

Low power, smallest-in-class 32.768-kHz crystal oscillator

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electronic devices. The compelling smart phones and tablets we know today are a direct result of the integration of computing, navigation, display, and navigation technologies in a very small device.

Epson, the established leader in miniaturization of quartz crystal oscillators, has applied its core technologies and unique strengths - QMEMS and IC design and fabrication - to produce a miniature crystal unit and oscillation circuit in the industry's smallest package. The result is the SG-3030CM, a crystal oscillator that, despite its tiny size, offers the same level of accuracy and low current consumption (0.65 μ A at 1.8 V) as its predecessor, the SG-3030LC. Employing a highly versatile 32.768-kHz tuning-fork crystal, the SG-3030CM can be used in a wide variety of electronic systems, where it can help to reduce both system size and current consumption.

Seiko Epson Corporation the world leader of quartz crystal technology today announced that it has begun shipping samples of the SG-3030CM 32.768 kHz crystal oscillator. Epson's SG-3030CM is the smallest 32.768 kHz crystal oscillator available in its class today.

Integrating a crystal resonator and oscillation circuit in a very small package, Epson's SG-3030CM consumes the same amount of current and has a 50% smaller footprint and 65% smaller cubic volume than its predecessor, the Epson SG-3030LC. Epson's new SG-3030CM 32.768 kHz crystal oscillator is just 3.2 mm x 1.5 mm with a maximum thickness of 0.9 mm.

Typically used for clock and sub-clock (sleep & timer) applications, 32.768-kHz crystal oscillators are widely found in smartphones, tablet PCs, digital cameras and other mobile consumer electronics, as well as in dashboard gear such as car navigation systems.

Miniaturization of electronic components enables size reduction and feature integration for consumer

In addition to saving valuable board space, integrating the crystal and the oscillator into a single package solves frequency accuracy and quality issues. The crystal oscillator's characteristics are guaranteed prior to shipment, ensuring quality and reliability, and simplifying design, procurement, and manufacturing.

"We are delighted to announce the SG-3030CM, and are confident that it meets the needs of our customers," said Masayuki Kitamura, chief operating officer of Epson's Microdevices Operations Division. "As a leader in crystal devices, Epson will continue to provide the kind of compact, accurate, stable products required in electronics and social infrastructures."

More information:

www5.epsondevice.com/en/quartz.../c/spxo/sg3030cm.html

Provided by Epson

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