



AHEAD OF WHAT'S POSSIBLE™

# ELECTRONIC WARFARE

Work closely with Analog Devices early in your electronic warfare application design process to optimize performance, increase integration, and advance functionality. Our unmatched performance and system-level expertise for today's electronic warfare applications will help you solve your toughest challenges and ensure a competitive edge.



#ADlahead

LEARN MORE ABOUT OUR ELECTRONIC WARFARE CAPABILITIES.

[analog.com/EW](http://analog.com/EW)



Owning the electromagnetic spectrum. Rapidly processing information. And ever faster threat detection. We understand the demands of modern electronic warfare. From high performance, high reliability products and packaging solutions, we can deliver the lowest noise and widest bandwidth at optimized power levels to next-generation designs that can capture and process data in challenging hostile environments accurately and quickly.

We believe our approach to collaborating with customers provides fully integrated solutions across the entire signal chain. In addition, we focus on continuous innovation in state-of-the-art components, modules, and subsystems to ensure that you can continue to be Ahead of What's Possible.™



## Synthesizer/Fast Frequency Sweeping Technology

Modern electronic warfare requires greater precision to detect and analyze signals in the present battle space. The ability to support wide bandwidth and fast frequency hopping are key enablers for building electronic warfare, radar, and signal intelligence systems. Analog Devices offers industry-leading, high speed converters that enable direct sampling and analysis across the frequency spectrum.

- ▶ DDS direct RF synthesis at 6 GSPS (AD9164)
- ▶ Wideband mixers and low phase noise PLL and VCO combinations up to 40 GHz
- ▶ Next-generation GSPS wide bandwidth, highly linear ADCs (AD9689), and RF DACs (AD9172) (linearity, bandwidth, and sampling speed)
- ▶ Low noise, high efficiency power regulation with Silent Switcher® 2 architecture (LT8650S)





## Signal Intelligence

ADI technologies support accurate signal processing to detect signals in the presence of noise and frequency blockers. They help global militaries to identify vital information in a very wide bandwidth signal while also delivering a high level of security with reliable communications that minimize interception.

- ▶ Integration of COMINT and ELINT hardware in other military equipment
- ▶ Trusted security solutions designed to meet customer increasing security needs
- ▶ High performance, low jitter clocking solutions
- ▶ Very wide bandwidth high speed sampling converters with state-of-the-art performance in dynamic range and linearity
- ▶ Low noise, wide bandwidth amplifiers

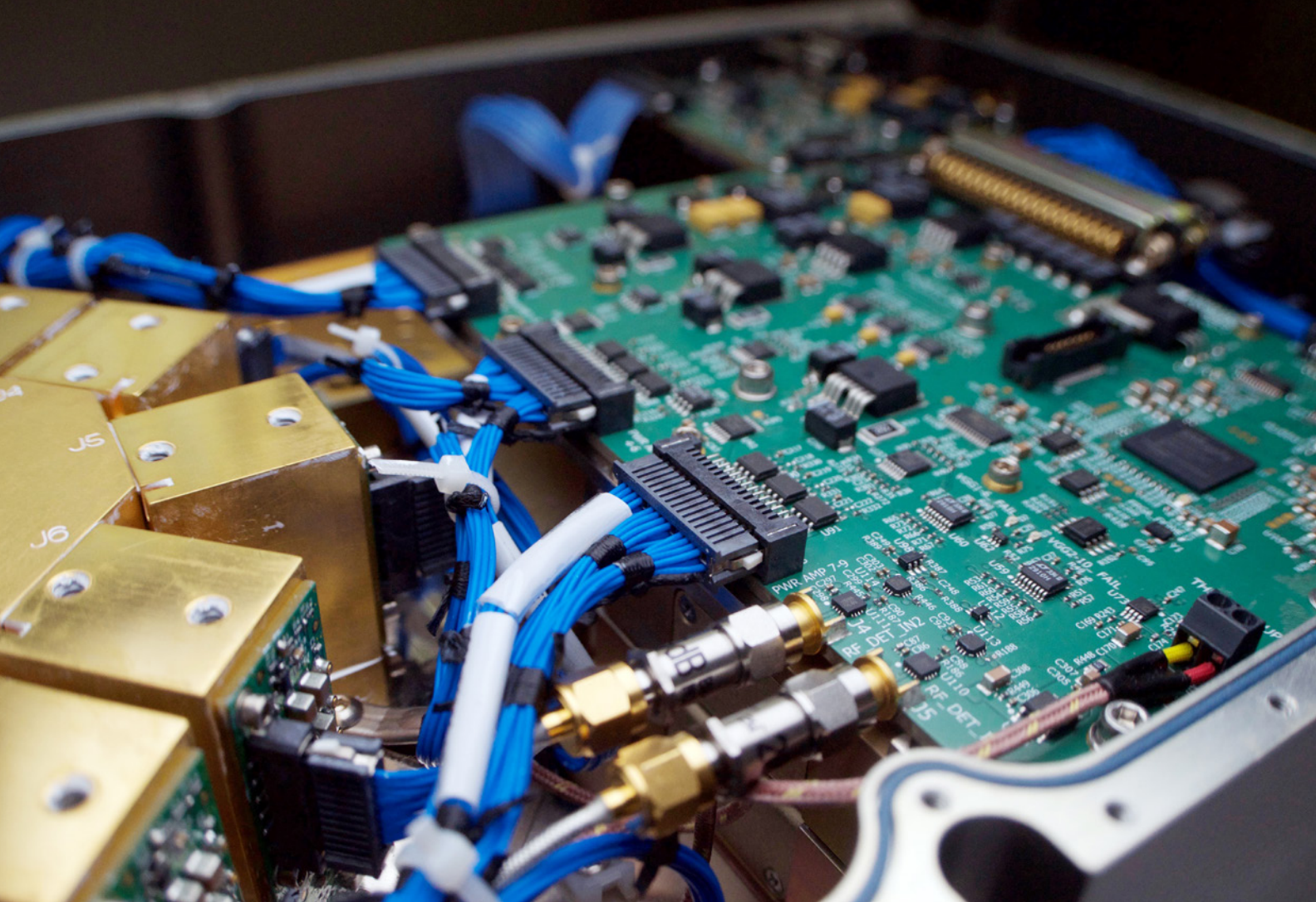


## Threat Detection and Jamming

EW is emerging as a predominant technology for survivability of military vessels. ADI understands the needs of increased vulnerability, which has led to advanced electronic protection and countermeasure systems.

- ▶ High speed converters allow for rapid capture and analysis of information in a hostile environment
- ▶ Wide selection of GaN/GaAs high power amplifiers
- ▶ Extensive range of wide bandwidth, low noise RF signal processing components
- ▶ Complete  $\mu$ Module<sup>®</sup> power management solutions provide high power density and efficiency





## Integrated Solutions Capabilities

Analog Devices leverages components, power management, and subsystems from the broadest product portfolio in the industry to create custom and standard integrated solutions that enable spectral dominance in the electronic warfare arena from dc up to 100+ GHz. In addition to providing high performance analog signal chains and converters, the Integrated Solutions team provides high power amplifiers well into the 20+ kilowatt range.

- ▶ Over 2 decades of integrated solutions experience for tier 1 defense companies
- ▶ Integration of wideband components into solutions to 80 GHz and beyond
- ▶ Built-in power conditioning and sequencing, test and fault detection algorithms
- ▶ Many standard products including wideband limiting amplifiers and SDLVAs
- ▶ Military and space qualified products

### Analog Devices, Inc. Worldwide Headquarters

Analog Devices, Inc.  
One Technology Way  
P.O. Box 9106  
Norwood, MA 02062-9106  
U.S.A.  
Tel: 781.329.4700  
(800.262.5643, U.S.A. only)  
Fax: 781.461.3113

### Analog Devices, Inc. Europe Headquarters

Analog Devices GmbH  
Ott-Aicher-Str. 60-64  
80807 München  
Germany  
Tel: 49.89.76903.0  
Fax: 49.89.76903.157

### Analog Devices, Inc. Japan Headquarters

Analog Devices, KK  
New Pier Takeshiba  
South Tower Building  
1-16-1 Kaigan, Minato-ku,  
Tokyo, 105-6891  
Japan  
Tel: 813.5402.8200  
Fax: 813.5402.1064

### Analog Devices, Inc. Asia Pacific Headquarters

Analog Devices  
5F, Sandhill Plaza  
2290 Zuchongzhi Road  
Zhangjiang Hi-Tech Park  
Pudong New District  
Shanghai, China 201203  
Tel: 86.21.2320.8000  
Fax: 86.21.2320.8222

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