com](http://www.st.com).

### **STMicroelectronics Contact:**

Michael Markowitz  
Director Technical Media Relations  
+1 781 591 0354  
[michael.markowitz@st.com](mailto:michael.markowitz@st.com)