New Products and Services Guide

New GaN LNAs offer high output power through X-band

In addition to exhibiting low noise and high linearity, Custom MMIC's latest GaN LNAs deliver output IP3 of +32 dBm and high input power handling of 5 W. CMD276C4 is a 2.6 to 4 GHz (S-band) LNA delivering greater than 14 dB of gain, and a noise figure of 1.2 dB. CMD277C4 is a 5 to 7 GHz (C-band) LNA with 20 dB of gain, output 1 dB compression point of +26.5 dBm, and a noise figure of 1.2 dB.

MS PHILADELPHIA

CMD278C4 is a broadband 8-12 GHz (X-band) LNA with 15 dB of gain, output 1 dB compression point of +28 dBm, and a noise figure of 1.8 dB.

CMD2

Booth #851 | custommmic.com

CMD276



Expert microwave assembly and testing services, hard-to-find diodes, and so much more

SemiGen is pulling out the stops to be your full-service microwave provider. Their new state-of-the-art, RF hybrid and PCB assembly center includes an in-house foundry, a high frequency (up to 50 GHz) test lab, and a stockroom full of your most desperately needed



devices and bonding supplies. Their high performance diodes, such as: PINs, Limiters, Schottkys, Attenuator Pads, and Capacitors, are solving supply chain problems; and their manufacturing and test teams are solving capacity and delivery problems across the US.

Booth #2009 | semigen.net



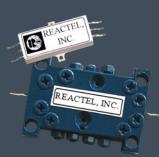


High Resolution Programmable Digital Attenuator

Vaunix has announced the release of a new Programmable Digital Attenuator. Lab Brick model LDA-906V is a 50-ohm device capable of bi-directional fixed attenuation, swept attenuation ramps, and creating fading profiles. It provides calibrated attenuation from 200 to 6.000 MHz with an impressive step size of 0.1 dB and typical accuracy <0.25 dB over 90 dB of control range. It is a driver-less, USB HID-class device and is ideal for quick set ups of WiMAX, MIMO, SIMO and other 5G wireless and microwave ATE test stands.

Booth #548 www.vaunix.com





Ultra-low profile filters for portable and airborne applications

Reactel is pleased to announce continued success in the launch of a series of ultra-low profile RF filters which exhibit equal performance to many of their larger connectorized designs. Utilizing innovative machining and material optimization techniques, these devices offer the highest Qs in frequencies to 30 GHz. Gull wing pins are available for lower for higher frequencies.

Stop by and take a chance at winning an Amazon Echo!



Booth #1703 reactel.com



GaN/SiC RF Power Modules create optimal HPAs

Integra's new, ultra-efficient RF Power Modules have been developed to offer a powerful yet simple, higher-level building block for creating optimized high power amplifiers (HPAs) in radar systems. Built-in functions include RF matching, gate-pulsing and sequencing (GPS), output noise suppression, temperature compensation, and VSWR protection. Integra's RF power modules operate up to 3.5 GHz (currently), and offer output power up to 2400 W, and efficiencies up

to 70%. Custom solutions and various packaging approaches are available.

Booth #815 | IntegraTech.com



Rugged, high-performance cables solve military challenges

TECT

San-tron is revolutionizing RF coaxial cable assembly design for critical military applications. Solutions include: Flexible, weatherproof and dust-proof pressurized assemblies; enhanced TNCs with standard or reverse polarity; highpower 7/16s; extreme shock- and vibrationresistant Type Ns; and high-flex, 20 GHz eSMA assemblies.

Booth #1348 | santron.com





Always Thinking

Fast-switching YiG Synthesizer keeps noise levels low

MicroLambda's Luxyn[™] YiG frequency synthesizer delivers an unprecedented combination of a 50 µs tuning speed and tuning steps as fine as 1 MHz. This is on top of typical phase noise of



-131 dBc/Hz offset 10 kHz from a 5 GHz carrier, -125 dBc/Hz offset 10 kHz from a 10 GHz carrier, and -154 dBc/Hz offset 10 kHz from a 50 MHz carrier. It also features impressively low noise levels, with harmonic levels of typically -12 dBc, subharmonics of typically -50 dBc, and spurious signal levels of typically -60 dBc.

Booth #1503 | microlambdawireless.com



Stocking, lapping, polishing, and laser processing of substrates, including BeO

Microcircuit designers looking to reduce the cost, time, and materials needed to fabricate their microelectronic circuits will find Laser Services a handy ally. Stocking all major brands of substrate material, Laser Services is an expert at cutting and scribing. As compared to water-jet cutting which allows for +/- 0.010" feature tolerance, laser cutting can achieve +/- 0.001". Designers can stop by and learn DFM tips on locating circuit features, singulation methods, metallization steps, and material properties.

Sister company, Accumet, provides ultra-precise lapping, polishing, and diamond cutting of ferrous and non-ferrous metals and ceramics, including BeO. Lapping can be completed from 6 µin to 60 µin and polishing of materials is from 0.1 µin to 5 µin. Accumet can also scribe or dice rectangular or other shaped parts up to 0.150" thick in geometries and as small as 0.005" x 0.005". Accuracy can be held to +/-0.0003"; repeatability to within 0.0001". Diamond machined edges/ bevels and chamfers can be machined within 0.0005".

Booth #1719 | laserservicesusa.com accumet.com



LASER

ACCUMET



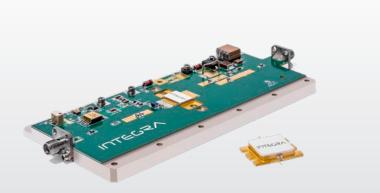
ProtoLaser S4 Dramatically Improves PCB Prototyping

The LPKF ProtoLaser S4 is an advanced and versatile PCB processing machine which allows you to go from CAD to a completed PCB in minutes without resist or chemical etching. The S4 processes standard copper-clad FR4, as well as a wide range of microwave substrates, including Duroid and PTFE, fired or unfired ceramics, PET foils, and flex materials. With its ultra-precise geometries, it is also usable as a PCB production-on-demand tool for unique filter, sensor, antenna and radar subsystem designs.

Booth #1216 Ipkfusa.com pcbprototypingmachines.com







Break away from the pack on your next radar system design by teaming up with Integra. You'll achieve leading-edge resolution, range and thermal control with our RF power devices offering over 80% efficiency, and our high-power experts will help you go the distance every time. Let's get started today.

Booth #815 | IntegraTech.com

