

# trinamiX

A brand of  
BASF – We create chemistry

Fueling the next generation of automotive applications

## trinamiX Face Authentication for vehicle access and in-cabin sensing



trinamiX Face Authentication contributes to a new driving experience by protecting the car against theft and unlocking innovative applications like touchless in-car payment.



### Security

Certified protection against fraud and theft



### Convenience

Touchless authentication in real time



### Design

Invisible performance behind display

### About

trinamiX Face Authentication is based on our unique method to make biometric authentication even more secure: The detection of human skin. It adds a reliable, passive liveness detection to regular face recognition. Our solution can benefit a broad variety of particularly sensitive use cases across markets.

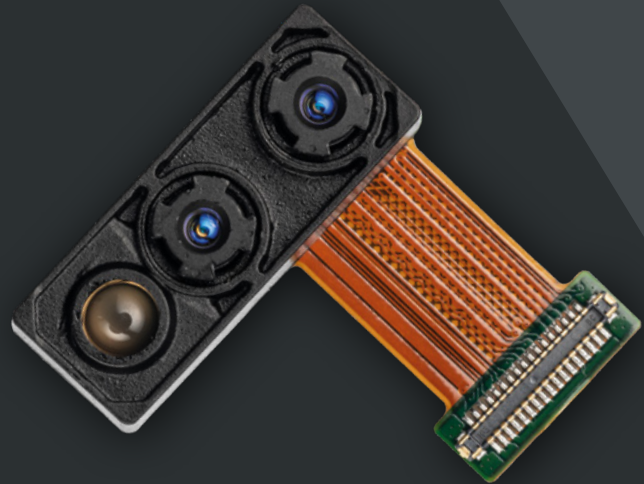


### Find out more

about trinamiX Face Authentication  
for automotive applications

We combine 2D image with unique skin detection

## trinamiX Face Authentication Reference Design RS 11



### Software

Operating system	Linux
Platform	NXP i.MX 8M nano
Applications	In-cabin sensing, Vehicle access
FAR @ FRR	1 : 1,000,000 @ 1 %
Spoof Acceptance Rate (SAR)	0 %

### 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

### 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
Baseline	6 mm
Certification	FIDO, Android Biometric Security and IFAA

### Contact

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### 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 highest security 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.