

Isorg and FlexEnable win industry award for first highresolution flexible image sensor designed on plastic

Sensors Expo 2017 award-win brings the 500 dpi fingerprint sensor on flexible substrate for biometric applications wider industry recognition

Grenoble, France, July 19, 2017 – <u>Isorg</u>, the pioneer in printed organic photodetectors and large-area image sensors, today announces that its first large-sized high-resolution (500 dpi) flexible plastic fingerprint sensor, co-developed with <u>FlexEnable</u>, won the 2017 Best of Sensors Expo - Silver Applications Award.

The high-resolution, ultra-thin, 500 dpi flexible image sensor (sensitive from visible to near infrared) offers system integrators unique advantages in performance and compactness. Its ability to conform to three-dimensional shapes sets it apart from conventional image sensors. The device provides dual detection: fingerprinting as well as vein matching. Due to its large-area sensing and high-resolution image quality, the device is highly suited to biometric applications from fingerprint scanners and smartcards to mobile phones, where accuracy and robustness as well as cost-competiveness are key.

Several biometric solution providers have sampled the flexible image sensor, verifying its readiness for deployment in products and compliance with FBI Image Quality Standards (IQS).

"Isorg is very honored to have received an international award for our groundbreaking high-resolution flexible image sensor technology whilst attending the most important global trade event dedicated to sensor innovations," said Emmanuel Guerineau, general manager and CFO at Isorg. "We are delighted to have collaborated with FlexEnable to produce the world's first printed electronics image sensor that overcomes the limitations of traditional sensors. Biometric solution providers will be able to take advantage of the key differentiating factors that our technology brings, such as customized formats in large and small sizes, and easy integration. We see these opening up new opportunities across multiple applications."

Isorg is planning to launch high-volume production of the flexible image sensor at its new plant in Limoges, France, in order to support its large-scale commercialization in the global biometrics market. The global biometrics hardware market is expected to grow from \$3.9 billion (approx. \in 3.4bn) in 2016 to \$6.2 billion (approx. \in 5.4bn) by 2021, according to the Yole Développement report on 'Sensors for Biometry and Recognition 2016'.

Central to the 500 dpi flexible image sensor is an Organic Photodiode (OPD), a printed structure developed by Isorg that converts light into current – responsible for capturing the fingerprint. Isorg also developed the readout electronics, the forensics quality processing software and the optics to enable seamless integration in products. FlexEnable, the leader in developing and industrializing flexible organic electronics, developed the Organic TFT backplane technology, an alternative to amorphous silicon. This partnership between the two companies began in Q4 2013.

"We are delighted that the large area flexible fingerprint sensor we developed with Isorg has been recognized with such a prestigious award. Thanks to being thin, light and glassfree, the sensor can be conformed to almost any surface to enable new form factors and use cases not possible with conventional fingerprint sensors," said Paul Cain, strategy director at FlexEnable.

Designed on a large area (3" x 3.2"; 7.62 x 8.13cm) plastic substrate, the flexible image sensor is ultra-thin (300 microns), therefore remarkably lightweight, compact and highly resistant to shock.

Sensors Expo and Conference, held in San Jose, California, is the largest gathering of engineers and engineering professionals involved in sensors and sensing-related technologies. For over 30 years, it has welcomed more than 6,400 professionals from across the US and over 40 countries to explore today's sensor technologies and find the solutions to tomorrow's sensing challenges. The Best of Sensors Expo Awards are announced in conjunction with Sensors Online, a leading resource and authority on sensing, communication and control. The awards are designed to spotlight the advances in both innovations and real-world applications of sensors.

About Isorg

Isorg, a pioneer company in organic and printed electronics for large area photodetectors and image sensors, converts plastic and glass substrates into smart surfaces. It offers a new generation of high performance imagers with 3D product integration capability recognizing any shapes or form factor. Its flexible image sensors have application in medical devices, ID security and access control, IoT and consumer electronics.

Created in 2010 and partnering with CEA-Liten, a leading French innovation center for new energy technologies and nanomaterials, Isorg is led by senior-level electronics industry managers with strong expertise in advanced technologies. www.isorg.fr

About FlexEnable

FlexEnable has pioneered the world's first flexible electronics technology platform that allows electronics made of organic materials to be manufactured on flexible plastic film, the thickness of a sheet of paper. Compatible with existing manufacturing lines, it's the key to truly flexible and cost effective electronics over large and small surfaces. The core applications of this technology are glass-free, flexible displays and sensors that enable game-changing products across a variety of industries including consumer electronics, automotive, digital signage, wearables, medical and security.

FlexEnable's customers include OEMs, component manufacturers and materials suppliers. The company offers a comprehensive range of services-based packages for its technology platform including: ProductEnable[™], MaterialsEnable[™] and FabEnable[™]. www.flexenable.com

Media and Analyst Contact Andrew Lloyd & Associates

Carol Leslie /<u>carol(AT)ala.com</u> Tel: +44 1273 675 100 US: + 1 617 202 4491 @ALA_Group