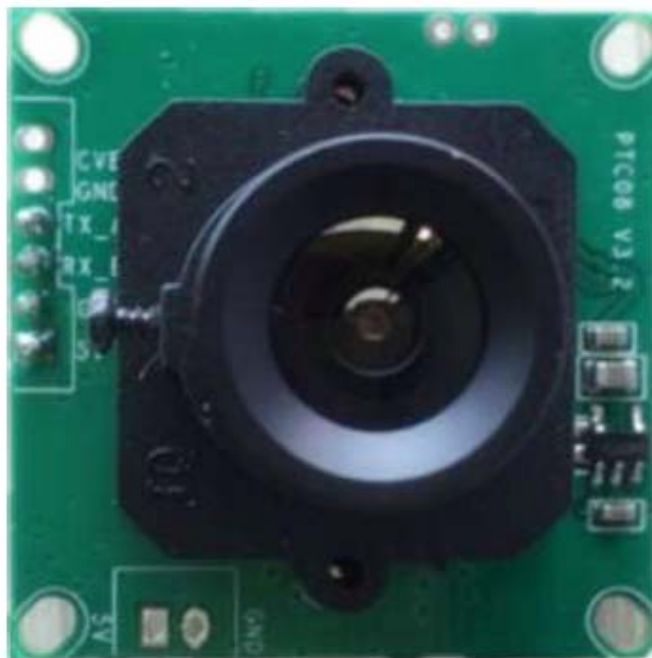


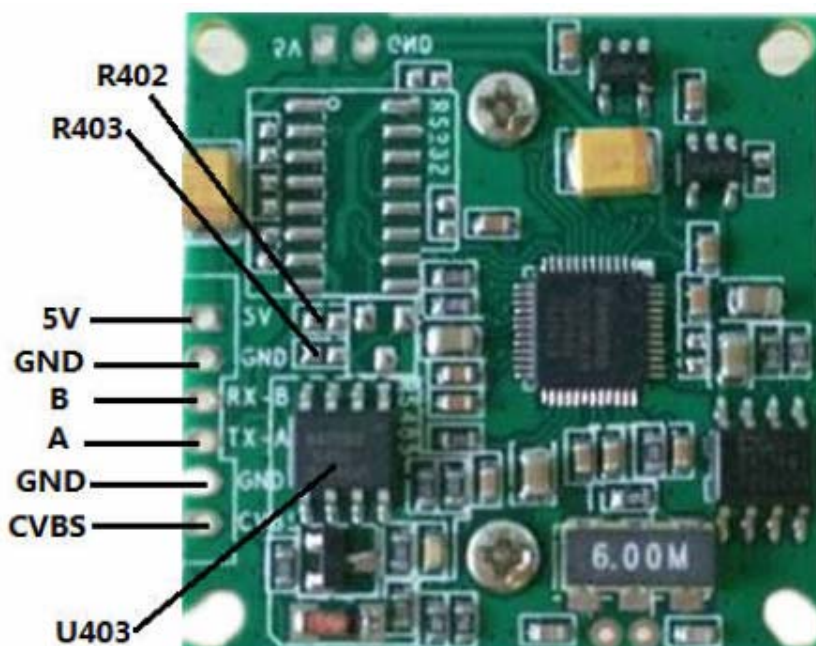
## General Description

The PTC08A JPEG compression module performs as a video camera or a JPEG compressed still camera . It provide a RS485 communication interface and can be attached to a monitor or control host. Users can send out a snapshot command from the host in order to capture a full resolution single-frame still picture. The picture is then compressed by the JPEG engine and transferred to the host.

### PTC08A TOP VIEW:



### PTC08A BOTTOM VIEW :



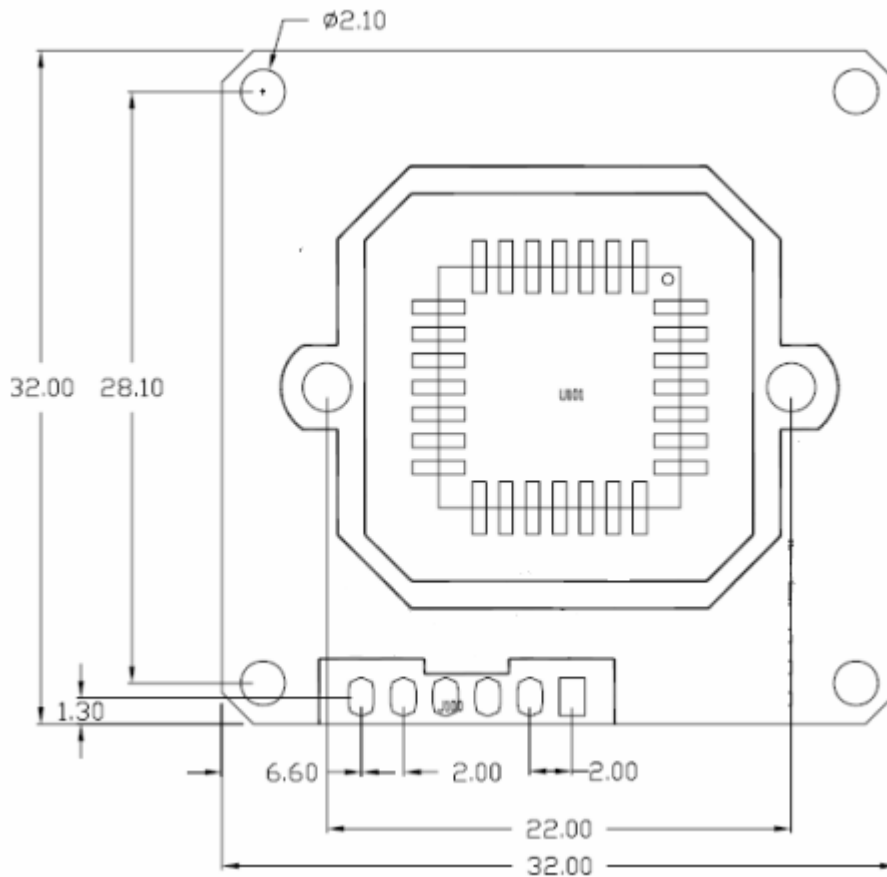
### Features

- Interface : RS485 (can be change to TTL interface )
- Size : 32mmx32mm
- Resolution : up sample to VGA(640x480)
- Low power consumption, 5V operation
- UART interface support up to 115200 bps , ( default 38400bps )
- Built-in JPEG CODEC
- Built in lens, optional
- User friendly command

### Pin Description

Pin	Description
CVBS	Analog video signal
GND	Power Ground
A	RS485 signal -- A
B	RS485 signal -- B
GND	Power Ground
5V	Power 5 VDC

### Mechanical Specification (unit: mm)



### Electrical Specification

VDD = 3.3V+10%, TA = 0 to 25°C

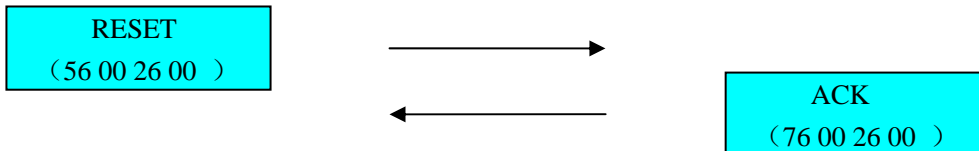
Parameter	Min	TVp	Max	Unit
DC supply voltage	3.3	5.0	6.0	V
Operation Current	60	70	85	mA
Operating temperature range	-20	20	85	°C

### DSP and Lens Specification

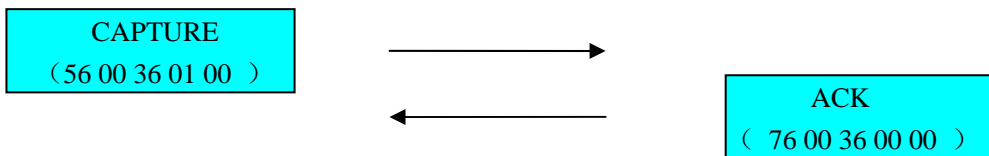
Description	Parameter
DSP	VC0703
Sensor	MT9V011
Imager Format	1/4"
F/#	2.0
Focal length (mm)	3.6mm
Field of View Diagonal (deg)	64
Distortion	0.38%
Relative Illumination	>53%
Filter Option IR-cut filter	included

### Command Protocol (hex format data)

1 **RESET:** 56 00 26 00      **RETURN:** 76 00 26 00



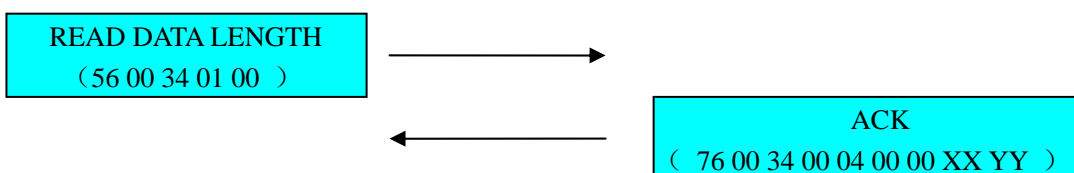
2 **CAPTURE A IMAGE:** 56 00 36 01 00      **RETURN:** 76 00 36 00 00



3 **READ IMAGE DATA LENGTH:** 56 00 34 01 00

**RETURN:** 76 00 34 00 04 00 00 XX YY

XX YY ----- image length, XX--- high byte, YY--- low byte



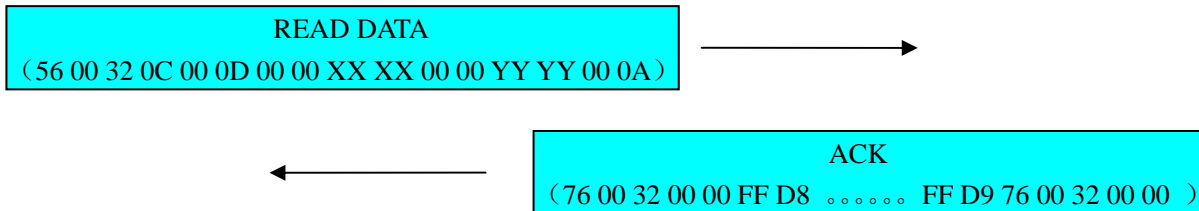
4 **READ IMAGE DATA:** 56 00 32 0C 00 0A 00 00 XX XX 00 00 YY YY 00 0A

RETURN: 76 00 32 00 00 FF D8 ..... FF D9 76 00 32 00 00  
 00 00 XX XX

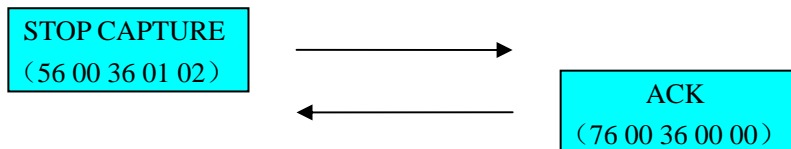
---- start address (the address must be times of 8, for example 00 00 )

00 00 YY YY ----the length of image data (high byte, low byte)

Notice:JPEG IMAGE DATA must be FF D8 in first, and FF D9 in end.



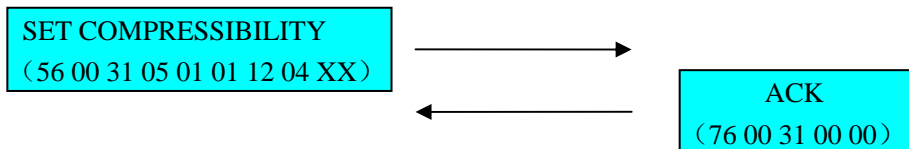
5 STOP CAPTURE: 56 00 36 01 02 RETURN: 76 00 36 00 00



6 SETTING IMAGE COMPRESSIBILITY: 56 00 31 05 01 01 12 04 XX

RETURN: 76 00 31 00 00

XX ----default value: 36 (range: 00 ----FF)

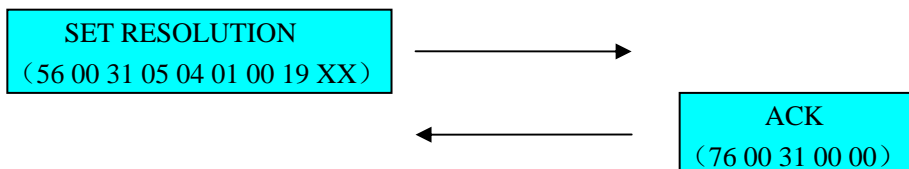


7 SETTING IMAGE RESOLUTION: (default: 320 \* 240)

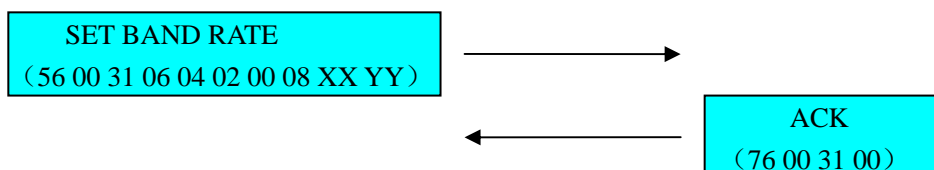
56 00 31 05 04 01 00 19 11 (320\*240) RETURN: 76 00 31 00 00

56 00 31 05 04 01 00 19 00 (640\*480)

56 00 31 05 04 01 00 19 22 (160\*120)



8 BAND RATE: ( default: 38400bps )



XX	YY	BAND RATE
----	----	-----------

AE	C8	9600
56	E4	19200
2A	F2	38400
1C	4C	57600
0D	A6	115200

## 9 PTC08A initial operation process

- (1) power on
- (2) delay 2.5s
- (3) reset command
- (4) set image resolution command
- (5) set image compressibility command

## 10 PTC08A get a image operation process

- (1) capture a image command
- (2) read image data length command
- (3) read image data command
- (4) stop capture command