WQ5007 Facial Recognition SoC Chip

Overview

WQ5007 is the only edge-side and low-power AI computing platform in the AI industry that supports all mainstream 3D vision solutions and is capable of high-speed convolutional neural network computing. It supports live detection locally based on 3D structured light and image recognition based on neural networks, featuring significant advantages such as ultra-low power consumption, balanced computing power, high integration, and fast startup. WQ5007 has dominant advantages in 3D facial recognition and other lightweight IoT applications, perfectly meeting customers' demanding requirements on low-power computing.

Functions

- Supports live detection locally based on 3D structured light and image recognition based on neural networks.
- Adopts ultra-low-power design, with the dynamic power consumption less than 400 mW and the standby power consumption less than 100 uW.
- Flexibly outputs offset, depth, and 3D point cloud.
- Supports MIPI Tx high-speed output to external AP systems.
- Outstanding computing power: INT8 200 GOPS, INT16 100 GOPS.
- Fast startup: Fast boot time < 100 ms.
- High-level integration: The 3D structured light processor and 32 MB DDR memory are supported.

Applications

Intelligent door lock

Facial-recognition payment

Intelligent access control

Robot

Block Diagram