Product Overview
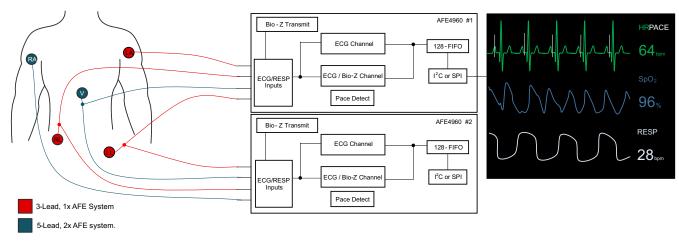# Analog Front End for 3-Lead and 5-Lead ECG

Capabilities Using One or Two AFE4960 Devices

More Information on ECG Systems Design

- TI's patient monitoring video tutorials
- Contact TI for design-in tools
- Evolving Semiconductor Technologies for Modern Telehealth Applications White Paper
- TI Support Forums

- AFE4960 Unboxing Video
- AFE4960 Hardware and Software Operation Video
- AFE4960 Signal Chain Video
- AFE4960 ECG Demo Video

Design Considerations

Upcoming design deadlines?	AFE4960 is highly integrated, just add patient protection and an MCU for a functioning system.
Need more than a 3-Lead ECG system?	Pair two AFE4960 devices in parallel to realize a 5-Lead ECG (4 ECG, 2 RESP) system.
Need SpO2?	AFE4960P comes with 4 LED, 4 PD PPG signal support for SpO2 measurement.
Need high-fidelity signal?	AFE4960 features 1+ GΩ input impedance, CMRR > 100 dB, and programmable-gain INA.

AFE Configuration	1-ECG	2-ECG	ECG and RESP	IDLE
Power Consumption (Typical Conditions)	About 520 μW	About 820 μW	About 1.26 mW	About 27μW

Related Devices

Feature	AFE4950	AFE49I30	AFE4960	AFE4960P	ADS1294	ADS1294R	ADS1296	ADS1296R	ADS1298	ADS1298R	ADS1299
ECG Channels	1	1	2	2	4	4	6	6	8	8	8
Respiration?	–	–	Integrated	Integrated	–	Analog	–	Analog	–	Analog	–
Pace?	–	–	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
PPG?	Integrated	Integrated	–	Integrated	–	–	–	–	–	–	–

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Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
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