

New Product Announcement

Get the Pulse of the Maxim MAX30100 Oximeter and Heart Rate Sensor IC Available from Mouser

April 29, 2015 – [Mouser Electronics](http://www.mouser.com), Inc., the global authorized distributor with the newest semiconductors and electronic components, is now stocking the [MAX30100 Pulse Oximeter and Heart-Rate Sensor IC](#) for wearable health from [Maxim Integrated](http://www.maximintegrated.com). The MAX30100 is a 14-pin surface mount IC that contains sensors for measuring a person's heart rate. It can also indirectly determine the oxygen saturation of a person's blood. The MAX30100 provides a complete pulse oximetry and heart rate measurement solution for [medical monitors](#) and [fitness wearable devices](#).

The [Maxim Integrated MAX30100 Pulse Oximeter and Heart-Rate Sensor IC](#), available from Mouser Electronics, combines the features of a heart rate monitor sensor and an oximeter in a [single chip sensor solution](#). A [pulse oximeter](#) is a device that measures the oxygen saturation of a person's blood by placing an LED and a photodetector against the thin skin of a person's body, such as a fingertip, wrist, or earlobe. The MAX30100 has a red LED, an infrared LED, and a photodetector recessed into the top of the package. The red LED is used for pulse oximetry and the infrared LED is used for [measuring heart rate](#). As each LED emits light into a person's finger, the integrated photodetector measures variations in light caused by blood volume changes. An integrated 16-bit analog to digital converter (ADC) with programmable sample rate converts the photodetector output to a digital value. This value is then processed by an on-chip low noise analog signal processor which determines the heart rate and blood oxygen content. Data is read through a serial I2C interface.

The MAX30100 filters out ambient light that can interfere with an accurate reading. It requires 600µA when operational and draws only 700nA in shutdown mode. The current to the two LEDs is programmable for use in [low power applications](#) and is in a 14-pin optical land grid array (OLGA-14) package measuring only 5.6x2.8x1.2mm. The MAX30100 targets [wearable medical devices](#).

To learn more, visit: <http://www.mouser.com/new/maximic/maxim-max30100-sensor/>.

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 500,000 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 Maxim Integrated

Maxim is the leader in analog integration. From mobile to industrial solutions, Maxim is making analog smaller, smarter and more energy efficient.

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