News Release



At Virtual MTT-S IMS 2020, Teledyne Showcases Dual-Channel DACs, Track & Hold Amps, Digitizer Studio Software, 90GHz Connectors

Nine Teledyne business units display comprehensive portfolio of RF/MW solutions

RANCHO CORDOVA, CA – August 3, 2020 – <u>Teledyne Technologies</u> is featuring a broad range of advanced RF & Microwave products and capabilities this week at the annual International Microwave Symposium, revamped into a 'virtual' online event this year due to the ongoing pandemic. Nine separate Teledyne brands currently deliver complex RF/MW solutions globally for the most demanding applications.

These Teledyne brands together serve customers worldwide in markets spanning Airborne, Electronic Warfare, Energetics, Missiles, Space, Radar, Test and Measurement, and Satellite Communications. Participating Teledyne companies include <u>Teledyne e2v Semiconductors</u>, <u>Teledyne Lincoln Microwave</u>, <u>Teledyne Labtech</u>, <u>Teledyne Microwave Solutions</u>, <u>Teledyne MEC</u>, <u>Teledyne Relays</u> / <u>Teledyne Coax Switches</u>, <u>Teledyne Scientific</u>, <u>Teledyne Storm Microwave</u>, and <u>Teledyne SP Devices</u>.

The experienced engineering resources and research and development teams embedded within Teledyne continue to develop and bring to market innovative RF/MW technologies to meet new and emerging challenges. Here is an overview of the capabilities being showcased next week.

IMS 2020: Featured Teledyne RF/MW Capabilities

- **Dual-Channel Digital-to-Analog Converters (DACs).** From Teledyne e2v Semiconductors, the new EV12DD700 dual-channel DACs operate at any band up to Ka, and enable system designers to migrate more RF hardware to digital code than ever before. They support beamforming applications and have a 25GHz output bandwidth 3dB point, and they can push well beyond this with just slightly more attenuation. An array of sophisticated signal processing functionality including a digital up-converter is also built-in to each DAC.
- 90GHz Connectors. From Teledyne Storm Microwave, there are new connectors optimized for 90 GHz now available. In addition to Storm's 1.0mm connectors that have an upper frequency range of 110 GHz, these two new 1.35mm connectors have a more robust mechanical design than the 1.0mm connector and are perfect for test and measurement use in applications like next generation vehicles and 5G backhaul radios. These new connectors significantly broaden the utility of Storm's existing SFO47EW cable. The WR12 direct connect waveguide flange (not an adapter) allows the SF047EW cable to be substituted in applications which would normally be restricted to using rigid waveguide thus giving the designer the ultimate layout flexibility.
- Track and Hold Amplifiers. From Teledyne Scientific Company, new 50GHz bandwidth Track and Hold amplifiers are now available, the RTH110 and RTH130. The RTH110 has an RF input bandwidth of 50GHz and a maximum sampling rate of 300MHz, and is ideal for signal sampling in Test and Measurement applications. The RTH130 has the same specifications but with a 10GHz+ sampling rate. It is a perfect fit for direct down conversion in RF applications. Both amps are available in an organic 4x4mm QFN package.
- Digitizer Studio Software. From Teledyne SP Devices, a redesigned Digitizer software environment is now
 available that is versatile and easy to use for Teledyne SP Devices' high performance digitizer products. The
 software, Digitizer Studio, offers powerful configuration, control, and display capabilities which greatly help
 simplify both performance evaluation and system-level integration. Digitizer Studio is a collaboration with
 Teledyne LeCroy based on over 20 years of software development experience in the field.

Additional products and capabilities being showcased include:

- Teledyne Labtech, complex RF/Microwave PCBs including advanced thermal management.
- Teledyne Microwave Solutions, world class amplifiers, RF modules, and subsystems.
- Teledyne MEC, compact, high power Ka and Q-band Travelling Wave Tubes (TWTs).

- **Teledyne Relays,** electromechanical from DC to 18 GHz; coaxial DC to 53 GHz; RF HEMT solid state DC to 60 GHz.
- Teledyne Lincoln Microwave, RF/Microwave modules, subsystems, and assemblies.
- Teledyne e2v Semiconductors, the world's first K-band DAC, 4 channel ADC at up to C band.
- Teledyne SP Devices, a comprehensive line of high speed digitizers.
- Teledyne Scientific, mmWave SSPAs, data converters, InP foundry, beamformer silicon and design services.
- **Teledyne Storm,** microwave cables, cable assemblies, and harness solutions.

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About Teledyne Technologies Incorporated

Teledyne Technologies is a leading provider of sophisticated instrumentation, digital imaging products and software, aerospace and defense electronics, and engineered systems. Teledyne's operations are primarily located in the United States, Canada, the United Kingdom, and Western and Northern Europe. For more information, visit Teledyne's website at www.teledyne.com.

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