

Microwave Components, Inc.

"Let our team at MCI help unwind your coil needs!"

Specializing in miniature air coils servicing Defense, Space and Hi-Rel Markets



Veteran Owned 2nd Generation Small Business



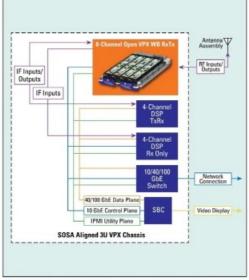
Materials include; bare and insulated gold, copper, silver, gold plated copper, nickel copper alloy, and aluminum wire.

Inductances from 1 to 1000+ nH

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EW, Radar & MilCom



A Fig. 3 SCi Blocks small form factor EW system.

a scalable physical architecture for the GbE, 10 GbE and 40 GbE interfaces to enable retrofit into currently deployed systems without changing existing system software. The SoC may also be used to implement Vita 49.2 messaging and data path protocols for future products. The SCi Blocks Manager allows system integrators a common command and control infrastructure for various RF circuitry, lending itself to much faster system integration.

The SWaP and ease of system integration of the RF Sticks are realized without compromising performance in the RF chain while creating other benefits. The reduction in SWaP into one slot in a 3U VPX chassis for an ES receiver opens the ability to add a general-purpose GPU (GPGPU) to a system, enabling cognitive or adaptive scanning of unknown threats or signals of interest. Unique small form factor EW systems are enabled by the RF Sticks. An example of this is shown in *Figure 3*.

The SCi Blocks module utilizes four down-converters for an ES receiver to provide situational awareness. Two up-converters and two down-converters are paired to produce the RF front-end for a wideband DRFM. The common command and control architecture for the SCi Blocks module along with the SOSA-aligned interfaces allows for quick and easy integration with the various digital signal processing elements and single-board computers. The combination can add new EW capabilities to small platforms such as unmanned aircraft systems previously unavailable due to SWaP constraints.

Spectrum Control's new SCi Blocks family is ideally suited for military and commercial Open Systems Architecture and SWaP-conscious platforms. Flexibility and adaptability without compromising RF performance bring a new level of creativity to system designers.

Spectrum Control Fairview, Pa. spectrumcontrol.com/sci-blocks

EW, Radar & MilCom **COMPANY SHOWCASE**



Miniature Air Coils for High-Reliability, RF and Microwave Applications

Microwave Components. Inc. (MCI) in Dracut, Mass., is a small, veteran owned manufacturer of miniature air coils. MCI has proudly been delivering custom,

high Q, miniature air inductors to the aerospace, defense and space markets since 1978. Materials include bare and insulated gold, copper, silver, gold plated copper, nickel copper alloy and aluminum wire. Inductances from 1 to 1000+ nH. Microwave Components, Inc.

www.mcicoils.com



See Norden's VPX Transceiver Specs

VENDORVIEW

Norden's wideband VPX transceiver is used across military applications. It offers 2 to 18 GHz operation in a versatile OpenVPX platform. The NUDC2-18/1.3-2.3 includes internal LOs which

provide an instantaneous IF bandwidth of 1 GHz and exceptional noise figure. The NUDC2-18_1.3-2.3 is currently in production. Contact Norden with your specific requirements and discuss custom configurations to meet your specification needs.

Norden Millimeter

https://nordengroup.com/wp-content/uploads/Norden-Transceiver.pdf



PLATH Signal **Products of PLATH** Group

PLATH Signal Products is a sensor division company within the PLATH Group. They formed in 2021 with the mission of taking their COMINT subsystems to market via system integrators, resellers and agents. Their antenna, monitoring receivers, direction finders and advanced Interception Automation subsystems are available as integrable elements of System Integrator's own SIGINT or COMINT platform. PLATH draws upon seven decades of signals experience to support partners in the development of operationally superior and effective systems.

PLATH Signal Products

www.plath-signalproducts.com



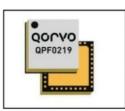
RF Subsystems & Integrated Filter Products by Q Microwave

Microwave supplies customers with high performance switch filter subsystems, down-converters,

up-converters and more. Discover its range of integrated products trusted for 25 years by leading providers of applications like frequency conversion, electronic warfare systems and radar systems.

Q Microwave

www.gmicrowave.com/rf-subsystems



Smallest 2-18 GHz 10 W FEM for Defense and Communications Applications **TWENDORVIEW**

Qorvo's QPF0219 is a 10 W multi-chip FEM that integrates a transmit/receive switch, a limiter, a low noise

amplifier and a power amplifier, making it ideal for electronic warfare, multifunction wideband arrays, radar and communications applications. Available in an 8x8 mm air cavity QFN package, the multi-die QPF0219 offers the optimal semiconductor technology for each functional block to maximize performance in challenging radar applications.

www.qorvo.com/products/p/QPF0219



Golden VHF Bootstrap Oscillator

Available from 80 to 130 MHz, the Golden Bootstrap oscillator provides ultra-low phase noise performance and low-g sensitivity of better than 5e-11/g below 300

Hz offsets, and 5e-12/g sensitivity above 300 Hz when vibration isolation is included. Quantic Wenzel's bootstrap oscillator technology consists of two rugged OCXOs of the same frequency phase locked together. Special compensation techniques minimize vibration induced phase noise by mechanically aligning the two oscillators and summing a compensation voltage with the electrical tuning to the oscillators. Quantic Wenzel

www.quanticwenzel.com