

SiTime expands product portfolio with industry's first kHz frequency silicon MEMS oscillator

Medical Design Technology

SiTime Corporation, the leader in MEMS-based silicon timing solutions, today introduced the SiT8503, the industry's first kHz frequency silicon MEMS oscillator for audio, microcontroller and high reliability industrial applications. SiTime already has the industry's broadest portfolio of Silicon MEMS-based, megahertz (MHz) frequency, differential oscillators, clock generators, VCXOs, spread spectrum timing products and embedded resonators. The SiT8503 adds kilohertz (kHz) frequency timing solutions to this portfolio and builds on SiTime's capability as a one-stop silicon timing provider.

"The SiT8503 leverages its silicon MEMS technology and programmable architecture to offer many unique features that are not available from quartz, such as frequency and voltage configurability, small size, low power and extreme ruggedness," said **Piyush Sevalia**, vice president of marketing at SiTime. *"SiTime's growing customer base is rapidly replacing their quartz oscillators with Silicon MEMS solutions. In addition, our industry-leading portfolio of silicon timing solutions is enabling us to become a strategic supplier of timing components to large OEMs worldwide."* Some of the key features and benefits of the SiT8503 are:

- Programmable support for any frequency between 200 kHz and 1000 kHz (with accuracy up to 5 decimal places), which supports a wide range of applications and allows the customer to optimize the frequency for their application.
- Configurable operating voltages of 1.8V, 2.5V, 2.8V or 3.3V. Support of such a wide range of voltages eliminates the need for expensive, external, level translators and minimizes the need for additional regulators in the system, thus reducing cost.
- Extreme ruggedness that is just not available from quartz. The device exhibits shock resistance of up to 50,000 G and vibration resistance of up to 70 G
- Configurable frequency stability of $\pm 20\text{PPM}$, $\pm 25\text{PPM}$, $\pm 30\text{PPM}$ or $\pm 50\text{PPM}$ that enables the customer to optimize the product for the best timing margin in their system
- 100% drop-in replacement of quartz solutions in all four industry-standard surface-mount packages (7.0x5.0 mm, 5.0x3.2 mm, 3.2x2.5 mm and 2.5x2.0 mm)
- Current consumption of less than 10 μA in standby mode to ensure the longest battery life

Samples of the SiT8503 are available now and volume production will be available on Sept. 30, 2010. The 50 PPM SiT8503 in the 7.0x5.0 mm package is offered at a list price of \$1.05 in 10,000 unit quantities.

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is leading the electronics industry's transition from quartz products to MEMS-based silicon timing solutions. SiTime's products are the heartbeat of high-performance electronics such as FTTH and Passive Optical Networking (PON) equipment, 10-Gigabit Ethernet switches, Computing and Storage Servers as well as high volume applications such as Digital Cameras, LCD HDTVs, desktop and portable computers, Set Top Boxes (STB), Multi-function Printers and Solid-State Drives (SSD). **About SiTime**

SiTime Corporation, the industry leader in MEMS-based analog semiconductor solutions, addresses the \$5 Billion timing market with programmable silicon products that replace conventional, quartz technology. Headquartered in Sunnyvale, Calif., SiTime is backed by leading venture capital firms NEA, Greylock, Jafco and Bosch.

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