

PRESS RELEASE

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Plessey launches an ultra-low cost version of its award winning EPIC sensor for high volume consumer applications at Chicago Sensor Expo 2012

Plymouth, ENGLAND – 30 May 2012 – Plessey Semiconductors announced today the release of the **PS25451**, an ultra-low cost version of its award winning *EPIC™* sensor that provides remote sensing for high volume consumer markets. A novel electrode design has been devised to replace the expensive titanium dioxide electrodes currently used for the higher end, medical applications of EPIC technology.

The PS25451 is an ultra-high impedance, non-contact, solid state electric potential sensor that can be used for a variety of consumer electronic devices such as proximity switching of lighting, gesture-based remote control of interactive toys, computer games, TVs, monitors, other appliances and presence detection for security/alarm systems.

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. This enables it to be used for security motion sensors and non-contact electrical switches as well as medical applications detecting heart beats, nerve and muscle activity either by dry contact (i.e. no gels required) or contactless.

Dr. Keith Strickland, Plessey's Technology Director, explained, "EPIC sensors can be used in an extremely wide variety of applications so we have created a product family that enables customers to select the most appropriate sensor solution according to the application's requirements for cost, operational range and sensitivity. The new electrode design for the PS25451 is formed on the copper track of the circuit board that is then covered by the normal protective resist."

EPIC sensors are already in commercial production by Plessey Semiconductors. By adjusting the gain and bandwidth amplification circuitry, the sensors can be tuned for detection at a distance as required. Production pricing for the PS25451 is less than \$1 in volumes above 50,000. It is supplied in a custom 3D package with exposed pins for surface mount assembly and measures 10mm x 10mm x 2mm, which is also pin compatible with the existing PS25401 EPIC sensor.

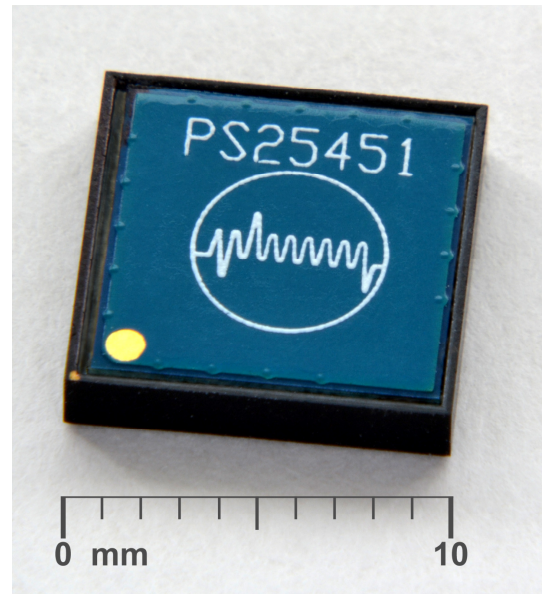
Plessey will be demonstrating the EPIC technology and reference designs on their booth 627 at the Chicago Sensors Expo Show in June 6-7, 2012 (<http://www.sensorsmag.com/sensors-expo>). The PS25451 datasheet can be found on the Plessey website at <http://www.plesseysemiconductors.com/products/epic/datasheets/> and EPIC application notes are available at www.plesseysemiconductors.com/products/epic/applications/

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

EPIC is a trademark of Plessey Semiconductors

Media contact:

Derek Rye, Group Marketing Manager, Plessey Semiconductors Ltd

Tel: +44 (0)1793 518026. Email: derek.rye@plesseysemi.com

Nigel Robson, Vortex PR Tel: +44 1481 233080 Email nigel@vortexpr.com