

SITIME TAKES DRIVERLESS CARS ONE STEP CLOSER TO REALITY

SiTime Corporation, the market leader in MEMS timing, today announced new oscillators for automotive networking in advanced driver-assistance systems (ADAS). These solutions will propel the automotive industry forward in their development of driverless cars. For successful ADAS operation, supercomputers in these cars will need to process massive amounts of data reliably and with low latency. The SiT9386 and SiT9387 oscillators enable just that. They deliver stable and reliable timing signals for All processors in automotive supercomputers, as well as for the interfaces that move data,

such as PCI Express and 10G, 40G, and 100G Ethernet.

„With our unique MEMS and analog technologies, SiTime is the only timing company that is disrupting automotive applications,“ said Piyush Sevalia, executive vice president of marketing at SiTime. „Timing is the heartbeat of electronics. Temperature changes, shock, and vibration can all destroy timing signals and can cause ADAS to fail. The SiT938X differential MEMS oscillators are the only timing solutions that are capable of withstanding such environmental stressors, while still delivering precision timing for ADAS operation.“



Earlier 2017, SiTime introduced the SiT8924/5 oscillators, a family of ultra-robust oscillators for all-around cameras. The SiT9386/7 oscillators further extend the company's offerings for the ADAS market. These devices are the first automotive products built on the Elite Platform™, a proprietary architecture that delivers excellent performance in harsh operating conditions:

- 30 times better than quartz in shock performance (10,000 g)
- 20 times better than quartz in reliability (over 1 billion hours MTBF)
- Extended temperature range (-40°C to +105°C)
- Robust operation in the presence of system noise (0.02 ps/mV PSNR)

In addition, the SiT9386/7 differential MEMS oscillators offer:

- Any frequency between 1 MHz and 725 MHz, accurate to 6 decimal places
- 0.23 ps typical RMS phase jitter (random)
- Frequency stability as low as ± 25 ppm
- The smallest package size (3.2 x 2.5 mm) for size-limited applications

- Also available in an industry-standard package (7.0 x 5.0 mm)
- LVPECL, LVDS, and HCSL output signaling types

Samples of the SiT9386/7 oscillators are available now on request. Production Part Approval Process (PPAP) documentation, compliant with the AIAG manual, will be available in the first half of 2018.

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.