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FOR IMMEDIATE RELEASE

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Optichron® Single-Board Transmit Chain Development Platform Leverages Industry's Highest-Performance Digital Pre-Distortion Solution for Wireless Infrastructure Efficiency

Complete, Versatile Signal Chain Compression and Linearization Solution Provides a Foundation for Highly-Efficient Single Product Designs That Support Multiple Protocols and Frequency Bands

FREMONT, Calif. – March 31, 2008 – Optichron, Inc., the leader in digital nonlinear signal processing, today announced the availability of the DPD-CFR-DEV-30 development platform, a complete transmit signal chain compression and linearization solution from baseband to power amplifier (PA). The platform may be used as a reference for production solutions of multiple architectures, using a single, highly-efficient design that supports frequency bands from 800 MHz to 3.5 GHz and protocols from GSM to WiMAX, plus LTE, and proprietary protocols. The single-board platform is based on Optichron's [OP4400-30 digital pre-distortion \(DPD\)](#) and [OP5000 crest factor reduction \(CFR\) ICs](#). The protocol-agnostic OP4400 DPD can linearize signal bandwidths up to 30 MHz for 5th order compensation, the industry's highest DPD performance, with no requirements for a separate DSP chip. The combination of DPD and CFR enables design engineers who implement baseband infrastructure to more readily complete transmit and feedback loop designs that greatly improve power amplifier (PA) efficiency, thereby reducing system cost and operating expense. The platform is managed through a GUI, with no requirements for software development or subsequent software maintenance. Each

version is populated with optimized components including converters from Analog Devices, oscillators, filters and modulators. The complete platform is supplied with single-board hardware, GUI, documentation including schematics and Gerber files, and power supply. The board works with any PA and minimal instrumentation.

The OP4400 DPD family's universal algorithm is applicable to any PA architecture (including class AB and Doherty) and requires no algorithmic programming or external DSP chip. Seamlessly complementing the transmit path linearization capability of the OP4400-30, the company's OP5000 CFR IC is a high-quality and versatile signal-compression solution that reduces the peak-to-average ratio (PAR) of complex signals associated with wide-bandwidth protocols. The OP5000 CFR enables improved PA efficiency by letting designers select a more efficient operating point. When combined these two Optichron components provide the industry's most effective solution for improving PA efficiency, the largest waste of power in the system, so designers can maintain spectral compliance while increasing output power, and save on both cost and power dissipation by using smaller PAs. During development designers also have the option to bypass the CFR or DPD, as well as various other components, to tailor the platform to their requirements. The comprehensive yet simple GUI tool supports the flexible configuration of design features and optional connections.

“We see great demand for the wireless infrastructure efficiency improvements that our transmit signal chain compression and linearization solution can enable,” said Perry Constantine, chief executive officer of Optichron. “With this complete, versatile development platform based on the industry's best-performing DPD and CFR combination, designers can shorten the time to market for systems that provide the end-user advantages of sharply reduced infrastructure capital and operating expenses.”

Additional advanced ICs on the board support pre-distortion bandwidth up to 205 MHz, delivering signal bandwidth over 30 MHz, including Analog Devices' full-featured AD9788 dual-channel, 16-bit DAC and monolithic AD9230 12-bit ADC, and a 10 MHz clock generator. To enable selective behavioral evaluation and design flexibility, designers can bypass other key

components, including a 806.4 MHz VCO, TX and FB digital step attenuators, and TX and FB LOs, with provisions for easy off-board connections to alternate choices. The board also includes TX and FB mixers, and a quadrature modulator. Complete information is available at <http://www.optichron.com/products/tools.php>.

Price and Availability

Pricing is \$4,995 per unit. The DPD-CFR-DEV-30 development platform is currently available in the following four versions that support a wide range of protocols:

DPD-CFR-DEV-30C: GSM, CDMA, WCDMA, TD-SCDMA, LTE

DPD-CFR-DEV-30D: CDMA, WCDMA, LTE

DPD-CFR-DEV-30E: WiBro, LTE

DPD-CFR-DEV-30F: WiMAX, LTE

About Optichron

Optichron, Inc., a leader in digital nonlinear signal processing technology, designs and manufactures integrated circuits that enable significant improvements in system-level cost: performance for communications applications. Optichron® proprietary linearization technology is the industry's most efficient solution for correcting nonlinear distortion, a problem present in all signal processing systems. Signal linearization gives system designers more headroom to implement more efficient systems that cost less to build and operate. For more information and product details please visit www.optichron.com.

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