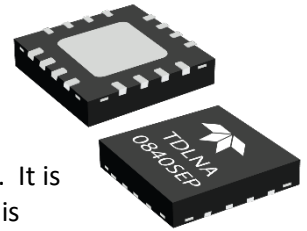


Teledyne e2v HiRel Releases Enhanced Plastic UHF to S-Band (0.3 GHz to 4 GHz) Ultra-Low Power Low Noise Amplifier for New Space Applications

MILPITAS, CA – June 19, 2024 – [Teledyne e2v HiRel](#) announces the availability of its latest space enhanced plastic (SEP) UHF to S-Band, low noise amplifier (LNA) model [TDLNA0840SEP](#) which is ideal for use in demanding high reliability applications where ultra-low power consumption, low noise figure, and small package footprint are critical for program success. This LNA, developed on a 150 nm, enhancement-mode, pseudomorphic High Electron Mobility Transistor (pHEMT) process, is available in a 16-pin quad-flat no-lead (QFN) 3 mm x 3 mm x 0.90 mm plastic surface mount package.

The LNA leverages monolithic microwave integrated circuit (MMIC) design techniques and delivers exceptional performance. The TDLNA0840SEP amplifier is ideal for UHF to S-band communications and consumes a mere 27 mW of power while delivering a gain of 29 dB from 0.3 GHz to 4 GHz and maintaining a noise figure of less than 2 dB and an input P1dB of -35 dBm. It is internally self-biased using $V_{DD} = +1.5$ volts and $I_{DDQ} = 17.8$ mA typical. No external bias resistor is required.



A customer evaluation kit is available for this LNA, which is an excellent choice for satellite communication systems featuring increased power of radio signals with minimal noise and distortion which can degrade digital signals.

The TDLNA0840SEP is TID radiation tolerant to 100 krad (Si) and is qualified per Teledyne’s Space enhanced plastic flow. It is available for sampling in third quarter 2024 and will be available for shipment from our DoD Trusted Facility in December 2024.

“Today, we’re releasing our latest ultra-low power LNA optimized for new space applications,” said Mont Taylor, Vice President and Business Development Manager at Teledyne e2v HiRel. “With a power consumption of only 27 mW, coupled with a flat gain-slope response of 29 dB from 0.3 to 4.0 GHz, we believe this new LNA will provide system designers with a superior solution for phased array communications and system applications where minimal power consumption is critical.”

For more information on all of Teledyne e2v HiRel’s space offerings, review our portfolio of semiconductors, converters, processors, and related services [here](#) on the Teledyne Defense Electronics website.

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Teledyne e2v HiRel’s innovations lead developments in space, transportation, defense and industrial markets. Teledyne e2v HiRel’s unique approach involves listening to the market and application challenges of customers and partnering with them to provide innovative standard, semi-custom or fully custom solutions, bringing increased value to their systems. For more information, visit www.tdehirel.com

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Serving Defense, Space and Commercial sectors worldwide, Teledyne Defense Electronics offers a comprehensive portfolio of highly engineered solutions that meet your most demanding requirements in the harshest environments. Manufacturing both custom and off-the-shelf product offerings, our diverse product lines meet emerging needs for key applications for avionics, energetics, electronic warfare, missiles, radar, satcom, space and test and measurement. www.teledynedefelec.com.

Media Contact:

Sharon Fletcher
Teledyne Defense Electronics
+1 323-241-1623 sharon.fletcher@teledyne.com