



Isorg's FAP30 optical fingerprint sensor obtains FBI certification

Certification of Bio1Print30, large-area biometric image sensor, offers optical fingerprint scanning advantages for mobile and nomad authentication

Limoges, France, January 9, 2023 – Isorg, a pioneer in Organic PhotoDetectors (OPDs) and large area image sensors, today announces the FBI certification of Bio1Print30, a large-area optical fingerprint sensor for applications where enhanced mobile security and nomad ID authentication are key. The Bio1Print30, a FAP30 (Fingerprint Acquisition Profile) device, whose core technology is compatible with smartphone displays, is certified as fulfilling the requirements for PIV (Personal Identity Validation) authentication and Mobile ID.

The FAP30 sensor is the second in Isorg's family of organic-based modules for fingerprint scanning to qualify for deployment in government applications for biometric authentication, aimed at preventing unauthorized access to critical facilities or at border-crossings. It allows the display to capture a digital image of the entire fingerprint pattern, in one scan. In addition, Isorg Bio1Print30 integrates the company's proprietary ASIC which enables fast and easy integration.

"As larger fingerprint sensors enhance security, Isorg is pleased to receive FBI certification of its FAP30 device. We are bringing to the security and ID market a large form factor OPD fingerprint sensor, which scales up the active area of the fingerprint scanner while maintaining the same high-resolution image," said Dieter May, CEO of Isorg.

Expanding government use of biometrics to manage borders, in defense, screening employees, health care and security are among the [market dynamics driving](#) use of fingerprint sensors for biometric authentication.

The French police are also seeking mobile fingerprinting capacity, in part to collect biometric data of victims of crime, in order to differentiate it from other data, such as latent fingerprints found at the scene, according to a [Biometric Summit 2022 report](#).

Isorg is the only manufacturer of organic-based fingerprint sensors to obtain FBI certification. The FAP30 sensor brings new and important advantages for mobile and nomad authentication:

- Ultra-thin (1.5mm), more than 30% slimmer than the earlier models, enabling easy ASIC integration
- Resistant to intense indoor lighting and direct sunlight, enabling accuracy and reliability of use anywhere and anytime
- Resistant to shocks and variations in temperature and hygrometry

Isorg sees this second FBI certification also benefitting other projects it is running based on the same sensor technology. This includes its integration into smartphones, enabling them to achieve both low False Acceptance Rates (FAR) and False Rejection Rates (FRR).

"Our core technology consists of a very thin component sensor. In addition to the performance, size and lightweight advantages for fingerprint scanners, our OPD technology can be laminated onto an OLED display, making it suitable for multi-fingerprint, high

security application on mobile phones. Overall, first adopters of organic-based sensors for integration in displays will be able to ramp up the security component of products within their portfolios and gain a competitive edge,” added Mr. May.

Currently, the majority of single finger biometric scanners use conventional prism-based optical technology; these tend to be bulky and impractical for mobility, as the active area becomes larger. Unlike flat fingerprint scanners designed with TFT-based (Thin-Film-Transistor) optical technologies, whose backlight approach means that the sensor is placed on the top of the fingerprint scanner, making it sensitive to outdoor light, Isorg’s approach overcomes this drawback. Isorg’s light source is a ‘front light’, where the sensor is placed behind the light source.

The global fingerprint sensor market is expected to grow to [\\$13.3 billion in 2030 with a CAGR of 14.8%](#).

About Isorg

Isorg is a pioneer in organic and printed electronics for large area photodetectors and image sensors. It offers a new generation of high-performance imagers with the capability for easy integration into systems with various shapes or form factors. Its flexible image sensors have application in consumer electronics, ID security and access control, IoT and medical devices. In 2020, it launched the first worldwide demonstrator of full-screen sized Fingerprint On Display (FOD) for smartphones. A year later, it received the first worldwide FBI certificate for an organic photodiode-based fingerprint module for the security & ID market. Founded in 2010 and partnering with CEA-Liten, a leading French innovation center for new energy technologies and nanomaterials, Isorg has raised €58.2M (approx. \$59M) in four financing rounds.

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