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## **STMicroelectronics Adds New High-Accuracy MEMS Sensors with 10-Year Product Longevity for Advanced Industrial Sensing**

- ❖ *New low-noise 3-axis accelerometer delivers affordable high-accuracy sensing for industrial inclinometers*
- ❖ *New parts supported by commitment of 10-year product-longevity program*
- ❖ *Additional sensing functions, optimized for industrial precision and stability, to follow in 2018*

**Geneva, May 9, 2018 – STMicroelectronics (NYSE: STM)**, a global semiconductor leader serving customers across the spectrum of electronics applications and the leading supplier of MEMS motion sensors for consumer products<sup>1</sup>, is extending its commitment to drive advanced automation and the Industrial Internet of Things (IIoT) by adding new high-stability MEMS sensors with 10-year product-longevity assurance.

The new sensors, to be made available during 2018, begin with the [IIS3DHHC](#), a 3-axis accelerometer optimized for high measurement resolution and stability to ensure accuracy over time and temperature. The IIS3DHHC targets precision inclinometers in antenna-positioning mechanisms for communication systems, Structural Health Monitoring (SHM) equipment for keeping buildings and bridges safe, and stabilizers or levelers for a wide variety of industrial platforms. Its long-term accuracy and robustness are also ideal for high-sensitivity tilt and security sensors, as well as image stabilization in high-end Digital Still Cameras (DSCs).

ST's 10-year longevity commitment assures long-term availability of a wide range of high-performing components used in industrial equipment, helping vendors handle the typically long in-market lifetimes of their products and extended operation in challenging environmental conditions. In addition to industrial sensors, the program covers STM32 microcontrollers, motor drivers, analog components, power converters, LEDs, and existing MEMS sensors that will be supported for at least 10 years.

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<sup>1</sup> IHS Markit, Consumer and Mobile MEMS Report 2017 (Jan 2018)

*“These high-quality industrial sensors leverage our investments in MEMS design and high-yield fabrication processes to deliver superior performance with low ownership costs for applications where the highest precision, repeatability, and robustness are critical,”* said Andrea Onetti, Group VP and General Manager, MEMS Sensors Division, STMicroelectronics. *“We will continue to introduce new types of precision sensors for industrial applications in the coming months, covered by our 10-year longevity commitment, including combination sensors, specialized sensors, and complete inertial modules.”*

The IIS3DHHHC is in production now, in a high-quality 16-lead 5mm x 5mm x 1.7mm ceramic LGA package, priced from \$4.50 for orders of 1000 pieces.

For more information, please visit

[http://www.st.com/content/st\\_com/en/support/resources/product-longevity.html](http://www.st.com/content/st_com/en/support/resources/product-longevity.html)

### **Notes for editors on the IIS3DHHHC:**

With full-scale range of  $\pm 2.5g$ , the IIS3DHHHC 3-axis accelerometer is optimized for fine-positioning mechanisms and detecting small movements such as in advanced security sensors. Among key differences between this and typical consumer-oriented accelerometers, its ultra-low noise of  $45\mu g/\sqrt{Hz}$  (micro-g per root Hz) allows very high resolution.

Moreover, extreme stability ensures minimal drift of sensor characteristics over time or wide temperature variations. Sensitivity changes by less than 0.7% from  $-40^{\circ}C$  and  $+85^{\circ}C$ . Offset drift is below  $0.4mg/^{\circ}C$ . This enables equipment to deliver consistent performance in various environments, including outdoors in cold or warm climates, or in industrial equipment, industrial robots, and drones, with minimal calibration or recalibration required.

In addition, the IIS3DHHHC integrates analog-digital conversion, as well as digital circuitry including FIFO data storage and interrupt control. This saves external conversion components and also simplifies power management to reduce energy demand and to enable longer runtimes for battery-powered equipment.

### **About STMicroelectronics**

ST is a global semiconductor leader delivering intelligent and energy-efficient products and solutions that power the electronics at the heart of everyday life. ST's products are found everywhere today, and together with our customers, we are enabling smarter driving and smarter factories, cities and homes, along with the next generation of mobile and Internet of Things devices.

By getting more from technology to get more from life, ST stands for life.augmented.

In 2017, the Company's net revenues were \$8.35 billion, serving more than 100,000 customers worldwide. Further information can be found at [www.st.com](http://www.st.com)

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