



AHEAD OF WHAT'S POSSIBLE™

# UNMANNED AND REMOTELY PILOTED SYSTEMS

For over 50 years, Analog Devices, Inc. (ADI) has enabled our customers to develop advanced systems that achieve the highest levels of performance while reducing size, weight, power, system cost, and development time. Analog Devices provides a wide range of solutions for the unmanned systems market.

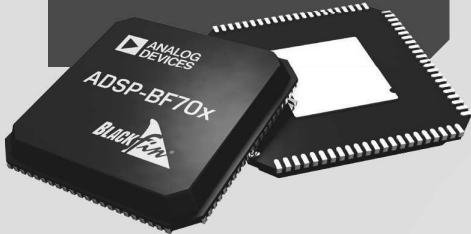
PROOF



Visit [analog.com/adev](http://analog.com/adev)

**Video Transmission**

Full line of analog/HDMI®/DVI interfaces along with codecs, compression, decoder, and encoder solutions. HD image signal processors with precision timing cores.



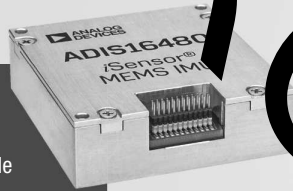
**Safety and Surveillance**

Chipsets to support ADS-B and transponders, along with IFF and sense and avoid.



**Navigation/ADAHRS**

Integrated inertial measurement unit (IMU) systems (3 to 10 axes) for attitude and position sensing—accelerometer, gyroscope, magnetic, pressure, and temperature sensors.



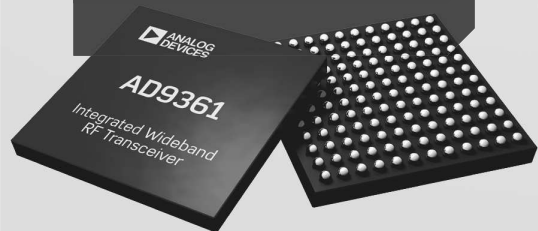
**Airframe Systems Monitoring**

Precision vibration sensors and analog-to-digital converters that support health utilization monitoring systems (HUMS).

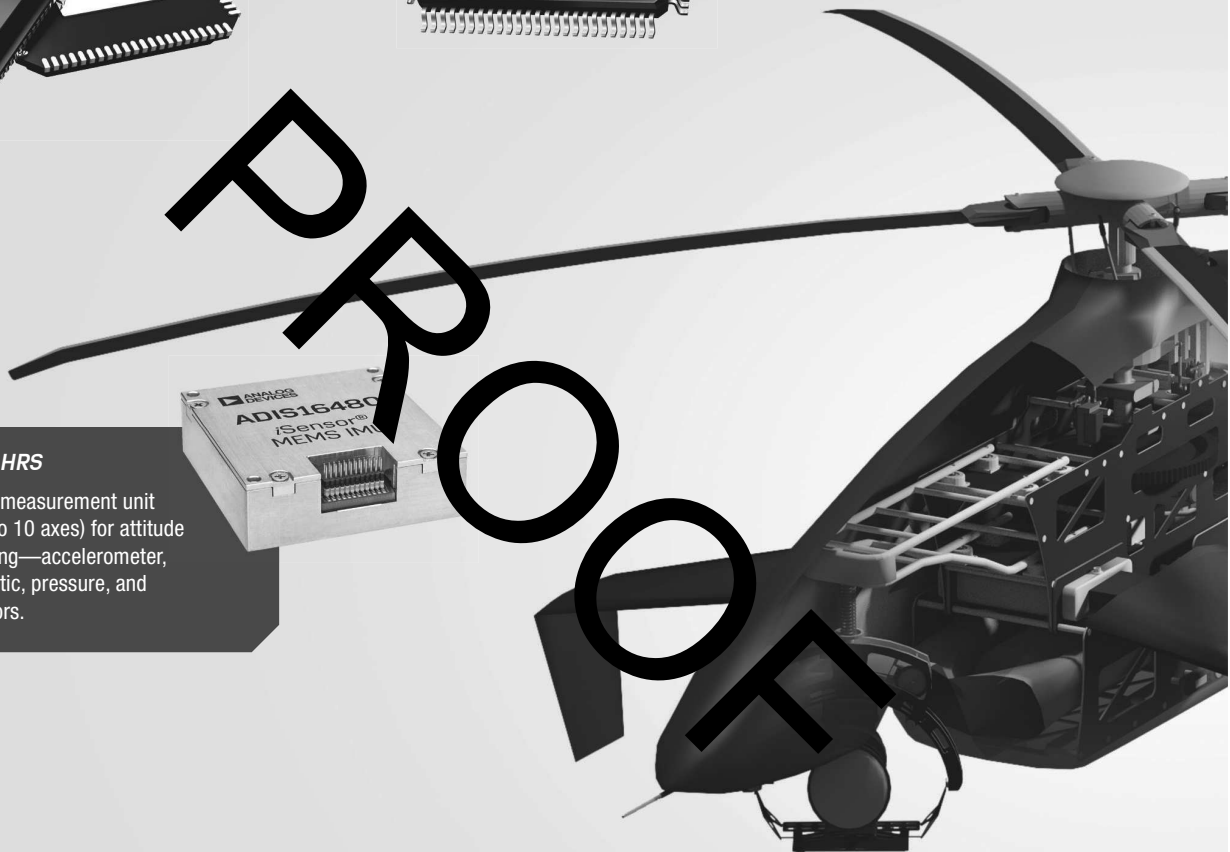


**Data Transmission and Vehicle Control**

Integrated transceiver ICs for both flight management control and data transmission.

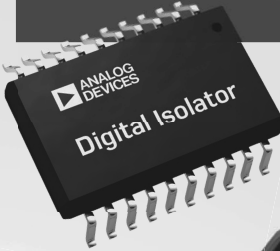


PROTOTYPING



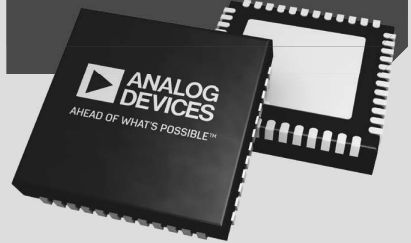
**Electrical Systems**

Motor control, power management, isolation, conditioning, and high quality amplifier components supporting flight control, power management, charging, and propulsion systems.



**Control Surfaces**

Flight control sensing and precision measurement via linear variable differential transformer (LVDTs), rotational converters, and strain sensor converters.

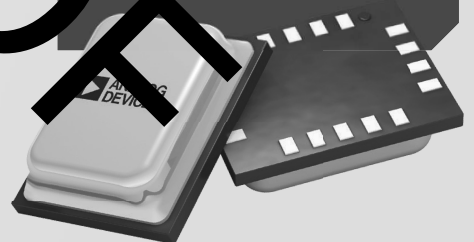


**Payloads**

High speed and precision converters and digital signal processors (DSPs) for interfacing to analog sensors and detectors.

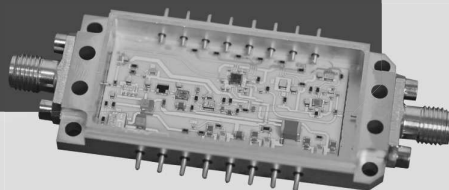
Advanced gyroscopes and accelerometers based on microelectromechanical systems (MEMS) for payload stabilization.

HDMI/DVI switches and buffers empower easy expansion of a number of HDMI inputs for multiple input display applications.



**Modules**

Analog Devices offers integrated system solutions to meet customers' specifications. ADI has developed a broad portfolio of digital, analog, microwave, and millimeter wave products to meet the challenges of unmanned systems supporting imaging, radar, surveillance, reconnaissance, and communications solutions.



**Collision Avoidance and Mapping**

24 GHz radar solutions for object detection, mapping, and ranging.



PROOF

## DO 178 B/C and DO 254 Support

Analog Devices recognizes the need to support DO 178 B/C and DO 254 processes to aid our customer's certification. ADI is working to provide the correct artifacts and processes to support complex components and software.

## Customized Solutions and System in Package (SiP)

System in package solutions provide reduced size and increase integration to optimize system performance and footprint. Using ADI's broad portfolio of die, advanced integrated solutions can be created for a wide and diverse range of applications.

## Integrated Assemblies

ADI designs and manufactures high performance miniature subsystems for high reliability applications utilizing ADI's expertise in system analysis, MMIC and module design, mechanical packaging, automated manufacturing, RF testing, screening, and qualification. The majority of MMIC ICs are ADI products that drive significant benefits in controlling performance, schedule, screening, qualification, packaging, and design optimization.

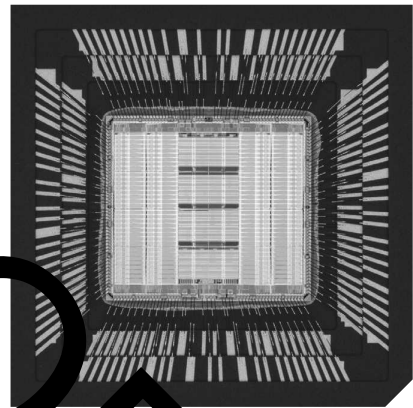
## RoHS Compliance

Restriction of Hazardous Substances (RoHS) regulations restrict the use of four heavy metals (lead, mercury, cadmium, and hexavalent chromium) and two brominated flame retardants (polybrominated diphenyl ethers and polybrominated biphenyls) in electrical and electronic devices. ADI provides products that allow our customers to be compliant with RoHS regulations. For more information on ADI's RoHS compliance program, see *Analog Devices RoHS Compliance Information* (6-14).

Analog Devices evaluation boards are specifically designed solely for the purpose of research and development and are made available solely on a business-to-business basis, therefore, they are excluded from the scope of the RoHS 2 Directive.

## Enhanced Products

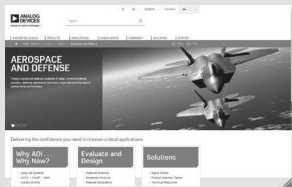
ADI's enhanced products (EP) portfolio provides a commercial off-the-shelf (COTS) solution for high reliability applications that negates the need for custom screening without the additional cost and challenges of custom designed parts. ADI focuses its efforts toward aerospace with parts certified to the Aerospace Qualified Electronic Component (AQEC) standard that defines the minimum set of requirements provided by the manufacturer that will allow a COTS component to be designated by AQEC (GEIA-STD-0002-1).



### Aerospace

To learn more about ADI's capabilities and for a complete list of aerospace solutions, visit

[www.analog.com/adeaf](http://www.analog.com/adeaf)



### Online Support Community

Engage with the Analog Devices technology experts in our online support community. Ask your tough design questions, browse FAQs, or join a conversation.

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



### Circuits from the Lab

Circuits from the Lab® reference designs are built and tested by ADI engineers with comprehensive documentation and factory-tested evaluation hardware.

[www.analog.com/cftl](http://www.analog.com/cftl)

**Circuits from the Lab®**

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