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Plessey Semiconductors launches PS25203 EPIC sensor for automotive applications at Chicago Sensor Expo 2012

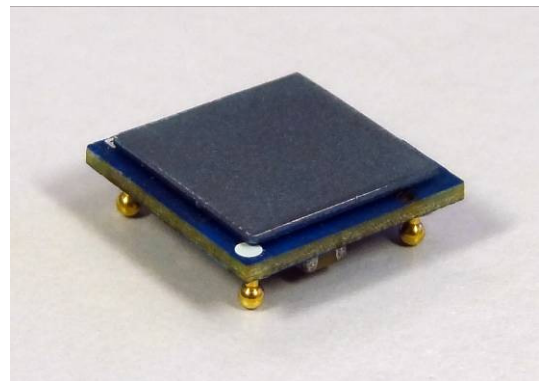
Plymouth, ENGLAND – 21 May 2012 – Plessey Semiconductors' award winning EPIC™ sensor technology has been creating considerable interest with car manufacturers as it can be used to provide low cost, reliable detection systems for several automotive applications. Plessey will be launching a version, the **PS25203**, which is specifically aimed at this market at the Chicago Sensor Expo 2012. This has a lower gain and higher input impedance making it ideal for certain types of contactless ECG measurement such as driver fatigue monitoring or seat occupancy. The EPIC sensor is a completely new area of sensor technology and works by measuring tiny changes in an electric field in a similar way to a magnetometer detecting changes in a magnetic field even at a distance and through clothing.



There are several applications where EPIC can be used in cars. For example, driver monitoring for health and alertness by detecting heart rate and respiration or determining the occupancy of the car to adjust the ride, handling and air bag deployment depending on the size and location of occupants. The EPIC sensor electrodes can be easily and discretely incorporated inside the seat backs to acquire the necessary biometric data.

“Regulations and economics are meaning that car designs are all becoming very similar so that manufacturers have to differentiate their products by the user features and comfort inside the car,” explained Derek Rye, Plessey Semiconductors' Marketing Manager. “We are only just starting to explore the new and exciting ways that these innovative sensors can be used to enhance and improve safety.”

EPIC sensors are already in commercial production by Plessey Semiconductors. By adjusting the DSP and amplification circuitry, the sensors can be tuned for detection at a distance as required for these automotive applications. Volume production pricing for the PS25203 is in the region of \$1-2. The PS25203 is supplied in a custom 4-pin PCB hybrid package measuring 10.5mm x 10.5mm x 3.45mm.



Plessey will be demonstrating automotive and Sports and Fitness reference designs on their booth 627 at the Chicago Sensors Expo Show in June 6-7, 2012 (<http://www.sensorsmag.com/sensors-expo>). Application notes are available on the Plessey website at www.plesseysemiconductors.com/products/epic/applications/

Plessey' EPIC Sensor technology

The EPIC sensor, which requires no physical or resistive contact to make measurements, will enable innovative new products to be made such as medical scanners that are simply held close to a patient's chest to obtain a detailed ECG reading or safety and security devices that can 'see' through walls. The sensor can be integrated on a chip with other features such as data converters, digital signal processing and wireless communications capability.

The technology works at normal room temperatures and functions as an ultra-high, input impedance sensor that acts as a highly stable, extremely sensitive, contactless digital voltmeter to measure tiny changes in the electric field down to millivolts. Most places on Earth have a vertical electric field of about 100 Volts per metre. The human body is mostly water and this interacts with the electric field. EPIC technology is so sensitive that it can detect these changes at a distance and even through a solid wall.

Video demos at http://www.plesseysemiconductors.com/media_video.html

About Plessey Semiconductors Limited

Plessey Semiconductors are the leading experts in the development and manufacture of semiconductor products used in sensing, measurement and controls applications. Plessey's products are found in a wide range of markets including communications, manufacturing, medical, defence, aerospace and automotive. Plessey designs their products specifically for high performance applications and its range of integrated sensing products includes electric potential sensors, CMOS image sensors and Hall Effect devices. These products all benefit from Plessey's high precision, high temperature and radiation tolerant technologies.

EPIC is a trademark of Plessey Semiconductors

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