



SiTime Transforms Precision Timing with New Epoch Platform

Opening a \$2 Billion Market in the Next Decade and Setting a New Bar with Unmatched Performance and Reliability

SANTA CLARA, Calif.--(BUSINESS WIRE)--Sep. 19, 2023-- [SiTime Corporation](#) (NASDAQ: SITM), the precision timing company, today announced the [SiTime Epoch Platform™](#), designed to solve the most complex timing issues in electronics and disrupt 100-year-old quartz-based technology. The SiTime Epoch Platform is a MEMS-based, oven-controlled oscillator (OCXO) that delivers an ultra-stable clock to datacenter and network infrastructure equipment, unlocking a cumulative \$2 billion served addressable market (SAM) in the next decade. Over time, Epoch technology will be extended to other high-growth electronics markets, such as aerospace and defense, industrial controls and more.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20230919903817/en/>



SiTime Epoch Platform delivers 2x longer holdover and ensures reliable, continuous network operations. (Photo: Business Wire)

“The release of the Epoch Platform is a pivotal moment for SiTime and the electronics industry,” said Rajesh Vashist, CEO and chairman of SiTime.

“For many years, customers lived with the shortcomings of existing timing technologies because there were no viable alternatives. They compromised on real-world performance, reliability and power, to name just a few. SiTime’s Epoch Platform changes the game, delivering higher performance and reliability with lower power that was unavailable until now. These benefits are the result of a half-decade of engineering investment and a systems-based development approach that combines MEMS, analog, packaging and algorithms. Epoch, along with new products introduced since 2020, with more to come, will expand our communications and enterprise annual SAM to \$1.3 billion by 2024. We believe precision timing will be a catalyst for innovation in all electronics and will drive our future success.”

Precision timing is critical to network performance and reliability. All nodes in the network must be synchronized in time. For example, all nodes in a 5G network must always be synchronized within hundreds of nanoseconds, which is 10X more stringent than 4G. This level of synchronization must be maintained despite network outages. By delivering up to 2X better performance, 9X smaller size and 3X lower power in applications such as datacenter switches and routers, 5G base stations and core infrastructure, the Epoch Platform sets a new bar in performance and reliability.

“As the world embraces next-gen technologies, like the explosion of AI, the reinvention of the cloud data center, and high speed 5G/6G cellular networks, advanced circuit and network timing solutions have become critical in ensuring performance, fault tolerance and reliability,” said Dave Altavilla, co-founder, president and principal analyst at HotTech Vision & Analysis. “AI is the most disruptive, transformative technology innovation in decades, perhaps even in the last century. The high-bandwidth, low-latency data center infrastructure needed to support AI will require robust precision timing for critical wired and wireless network connectivity. Furthermore, these technologies will also be deployed at the edge and in the field, where tough environmental conditions will require more ruggedness and higher reliability than ever before.”

SiTime Epoch Platform Delivers 2X Longer Holdover and Ensures Reliable, Continuous Network Operations

A synchronized network relies on multiple, redundant timing sources to ensure continuous operation. One of these sources is an ultra-stable, local oscillator, typically an OCXO, which will “holdover” the network and ensure continued operation when other timing sources are impacted.

However, legacy quartz OCXOs are inherently unreliable and prone to performance degradation in the presence of environmental stressors such as temperature changes and vibration. To date, electronics companies compromised on real-world performance, reliability, size, power, and warm-up time to achieve the one thing that an OCXO delivered – a stable clock reference.

With the Epoch Platform, SiTime is breaking through all these limitations of quartz OCXOs. Epoch delivers 2X longer holdover, even under environmental stressors, enabling telecom and cloud service providers to deliver service continuity in real-world conditions.

Key Features of SiTime Epoch Platform

- Any frequency between 10 and 220 MHz, programmable up to 6 decimal places of accuracy.
- 8 hours of holdover, up to 12 hours with aging compensation – 2X better than other solutions in real-world environments.
- ± 1 , ± 3 , ± 5 ppb frequency stability over temperature
- Highest operating temperature range: $-40\text{ }^{\circ}\text{C}$ to $+95\text{ }^{\circ}\text{C}$
- 2.5, 2.8, and 3.3 operating supply voltage
- 3X lower power: 420 mW
- 3X better ADEV under airflow: $5\text{e-}12$ at 10 seconds averaging time
- 3X lower aging: ± 0.08 ppb/day
- 2X faster time to stability – 60 seconds
- 9X smaller footprint, 3X lower height: 9 mm x 7 mm x 3.73 mm
- Digital control with $5\text{E-}14$ resolution: I²C and SPI interfaces

Availability

Engineering [samples](#) of the SiT58xx Epoch Platform are available now for qualified customers. General samples will be available in October 2023. Volume production is expected in early 2024.

Additional Resources

- [Blog](#)
- [Product page](#)
- [Webinar](#)

About SiTime

SiTime Corporation is the precision timing company. Our semiconductor MEMS programmable solutions offer a rich feature set that enables customers to differentiate their products with higher performance, smaller size, lower power and better reliability. With more than 3 billion devices shipped, SiTime is changing the timing industry. For more information, visit www.sitime.com.

Forward-Looking Statements

This press release may contain forward-looking statements regarding future events. These forward-looking statements are intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. Readers are cautioned that these forward-looking statements involve risks and uncertainties that could cause our actual results and the timing of events to differ materially from those anticipated in such forward-looking statements, including, but not limited to: (i) the size and growth potential of the markets for our solutions, and our ability to serve and expand our presence in those markets, (ii) the

ability of our products to conform to, or be compatible with, certain industry-specific standards, and (iii) our ability to introduce and ship new products in volume; and other risks and uncertainties described more fully in our documents filed with or furnished to the Securities and Exchange Commission. More information about these and other risks that may impact our business is set forth in our more recent Form 10-Q filed with the Securities and Exchange Commission. All forward-looking statements in this press release are based on information available to us as of the date hereof and qualified in their entirety by this cautionary statement, and we assume no obligation to revise or update these forward-looking statements.



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