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**Photo Available**

## **Crocus MLU sensors aim to put more 'flex' into flexible displays**

**A prototype based on Crocus' MLU (Magnetic Logic Unit™) sensor demonstrates the capability to detect the shape and bendability of flexible surfaces and displays**

**Grenoble, France, November 5, 2014** - Crocus Technology, a leading provider of magnetically enhanced semiconductor technologies and products, today announces a new Magnetic Logic Unit™ (MLU) based solution that can detect the position and shape of flexible two dimensional surfaces. Wearable devices, curved panel displays, flexible solar panels and, in the future mobile phones will integrate flexible shape sensor foils. By having knowledge about the shape and bendability of these flexible surfaces, system integrators can use software to make much needed improvements, such as to correct distorted images.

Crocus' magnetic sensors aim to provide an efficient solution for shape sensing in flexible surfaces and foils to overcome deficiencies occurring in other solutions, such as piezoelectric sensors. Unlike other solutions, Crocus' MLU sensors exhibit high sensitivity and directional capabilities. This means that only a minimal number of MLU sensors need to be embedded in flexible shape sensor foils. In its prototype, Crocus only uses 0.25 sensors per square centimeter, making its solution extremely cost-effective.

In addition, Crocus' MLU sensors offer advantages in low power consumption and high-speed detection. They provide strong signals without active components. Crocus' 20cm x 20cm prototype consumes less than 10mA (milliampere) during the sensing cycle that lasts less than 1ms (microsecond).

"Crocus has created a new IP based on magnetic sensors for flexible surface position detection. This enables equipment makers to gain in the added performance of flexible shape devices, while reducing costs," said Bertrand Cambou, chairman and CEO of Crocus Technology. "MLU sensors in flexible displays are an exciting development. We anticipate strong interest from players in a rapidly growing market."

As flexible displays are light, thin and unbreakable, they are expected to replace conventional displays. Key technology providers include Samsung Display, LG Display, Sony, Sharp and AU Optronics (source: Emerging Technologies Display Report 2013, published by IHS Electronics and Media).

The market for flexible displays is expected to reach USD 3.89 billion by 2020 (source: Markets and Markets, March 2014).

### **About Crocus Technology**

Crocus Technology is a leading provider of magnetically enhanced semiconductor technologies and products for application in sensors, mobile security, non-volatile memory, embedded microcontrollers and harsh environment electronics.



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Crocus Technology has pioneered Magnetic Logic Unit™ (MLU), a disruptive CMOS-based rugged magnetic technology. MLU brings important advantages to devices needing greater security and robust high-speed performance at a lower cost. MLU enables Crocus' sensor products to exhibit high sensitivity, low-noise and high temperature tolerance (250°C), making them well-suited for a wide range of consumer and industrial applications. Fast read-write capabilities also allow small-footprint MLU-based products to enhance the performance and security of chips used in smartcards, mobile phones and data servers. Crocus Technology also licenses its MLU technology and processes to select foundries and industry partners.

Founded in 2004, Crocus Technology is led by a senior management team with high-level industry experience forged at Motorola, AMD, Intel, Texas Instruments and Gemalto. It has US operations in Santa Clara, California, and offices in Grenoble and Rousset, France. It jointly owns Crocus Nano Electronics, a Russian-based advanced magnetic semiconductor manufacturing facility, with investment firm Rusnano. For more information, please visit: [www.crocus-technology.com](http://www.crocus-technology.com).

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