MC-7725
300,000 Pixel Serial JPEG Camera Module

- Work by day and night
- Low cost and low powered camera for embedded imaging applications
- On board EEPROM provides a command-based interface to external host via TTL or RS232 or RS485 serial link
- UART: 2400-115200bps transferring JPEG still pictures
- Built-in down sampling, clamping and windowing circuits for 640*480, 320*240, 160*120 image resolutions
- Compression ratio can be changed flexibly by user
- No external DRAM required
- Auto-Infrared, Auto-White Balance, Auto-Gain Control

Overview

The Serial Camera, built in snapshot, JPEG compression and serial interface communication module, can be attached to computer and any other embedded devices performing as a video camera or a JPEG compressed still camera for imaging applications. It uses an Omni Vision CMOS OV7725 sensor(OV7725 is also used in the camera of iPhone, it is much better than others) along with a JPEG compression chip that provides a low cost and low powered camera system. Its on-board Serial interface is suitable for a direct connection to any host micro-controller UART. The JPEG picture can be captured via serial commands, which leads to monitoring so easy.
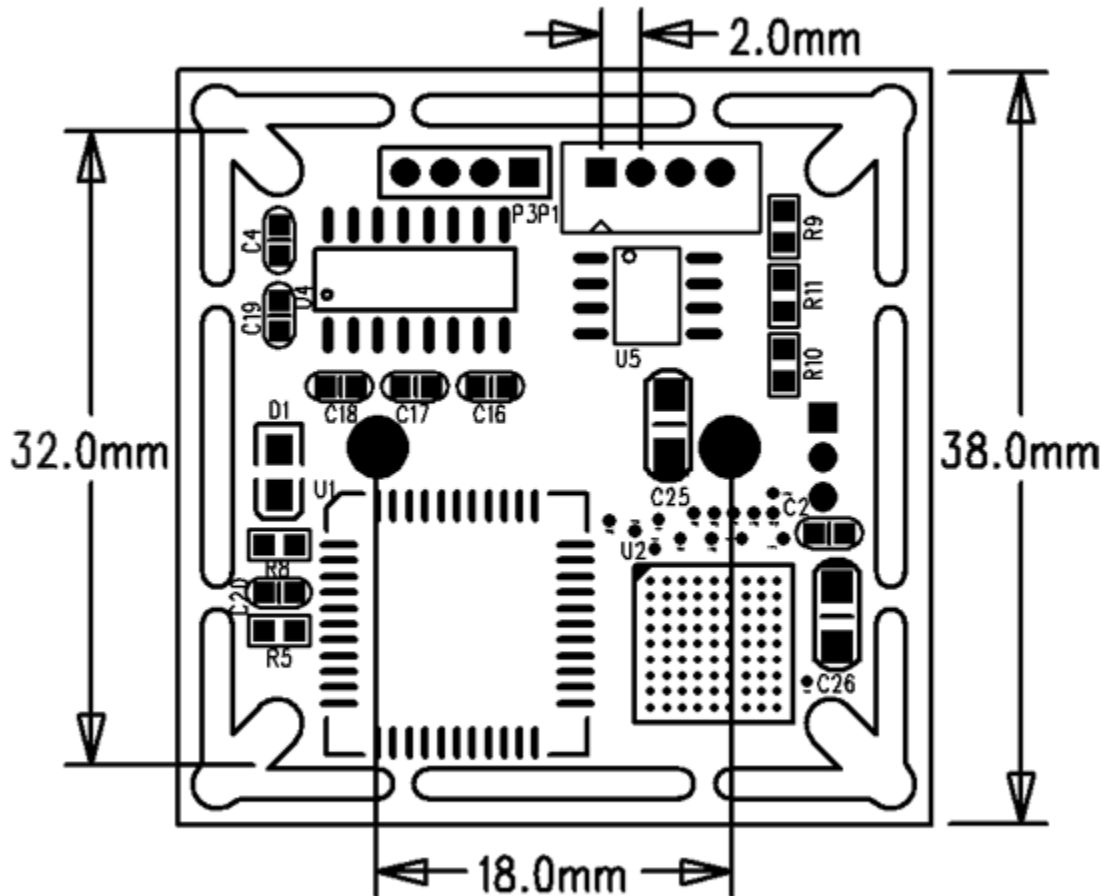
Lens Description

2.5mm, 2.8mm, 3.6mm, 6mm, 12mm IR lens or color lens are selectable for customers

Application

- General purpose embedded imaging and control
- Security system
- Access Control system
- Robot vision, object detection and recognition
- Industrial control system
- Automotive system
- Medical systems ect.

Dimensions

Pinout

Pin	1	2	3	4
Symbol	VCC(Red Wire)	RXD/485-A(Yellow Wire)	TXD/485-B (Green Wire)	GND (Black Wire)
Description	Power supply DC+5V	TTL/ RS232 Serial Input 485-Date+ Selectable	TTL/ RS232 Serial Output 485-Date+ Selectable	Power supply ground

Form Factor

Dimensions: 38 x 38 mm
Weight: 100 g

Resolution

Compression Algorithms: JPEG
Resolution: 640x480, 320x240, 160x120

Serial Interface

RS232,RS485,TTL

Serial Communication Parameters

Parity: None, Even, Odd, Space, Mark
Data bits: 7, 8
Stop bits: 1, 2
Flow Control: RTS / CTS
Baud rate: 1,200 bps ~ 115,200 Kbps (supports non-standard baud rate)

Environmental Limits

Operating temperature: -40 ~ 85 °C
Storage Temperature: -65 ~ 150 °C
Ambient Relative Humidity: 5 to 95% (non-condensing)

Power Requirements

Power Input: 5 VDC, ± 5%
Power Consumption: 70 mA@5 VDC max.

Reliability

Automatic Reboot Trigger: Built-in WDT (watchdog timer)

Warranty

Warranty Period: 1 years