


Intel® Embedded Design Center

Ask. Click. Get answers.
Click to chat now with an Intel engineer. [Learn More >](#)



newelectronics
The site for electronic design engineers



- [Home](#)
- [Advertise](#)
- [Magazine](#)
- [Events](#)
- [NETV](#)
- [Directory](#)
-
-

News

Technology

: R&D

: Embedded

: Communication

: System design

: Industry sectors

: News

: Educational

: White Papers

Sensor Zone

Channels

: Embedded

: Power

White papers

Interviews

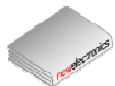
Products

Tech. Spotlight

Blogs

Jobs

Ezines



Subscribe to magazine

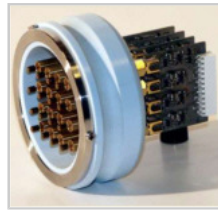
Plessey Semiconductors announce technology that can 'see' through walls

10/11/2010 [Email to a friend](#) [Comment on this article](#)

Plessey Semiconductors have announced a collaboration with the University of Sussex on a breakthrough Electric Potential Sensor (EPS). The technology is currently the size of a small coin and claims to detect changes in electric field, in contact, at a distance, through clothing and even through walls.

The sensor has been designed to measure changes in an electric field in a similar way to a magnetometer detecting changes in a magnetic field.

The initial application areas for EPS, which reportedly requires no physical or resistive contact to make measurements, will be in medical and sports. The sensor aims to enable innovative new products such as a contactless ECG, pictured, whereby an array of EPS sensors can be held over the patient's chest to obtain readings. According to the Plessey Semiconductors, these readings will give the equivalent of a 12 lead ECG without wiring or electrodes.



The EPS technology is said to work at normal room temperatures and functions as an ultra high, input impedance sensor that acts as a stable, sensitive and contactless digital voltmeter to measure tiny changes in the electric field down to millivolts.

Professor Robert Prance of the University of Sussex, explained, "We created this technology initially as a noninvasive, non contact sensor for measurements in fundamental physics research. However, we quickly realised the many important applications for which this technology could be utilised. Our Research Councils UK Basic Technology programme has allowed us to develop a generic EPS and we have been able to demonstrate its application in a number of areas. We are delighted to have found a partner that we can now go forward with to develop this unique technology into innovative product solutions for the marketplace."

Dr Keith Strickland, Technology Director for Plessey Semiconductors, said, "The EPS technology created by Professor Prance's team is a significant innovation that will have a wide ranging disruptive impact in the sensor market. We expect to have our first product prototype available in Q3 of next year for a medical diagnosis product that will significantly advance the ease and quality of cardiac measurements."

Author
Laura Hopperton

Supporting Information
<http://www.plesseysemiconductors.com/>

This material is protected by Findlay Media copyright 2010. See [Terms and Conditions](#). One-off usage is permitted but bulk copying is not. For multiple copies contact the [sales team](#).

Bookmark this article using:

-  [Del.icio.us](#)
-  [digg](#)
-  [reddit](#)
-  [Facebook](#)
-  [StumbleUpon](#)

Your comments / feedback

Do you have any comments or feedback on this article? Please contact us by filling in the form below.

Name Hide name

Your Email Address

Comments

Related Companies

[Plessey Semiconductors Ltd](#)

Related News

[Xtrinsic intelligent sensors designed to keep drivers safe](#)

[Semiconductor industry 'back to normal'](#)

[Renesas Electronics and SYSGO collaborate on CPU software](#)

[ARM ceo shrugs off tablet pc competition](#)

[Smartphone IC market expected to rise by 42% in 2010](#)

Related Technology

[Challenges on the agenda](#)

[Helping UK electronics thrive](#)

[British Engineering Excellence Awards Review](#)

[A tale of two cities - UK Electronics England](#)

[Flower of Scotland - UK Electronics Scotland](#)

Related Products

[High resolution pressure sensor](#)

[Digital servo inclinometers](#)

Related Events

[Connecting with your Global market at Technology World in partnership with UK NanoForum 2010](#)

[Semiconductor Industry Forecast Seminar](#)

[National Electronics Week 2011](#)

[Gadget Show Live 2011](#)



Send 

Your comments/feedback may be edited prior to publishing. Not all entries will be published.

[Terms and Conditions](#)

To comment on news stories or blogs you need to complete our 60 second registration process. Once completed this then allows you to download any and all white papers, register for e-zines and access our detailed supplier directory for FREE.

If you are all ready a registered user then enter your e-mail address and login.

You will need to have logged in prior to entering your comments in the boxes provided.

Please enter your email address to login and gain **free access** to this site.

If you are using this site for the first time registration is **quick** and completely **free**.

Register Now - [Register](#)

Email Address : [Login](#)

Remember Me: - If this box is ticked you will be automatically logged in when you return.

Important: To protect your privacy, do not select 'Remember Me' if other users have access to the computer you are using.

[Login](#) | [Contact us](#) | [About us](#) | [Terms and conditions](#) | [RSS](#) | © Findlay Media 2010