trinamiX

A brand of
BASF – We create chemistry

trinamiX Face Authentication

Premium performance with unmatched affordability

Security
Certified for mobile payment

Convenience
Face authentication even behind OLED

Affordability
Low hardware requirements and easy to integrate

Privacy

The protection of sensitive data is our top priority: All user data collected during face authentication is encrypted and protected by Qualcomm® Trusted Execution Environment. It is only stored locally on the device without any cloud computing involved.

Learn more

trinamiX Face Authentication
for mobile payment

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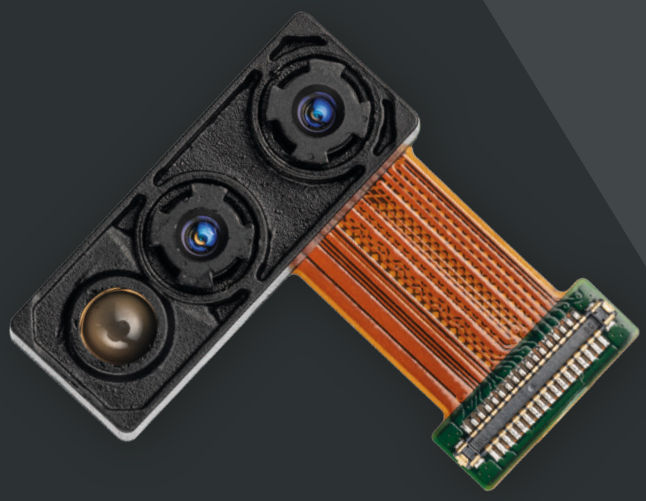
trinamiX Face Authentication Reference Design RS 11

We combine 2D image with unique skin detection



Software

Integration	Android
Secure Environment (TrustZone)	Qualcomm TEE with Trusted App (TA) and Secure Processing Unit (SPU)
FAR @ FRR **Spoof Acceptance Rate** (SAR)	1 : 1,000,000 @ 1 % 0 % ; fulfills requirements for Android Biometric „Class 3“ and mobile payment [1]

Hardware

Camera module	CMOS Camera
Dot projector and flood	940 nm VCSEL (Laser Class 1)
Dimensions (H x W x D)	6 x 15.5 x 3.3 mm
Interface	MIPI + GPIO

Evaluation Platforms

Operates on Qualcomm Snapdragon Platform and in Trusted Execution Environment

Key Operating Figures

Working range	0.2 m – 0.7 m
Outdoor performance	Up to 100 k LUX
Field of view	65 x 55 (H x V)
Operating temperature	From 0 °C to 60 °C
Unlock time	< 250 ms
Baseline	6 mm
Certification	FIDO, Android Biometric Security and IIFAA [1]

1 Certification provided by biometrics test institutes. Must be re-certified in customer product.

Technology

The system enhances a regular 2D IR image by laser dot projection and analyzing it through our proprietary algorithms.

- Flood-illuminated 2D IR image
- Skin detection
- Meets **FIDO Level C** standards

About trinamiX GmbH

trinamiX develops cutting-edge biometric and mobile NIR spectroscopy solutions, which are used in both consumer electronics and industrial designs. The company‘s products enable humans and machines to better capture data, with the goal of understanding the world around us. This results in improved decision-making as well as stronger biometric security.

Contact

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