Q-Face Pro

High-End AI Facial Recognition OEM Module



Q-Face OEM module series are stand-alone facial recognition systems ideal for Edge AI embedded system applications where the most trusted touchless biometric security is required. Specifically, the modules are designed for manufacturers and system integrators seeking safe, reliable, and best-performing facial recognition systems that are environment-friendly, and easy-to-integrate, with flexible form factor capabilities.

Q-Face Pro OEM module as a flagship model of the Q-Face series provides a complete high-performing facial recognition solution and QR code detection.

These features are backed by industry-proven in-house AI-enabled facial recognition algorithms, un-hackable user data security at a dedicated secure element, and unrivaled hardware reliability. Also, the Pro OEM Module's developer-friendly integration tools including necessary documents, SDKs, and an online technical support channel help quick and stress-free integration.



CE, FCC, RoHS, REACH, WEEE



Features

Specifications

NPU	Fast and Smart Al Optimized for Facial Recognition Access • NPU-optimized Al algorithm offers the highest standards in facial recognition accuracy and speed	General	CPU	Quad-core ARM Cortex-A7 32bit 1.5Ghz NPU (up to 2TOPS)
			Communication Interface	USB 2.0
			Power Consumption	< 5W (max)
[Ð]			Power Supply	DC 5V 1A
			Operating Temperature	-10°C ~ 50°C
	Compatible with Facial Variations		Operating Humidity	0 ~ 90% RH
	Use dynamic face templates to increase matching performance with faces wearing masks, glasses, hats, beards, different hairstyles, etc		Dimension	92mm x 30mm x 17mm (W x H x D)
			Heat Sink Control	By designed steal panel and power management logic in S/W
			Communication protocol	UVC & RNDIS protocol (video streaming and control module) / UART (commands only)
\mathbb{C}	Protected Against Facial Spoofing		Luminance	0.01 lux to 65,000 lux
X-Las	 Detect fake faces, images, and photos to safeguard against facial spoofing 	OS	Device (Module)	Linux
			Host	Supports Windows 10 or later / Android 8.0 or later / Linux kernel v4.X or later
	Non-stop Pass Through Accurately and rapidly recognize moving faces in high-traffic areas 	Sensor	Camera System	Dual camera system (RGB + IR) 1/2.8 CMOS 4EA IR LED (850nm)
			Angle of view	Vertical viewing angle of 65°
			Image Resolution (W*H)	720*1280
ବ	Reinforced user privacy and biometric data protection	Biometric Performance	Anti-spoofing	Yes
	Embedded with U.S NIST FIPS197 validated AES256 and ED25519 key exchange algorithm Embedded with Secure Element(SE) that stores encryption key to prove the actual secure attacks		Capacity	1:N : 50,000 users (max) / 1:1 100,000 users (max)
			Accuracy	FRR 1% @ FAR 0.000001% (1/100,000,000)
			Recognition Distance	0.5m ~ 1.3m
	QR Detection for the extendibility of applications		Recognition Time	Total : < 500 ms • Face Detection : < 50ms • Recognition (Extraction + Matching) : < 450ms (less than 300ms @1:10,000 users)
		Data Security	Secure Element	Storing encryption key
			Template and Channel Encryption	AES256 (FIPS197 validated algorithm), ED25519 (key exchange algorithm)
×.	Developer-Friendly Integration Tools for Easier Integration	QR code Detection		Yes
\sim \sim	 Android, Windows and Linux SDKs 			

· Android, Windows and Linux SDKs · Running on-line technical support channel

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Certifications



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