

IOTTech AM01 is an AI module targeting the smart home and IoT segment with NPU core inside to accelerate neural network processing and enabling devices with edge AI ability to save hardware cost and power consumption.

AM01 AI module is suitable for Door Lock, Access Control, Doorbell, IP Camera, Smart Home Appliance, Surveillance Scenarios and ready for RGB and NIR image sensors. So system makers can easily to realize their application and achieve AI everywhere with IOTTech AM01 inside.

### Features:

- **Face detection**
- **Face Recognition**
- **Object detection**
- **Object Recognition**
- **People counting**
- **Human detection**
- **Gesture control**

# AM01

38 x 38 mm AI Module



Processor	ARM Cortex-M4@200MHz for system control ARM Cortex-M4@250MHz as AI co-processor
NPU	Maximum Frequency @ 300 MHz Peak Throughput of 8-bit mode: 345 GOPS,576MAC/cycle
Flash	Up to 64 MB SPI NOR flash
Memory	Embedded 64MB
Video in interface	2-lane MIPI-CSI-2 RX
Video out interface	2-lane MIPI-CSI-2 TX MIPI-DSI TX DVP LCM
Peripheral Interface	I2C SPI UART USB 2.0 host/device interface PWM GPIO RS485 DIDO
Supported AI framework	TensorFlow/ Caffe/ Keras/ Pytorch
Power	Average power consumption 500mW 1.1V core voltage 3.3V I/O voltage
Dimension	38 X 38 mm
Working temperature	0° C to 45° C
LED	Status
Button	Reset
Demo AI Algorithm	FDFR

### Block Diagram

