



SiTime and Bosch accelerate innovation in MEMS Timing for 5G and IoT

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- ▶ A billion MEMS timing solutions from SiTime enable synchronization and connectivity of electronic devices
- ▶ Since 2009, Bosch has supplied MEMS wafers and implemented new process technologies that have helped enhance SiTime's timing solutions
- ▶ SiTime and Bosch are strengthening their process and manufacturing partnership to provide innovative timing solutions for future 5G, IoT and automotive applications

SANTA CLARA, Calif. – SiTime Corporation, a leading provider of MEMS timing, and Bosch, a global supplier of technology and services, announced a strategic technology partnership to accelerate innovation in micro-electro-mechanical systems (MEMS) timing. SiTime will work with Bosch to develop processes for next-generation MEMS resonator products. These MEMS resonators are the heartbeat of 5G, IoT and automotive electronics, and will enable the higher speeds of 5G, long battery life of IoT devices and increased reliability of driver assistance systems in automotive. Bosch will utilize its expertise in MEMS manufacturing to produce these resonators for SiTime and ensure availability of high-volume capacity.

Mobile phones, high-speed trains and stock markets have one thing in common – they must stay on time. And they do thanks to accurate MEMS timing devices found in millions of telecom, enterprise, and consumer electronic products.

“Since 2009 SiTime has counted on Bosch to manufacture more than a billion MEMS resonators,” said Rajesh Vashist, CEO of SiTime. “Over the next decade, the 5G, IoT, and automotive markets will drive the growth of the timing industry by creating a 200 billion unit opportunity. Automation, communications, and computing applications in these markets will require more features, higher accuracy and reliability from timing components.”

SiTime has revolutionized the \$6 billion timing industry with innovative MEMS timing solutions that offer unique benefits. SiTime has shipped over a billion units into all electronics markets, has over 90 percent share of the MEMS timing market, and has partnered with industry leaders, such as Intel, to drive timing innovation in 5G.

“Stable, reliable MEMS timing devices are needed for successful operation of new, high-bandwidth 5G, IoT and driver assistance systems,” said Jens Fabrowsky, executive vice president of the Automotive Electronics division at Robert Bosch GmbH. “Without ultra-precise timing, the benefits and opportunities for next generation systems will not be achieved. With Bosch’s MEMS leadership and manufacturing excellence, and SiTime’s groundbreaking MEMS timing technology, this partnership will make possible unique new features and mission-critical services in 5G, IoT, and automotive applications.”

Bosch has been both a pioneer and a global market leader in the MEMS sensor segment since 1995 and has sold more than 9.5 billion MEMS sensors. The company developed the manufacturing process behind MEMS technology nearly 25 years ago. More than every second smartphone worldwide uses a Bosch MEMS sensor.

“Bosch’s strong MEMS process capabilities are a foundation on which we can develop our next generation of higher performance MEMS resonators,” said Vashist. “Our partnership with Bosch will help extend our leadership into the coming decades.”

Press photo: #1463750

More Information:

[SiTime Fact Sheet](#)

[About SiTime](#)

[SiTime Website](#)

Contact person for press inquiries:

Jeremy Hyatt, Green Flash Media for SiTime

Phone: +1-949-290-5779

E-mail: jeremy@gflashmedia.com

Annett Fischer, Robert Bosch GmbH,

Phone: +49 (711) 811-6286

Twitter: [Annett__Fischer](#)

About SiTime

SiTime Corporation, the leader in MEMS timing and a wholly owned subsidiary of MegaChips Corporation (Tokyo Stock Exchange: 6875), offers MEMS-based silicon timing solutions that replace legacy quartz products. SiTime's configurable solutions enable customers to differentiate their products with higher performance, smallest size, lowest power, and best reliability. The rich feature set and flexibility of SiTime's solutions allow customers to consolidate their supply chain, reducing the cost of ownership and time to market. By using standard semiconductor processes and high-volume packaging, SiTime offers the best availability and shortest lead times in the industry. With 90% market share and over 1 billion devices shipped, SiTime is driving the electronics industry to use 100% silicon-based timing. www.sitime.com.

About Bosch

Mobility Solutions is the largest Bosch Group business sector. In 2017, its sales came to 47.4 billion euros, or 61 percent of total group sales. This makes the Bosch Group one of the leading automotive suppliers. The Mobility Solutions business sector pursues a vision of mobility that is accident-free, emissions-free, and stress-free, and combines the group's expertise in the domains of automation, electrification, and connectivity. For its customers, the outcome is integrated mobility solutions. The business sector's main areas of activity are injection technology and powertrain peripherals for internal-combustion engines, diverse solutions for powertrain electrification, vehicle safety systems, driver-assistance and automated functions, technology for user-friendly infotainment as well as vehicle-to-vehicle and vehicle-to-infrastructure communication, repair-shop concepts, and technology and services for the automotive aftermarket. Bosch is synonymous with important automotive innovations, such as electronic engine management, the ESP anti-skid system, and common-rail diesel technology.

The Bosch Group is a leading global supplier of technology and services. It employs roughly 402,000 associates worldwide (as of December 31, 2017). The company generated sales of 78.1 billion euros in 2017. Its operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. As a leading IoT company, Bosch offers innovative solutions for smart homes, smart cities, connected mobility, and connected manufacturing. It uses its expertise in sensor technology, software, and services, as well as its own IoT cloud, to offer its customers connected, cross-domain solutions from a single source. The Bosch Group's strategic objective is to deliver innovations for a connected life. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is "Invented for life." The Bosch Group comprises Robert Bosch GmbH and its roughly 440 subsidiary and regional companies in 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. The basis for the company's future growth is its innovative strength. At 125 locations across the globe, Bosch employs some 64,500 associates in research and development.

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