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BECAUSE YOUR SECURITY MATTERS

Fingerprint on Display (FoD) Solution

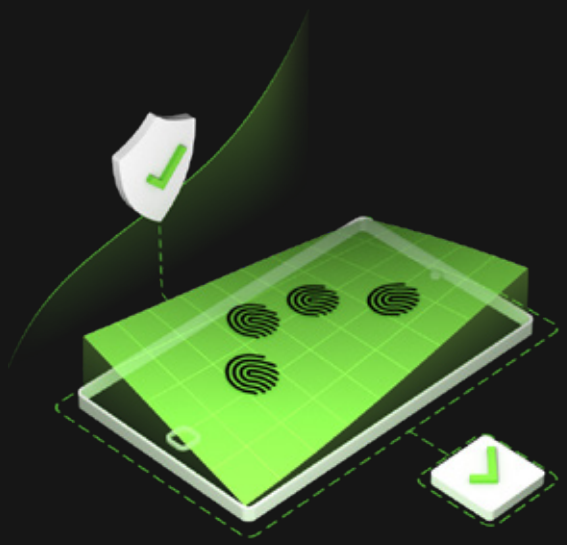
SMARTPHONE

Key Features & Benefits:

- Scalable Solution: large area to full mobile display
- Slim fingerprint module thinner than 300 µm
- Support 1 to 4 finger authentication
- Robust FRR/FAR performance under various conditions including sunlight, wet and dry fingers
- Support curved-edged phone display with polymide-substrate sensor
- Future Ready: foldable display compatible
- Read-Out System Controller: 1- chip ROIC with GOA control, sequencer and single power supply

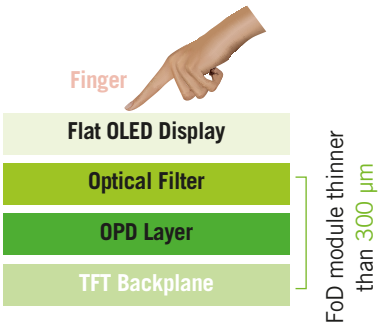
Differentiation:

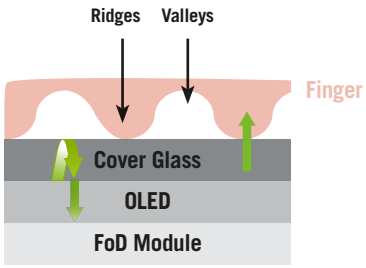
- Easy phone integration - slim large area FoD module
- Curved and foldable display compatible
- Cost-effective solution for large area to full display
- High Security with Multi-fingers authentication



TECHNICAL DATA

FoD Module Stack Structure



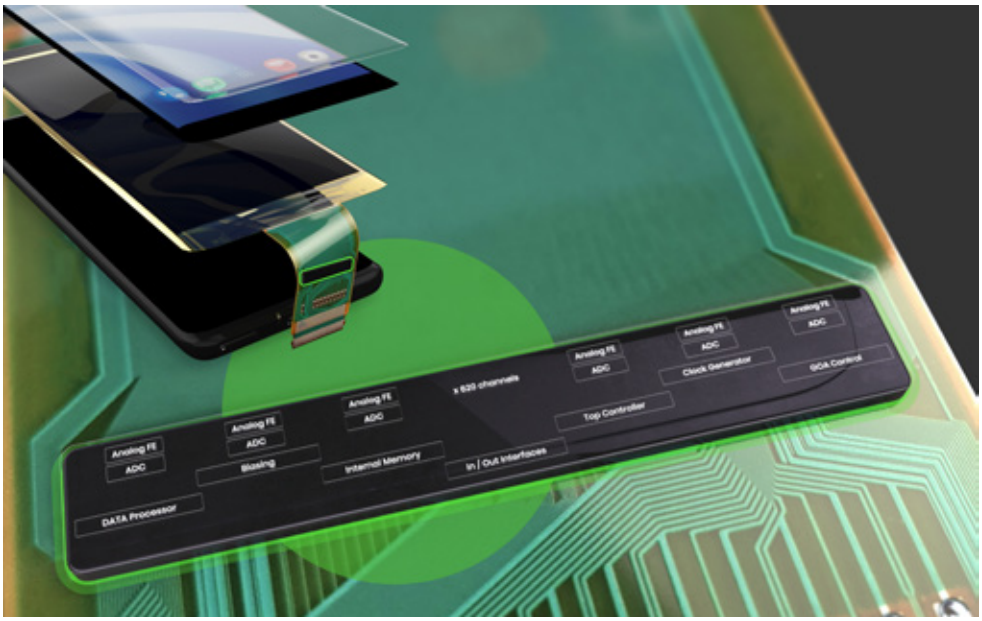


Working Principle

Display light is:

- ***Absorbed by the ridges***
- ***Reflected on the valleys location***

Readout IC Integration



SPECIFICATIONS

Key Parameters	Target Specifications
Fingerprint Matching Time	200 ms or less
False Rejection Rate (FRR) and False Acceptance Rate (FAR)	≤1.5% with FAR < 1/50000 (in normal indoor condition)
N° of Channels in ROIC	620 per ROIC (2x ROIC for Full Display FoD)
Single external Power Supply	2.7 to 3.6 V (Separate internal LDOs for digital and analog circuits)
Power Consumption (Full Display)	• 300 µA under 3.3 V in sleeping mode • 600 mA under 3.3 V in acquisition mode
Interfaces	• SPI for inputs and outputs • Video port format for fast output

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Isorg • 60 Rue des Berges • Immeuble Tramontane
38000 Grenoble • France
Tel: +33 438 881 836