

## New Product Announcement

# Analog Devices ADuCRF101 Wireless Data Acquisition System Now at Mouser

**February 24, 2015** – [Mouser Electronics](http://www.mouser.com), Inc. is now stocking the [ADuCRF101 Precision Analog Microcontroller with RF Transceiver](#) from [Analog Devices](#). The ADuCRF101 is a fully integrated data acquisition system-on-a-chip designed for low power wireless applications. It features a 6-channel 12-bit analog to digital converter (ADC) built around a 16MHz ARM Cortex-M3 core, as well as a complete wireless RF transceiver. On-chip memory includes 128KBytes of Flash part of which can be partitioned to be used like EEPROM, and 16KBytes of SRAM, all in a package just 9mm x 9mm. This new microcontroller targets [Internet of Things](#) as well as [smart meters](#), home automation, process and building control, [wireless mesh networks](#), and the latest IEEE 802.15 Smart Utility Networks (SUN) applications.

The [Analog Devices ADuCRF101 Precision Analog Microcontroller with RF Transceiver](#), available from Mouser Electronics, contains everything needed to implement a wireless data acquisition system, including analog and digital [sensor](#) inputs and an RF transceiver. The data acquisition section consists of a high resolution 12-bit ADC with a programmable data rate of up to 167kSPS. The ADC has six channels which can be configured in either single ended or differential modes. In single-ended mode, the ADC can be used with sensors that have ratiometric outputs, such as transducers. Serial inputs include a UART, I2C, and SPI which can be used to interface to external sensors.

The on-chip [RF transceiver](#) operates over two frequency bands, 862MHz to 928MHz and 431MHz to 464MHz, covering the worldwide license-free ISM bands at 433 MHz, 868 MHz, and 915 MHz. It is suitable for applications that operate under the European ETSI EN300-220, the North American FCC (Part 15), and the Chinese short-range wireless regulatory standards. The RF transceiver section supports ZigBee as well as custom wireless protocols. This high degree of integration significantly lowers [Bill-of-Materials \(BOM\)](#) costs.

This wireless data acquisition system is designed for battery-powered applications where [low power](#) is absolutely critical. The ADuCRF101 can be configured to operate under different low power modes under direct program control. A Flexi mode is available, which allows any peripheral to wake up the device. Hibernate mode allows only the internal wake-up timer to remain active. Shutdown mode is the lowest power mode and only an external interrupt can wake up the microcontroller.

To learn more, visit: <http://www.mouser.com/new/Analog-Devices/adi-aducrf101-microcontroller/> .

With its broad product line and unsurpassed customer service, Mouser caters to design engineers and buyers by delivering What's Next in advanced technologies. Mouser offers customers 20 global support locations and stocks the world's widest selection of the latest semiconductors and electronic components for the newest design projects. Mouser Electronics' website is updated daily and searches more than 10 million products to locate over 4 million orderable part numbers available for easy online purchase. Mouser.com also houses an industry-first interactive catalog, data sheets, supplier-specific reference designs, application notes, technical design information, and engineering tools.

### **About Mouser Electronics**

Mouser Electronics, a subsidiary of TTI, Inc., is part of Warren Buffett's Berkshire Hathaway family of companies. Mouser is an award-winning, authorized semiconductor and electronic component distributor, focused on the rapid introduction of new products and technologies to electronic design engineers and buyers. Mouser.com features more than 4 million products online from more than 500 manufacturers. Mouser publishes multiple catalogs per year providing designers with up-to-date data on the components now available for the next generation of electronic devices. Mouser ships globally to over 400,000 customers in 170 countries from its 492,000 sq. ft. state-of-the-art facility south of Dallas, Texas. For more information, visit <http://www.mouser.com>.

### **About Analog Devices**

Analog Devices has built one of the longest standing, highest growth companies within the technology sector utilizing cultural pillars such as innovation, performance, and excellence. Acknowledged industry-wide as the world leader in data conversion and signal conditioning technology, Analog Devices serves over 100,000 customers, representing virtually all types of electronic equipment. Celebrating over 40 years as a leading global manufacturer of high-performance integrated circuits used in analog and digital signal processing applications, Analog Devices is headquartered in Norwood, Massachusetts, with design and manufacturing facilities throughout the world. Analog Devices' is included in the S&P 500 Index.

### **Trademarks**

Mouser and Mouser Electronics are registered trademarks of Mouser Electronics, Inc. All other products, logos, and company names mentioned herein may be trademarks of their respective owners.

– 30 –

Further information, contact:  
Kevin Hess, Mouser Electronics  
Vice President Technical Marketing  
(817) 804-3833  
[Kevin.Hess@mouser.com](mailto:Kevin.Hess@mouser.com)

For press inquiries, contact:  
Kelly DeGarmo, Mouser Electronics  
Corporate Communications Manager  
(817) 804-7764  
[Kelly.DeGarmo@mouser.com](mailto:Kelly.DeGarmo@mouser.com)