M5Stack UnitV2 - The standalone AI Camera for Edge Computing (SSD202D)

Description

UnitV2 is a high-efficiency AI Camera module, the first M5Stack product that runs on the Linux operating system. The standalone device adopts SigmaStar SSD202D (ARM Cortex-A7 dual-core 1.2GHz) as the core, embedded 128MB DDR3 memory, with 512MB NAND Flash, 1080P camera, 2.4G Wi-Fi and cooling fan. With rich software applications, hardware resources and easy development tools, UnitV2 is committed to bringing users a simple and efficient AI development experience out of the box.

Out Of The Box AI Applications

- UnitV2 integrates multiple ready-to-use AI recognition applications developed by M5Stack (such as Face Recognition, Object Tracking, Color Tracker, Shape Detector, Barcode Detector and other popoular functions), which can help users to build your own AI applications quickly.
- Standalone! Plug and play! UnitV2 has a built-in USB LAN. When connecting to PC through UBS-C interface, it will automatically establish a network connection with UnitV2. With highly free connectable style, it can also be connected and debugged via Wi-Fi.
- UART serial port communication, all identification content is automatically output in `JSON` format through the serial port, which is convenient to call.

Efficient To Develop

- Based on Linux system, and variety of peripherals, UnitV2 is compatible with different development tools.
- Through SSH Access, you can fully control the hardware resources.
- Easily build a custom recognition model through M5Stack's <u>V-Training</u> (AI model training service).

Software Support

M5Stack team will add more functions through upcoming versions of firmware. Users can easily upgrade the device through TF Card.

Product Features

- SigmaStar SSD202D
- ARM Cortex-A7 Dual Core 1.2GHz with Neon and FPU
- Embedded 128MB DDR3 Memory
- 512MB NAND Flash
- GC2145 1080P Colored Sensor
- Microphone, TF Card slot, UART port, USB-C
- Wi-Fi 2.4GHz
- Cooling Fan
- OS: Linux

Include

- 1 x M5Stack UnitV2
- 1 x USB-C Cabel (50cm)
- 1 x Stand
- 1 x Back Brick

Applications

- Access Control
- Home Automation
- Occupancy Monitoring
- New Retail
- Industrial & Machine Vision
- Warehouse Management and Logistics

Specification

Resources	Parameter
Sigmstar SSD202D	ARM Cortex-A7 Dual Core 1.2GHz with Neon and FPU
Flash	512MB NAND
RAM	128MB DDR3
Camera	GC2145 1080P Colored Sensor
Lens	FOV 68° , DOF= 60cm- ∞
Power Input	5V @ 500mA
Peripherals	USB-C x1, UART x1, TF Card x1, Button x1, Microphone x1, Fan x1
Indicator LED	Red, White
Wi-Fi	150Mbps 2.4GHz 802.11 b/g/n

Resources	Parameter
Operating Temperature	32°F to 104°F (0°C to 40°C)
Net weight	18g
Gross weight	62g
Product Size	48*18.5*24mm
Package Size	157*38*38mm
Case Material	Plastic (PC)