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FOR IMMEDIATE RELEASE

Jackson Labs Technologies, Inc. delivers the LC_XO™ a complete GPSDO reference in a sub 1 x 1 inch Footprint

“LC_XO™” can replace OCXO’s in legacy applications, can be socketed, or soldered into a customer’s PCB, and includes a 50 channel GPS receiver and an ovenized 10MHz crystal oscillator.



LOS GATOS, Calif., September 24th, 2011 – Jackson Labs Technologies, Inc, a designer and manufacturer of cutting-edge gps, timing and frequency equipment, today announced the availability of its breakthrough LC_XO 10MHz Frequency and Timing Reference which integrates a GPS receiver, power supplies, and an ovenized, disciplined crystal oscillator into a sub 1 x 1 inch footprint.

The LC_XO time and frequency reference is a highly integrated Global Positioning System Disciplined Oscillator (GPSDO) using a 50 channel GPS receiver with WAAS to discipline an OCXO or TCXO to typically better than 0.5ppb frequency accuracy. By combining a GPS receiver, oscillator, power supplies, and disciplining firmware onto a sub 1-inch-square PCB customers can replace legacy OCXOs with a unit that uses significantly less power, has lower height, and provides atomic clock frequency accuracy.

The LC_XO provides better than 1E-012 (one part per trillion) frequency accuracy averaged over 24 hours, and can be soldered or socketed onto a customers’ pcb. The LC_XO only requires the user to connect a GPS antenna signal and 3.3V power for operation. LC_XO is available in 10MHz and 16MHz versions from stock, and custom-frequencies can be ordered.

Jackson Labs Technologies, Inc. President Said Jackson noted that the LC_XO is extremely easy to use: “The LC_XO is a true plug-and-play product which the user can operate simply by applying 3.3V power and connecting a GPS antenna, then waiting typically around 5 to 10 minutes for the Lock output LED to indicate operation with better than 1ppb frequency accuracy. No previous GPSDO experience or software are required. The unit will also



provide GPS NMEA navigation messages with an industry leading better than 1 meter rms horizontal position accuracy.”

The LC_XO is a true disciplined oscillator rather than an NCO (numerically controlled oscillators), and does not suffer from phase noise, jitter, frequency discontinuities, and spurs that GPS NCO products are typically burdened with. The phase noise of the TCXO version at 100Hz is -132dBc/Hz, the noise floor is -158dBc/Hz, and the typical short-term average frequency accuracy and stability is better than 0.1ppb (parts per billion) when locked to GPS. The LC_XO is configured with an OCXO by default, and can optionally be delivered in a low-cost, low-power TCXO version with instant-on performance.

The TCXO version consumes less than 0.5Watts, operates from a single 3.3V power supply, and provides two serial interfaces for SCPI control and NMEA 0183 navigation output. LC_XO is available in 0C to +60C, or -25C to +75C versions. A LOCK/ALARM indicator output and firmware upgrade capability is built-in. Standard NMEA-0183 serial output sequences allow the unit to be used as a generic 50-channel WAAS/EGNOS/MSAS-enabled GPS receiver providing position, velocity, and time (PVT) solutions. Electronic aging compensation of the internal crystal allows holdover operation in scenarios where the GPS antenna is connected only for short yearly calibration cycles rather than continuously.

LC_XO samples ship from stock. With performance that exceeds existing Rubidium frequency references, and with price points similar to legacy OCXOs, the LC_XO sets a new standard.

WWW.JACKSON-LABS.COM/INDEX.PHP/PRODUCTS/LC_XO

About Jackson Labs Technologies, Inc.:

Located in Los Gatos, CA, Jackson Labs Technologies, Inc. is a privately held company that is setting new standards in timing and frequency generation for the defense, engineering, test & measurement, broadcast, and research markets. Jackson Labs Technologies, Inc.: The Next Generation of Timing & Frequency. To learn more, visit www.jackson-labs.com.