

## **Plastic Logic and Novaled partner to demonstrate a world first for displays and open a new frontier in consumer electronics**

**Cambridge, UK and Dresden, Germany – 6 February 2014 –Plastic Logic, the leader in the development and industrialisation of flexible organic electronics, and Novaled, a leading company in organic electronic materials and technology for OLED applications, announce a partnership which will transform and accelerate the market for flexible and wearable displays. The companies demonstrate today at the Flextech Conference in Phoenix, AZ a truly flexible, plastic, fully organic AMOLED display. This will be the first of a series of technology demonstrators during 2014, which will be part of each company's development of partnerships to enable the market for truly flexible, unbreakable AMOLED displays - a market segment forecast to be worth over \$10b by 2020 (IHS 2013 report).**

The dream of wearable display technology is existing for a long time now. Making this real has needed the correct set of electronics capabilities to enable compelling and practical solutions for lifestyle, communications and fitness applications. The demonstrator heralds a breakthrough by combining for the first time a functional all-plastic AMOLED display with an industrialised turnkey manufacturing process for the backplane electronics. This marks the beginning of a new chapter for display makers searching for a path to ultra-flexible, ultra-thin, lightweight AMOLEDs, using a low temperature process which has a number of key industrial benefits, including superior uniformity, yield and hence ultimately a route to low cost solutions for volume manufacturing

Both companies bring critical technology to the demonstration. Novaled's PIN OLED<sup>®</sup> technology enables the use of non-standard electrode materials needed for the flexible AMOLED development. Plastic Logic's fully industrialised plastic, flexible Organic Thin Film Transistor (OTFT) backplane and know-how enabled the world's first fully organic, flexible display. Such truly flexible AMOLEDs, and the increased usable screen areas they make possible, are set to power the next generation of products for the wearables market, poised to take off in 2014.

Through the OTFT industrialisation process Plastic Logic has created unique IP and a highly transferable process-flow. With an entire supply chain in place, OTFT manufacturing has now reached a tipping point in performance with leading organic semiconductor (OSC) materials suppliers, including Merck whose OSC material was used in the demonstration, now showing mobilities required to drive OLED displays. The process is compatible with existing mainstream display manufacturing operations, underpinning a new technology licensing business model. Plastic Logic has already established a partner program to work with leading global display makers and consumer electronics companies to enable flexible, plastic AMOLED supply chains through licensing and technology transfer to mass volume producers.

Indro Mukerjee, CEO of Plastic Logic, acknowledged the scale and relevance of the breakthrough, saying "Flexible electronics is a reality, already proven through the development

and manufacture of plastic, bendable displays and sensors. For the first time a fully organic, plastic, flexible AMOLED demonstration has been achieved with a real industrial fabrication process. This marks the start of a revolution in wearable products, the next frontier in consumer electronics - 2014 will be the year that wearable technology starts to go mainstream.”

“Novalled has been developing its leadership in the doping of OLED devices”, says Gildas Sorin, CEO Novalled GmbH. “When applied to the OTFT Novalled technologies and materials will play a driving role in fully organic displays as well as in opening the fields of new organic devices.”

## **About Plastic Logic**

Plastic Logic is the recognised leader in organic thin-film transistors (OTFT) and is at the forefront of research and investment in plastic electronics. The company has industrialised the process technology and now manufactures a range of high-quality, shatterproof, ultra-thin and ultra-lightweight plastic displays. These offer huge advantages over conventional screens, as they are extremely flexible with proven lifetimes. Solutions for sensor and other non-display applications are in development, enabling revolutionary design possibilities, set to transform existing markets such as wearable and mobile devices, signage, and automotive, as well as many others. Plastic Logic is backed by major investors including Rusnano and Oak Investment Partners.

Find out more about Plastic Logic and its robust, flexible displays by visiting <http://www.plasticlogic.com>. and <http://www.youtube.com/plasticlogic>.

Companies interested in working together with Plastic Logic should contact [info@plasticlogic.com](mailto:info@plasticlogic.com).

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## **About Novalled**

Novalled GmbH is a leader in the research, development and commercialization of technologies and materials that enhance the performance of OLEDs (organic light-emitting diodes) and other organic electronics. Novalled offers OLED product manufacturers a unique combination of proprietary technology, materials and expertise, and is currently the only company in the OLED industry licensing and selling organic conductivity doping technology and materials for use in the commercial mass production of display products. Novalled has developed strategic partnerships with key OLED innovators and producers throughout the world and, with a broad portfolio of more than 500 patents granted or pending, has a strong IP position in OLED technologies, structures and materials. Novalled is headquartered in Dresden with offices in Korea and Japan. Novalled's majority owner is Samsung Cheil Industries.

For more information, please visit [www.novalled.com](http://www.novalled.com).

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