October 6, 2016

Analog Devices' Low Power AFE Enables Smaller, Lighter Wearable Health Devices with Longer Battery Life

NORWOOD, Mass.--(BUSINESS WIRE)-- Analog Devices, Inc. today announced a low power, next-generation biopotential analog front end (AFE) which enables smaller, lighter, and less obtrusive cardiac monitoring devices with longer battery life. The AD8233 AFE is a fully integrated, single-lead electrocardiogram (ECG) front end designed in one compact, easy-to-use component. Typically, developers need to design ECG front ends from individual components, which can add incremental cost and design time. The highly integrated, out-of-the-box AD8233 AFE eliminates these unnecessary costs and extra time, helping developers get products to market more quickly. Additionally, the device's 2.0mm × 1.7mm tiny size enables the design of wearable health devices that are smaller, lighter, and easier to wear. Bulky, heavy, and obtrusive monitors can be unpleasant for patients to wear and may even interfere with their everyday lives. Longer battery life is another crucial attribute for cardiac monitors and is vital to ensure continuous monitoring that provides accurate data without the interruption of a recharge or battery replacement. The AD8233 AFE's low microamp-range power consumption results in greatly extended battery life.

This Smart News Release features multimedia. View the full release here:
http://www.businesswire.com/news/home/20161006005016/en/

Analog Devices' Low Power AFE Enables Smaller, Lighter Wearable Health Devices with Longer Battery Life (Photo: Business Wire)

- View product page, download data sheet, order samples and evaluation boards: http://www.analog.com/AD8233
- Read the article "Home is Where the Heart Is" to learn more about Analog Devices and home health-care monitoring: http://www.analog.com/media/en/technical-documentation/technical-articles/Home-Is-Where-The-Heart-Is.pdf
- Connect with engineers and ADI product experts on EngineerZone®, an online technical support community: https://ez.analog.com/welcome

Along with its small size, the single-supply (1.7 V to 3.5 V) AD8233 features extremely low quiescent current of 50 µA (typical); lead on/off detection even while in shutdown mode (< 1 µA); and 80-dB common-mode rejection ratio (DC to 60 Hz). Electrical noise, a critical specification for cardiac-monitoring devices, is below 10 µV from 0.5 to 40 Hz. The AD8233 also allows for highly flexible filter configurations which are essential to consistent, confident operation in an inherently harsh electrical environment under a range of use cases: a two-pole adjustable high-pass filter, a three-pole adjustable low-pass filter with adjustable gain, and an RFI filter. For ease-of-use and flexibility, it also includes an integrated right leg drive (RLD) amplifier with shutdown plus an uncommitted op amp. Analog Devices also offers an evaluation board, reference design, web based filter design tool and Spice model to facilitate design-in and speed time to market.

Pricing and Availability

Product	Full Production	Price Each per 1,000	Packaging

AD8233	Now	$1.49	2 mm × 1.7 mm WLCSP
AD8233CB-EBZ	Now	$46.27	Evaluation Board

About Analog Devices

Analog Devices (NASDAQ: ADI) designs and manufactures semiconductor products and solutions. We enable our customers to interpret the world around us by intelligently bridging the physical and digital with unmatched technologies that sense, measure and connect.

Read and subscribe to Analog Dialogue, ADI's monthly technical journal, at: http://www.analog.com/library/analogDialogue

View source version on businesswire.com: http://www.businesswire.com/news/home/20161006005016/en/

Analog Devices, Inc.
Linda Kincaid, 781-937-1472
linda.kincaid@analog.com
or
Porter Novelli
Andrew MacLellan, 617-897-8270
andrew.maclellan@porternovelli.com

Source: Analog Devices, Inc.