SoooGuard INC

Model No.: TVMI030-I6

JPEG Compression Mini VGA Camera UART Serial Interface

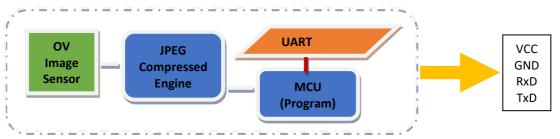
General Description

The TVMI030-I6 is a high integrated Mini camera that performs as a JPEG compressed still camera, which also provides a standard serial UART port for communication. Users can request a full pixel dimension single-frame still picture by sending out a snapshot command from host. The picture is then compressed by the JPEG engine and transferred to the host via UART port.

Application

It supports Standard RS-232 / RS-485 / TTL interface. Now it is widely used Vehicle GPS tracking system, **Robert Vision System**, Industrial Process Control, Safety Protection etc.;

Block Diagram



<u>Atlas</u>



Features

- Cost Effective: Low-cost & low-powered solution for a image acquisition system;
- Various Pixel Dimension: VGA / QVGA / QQVGA for different requirements;
- Low Image Data: JPEG compressed with 4-compression ratio configuration;
- Multiple UART Ports: RS-232, RS-485, TTL for different hosts;
- Different Baud Rate: Support Max 115200bps;
- Application Environment: Daytime Mode or Day / Night Mode;
- Various Lens Option: 2.8mm/3.6mm
- Mini Shape: Smaller size that is popular in Taxi.

Packing list

• Camera	1
 Self-Drilling Screw 	3
 Certificate of Approval 	1
 Glue Cushion 	1

Command Summary

No.	Function	Description	
1	Snapshot	Request camera to snapshot a specific size picture & divide it into packages.	
2	Report	Camera report picture size & number of packages of the snapshot to host deice	
3	Get Picture	Host device sends to get the specified picture data package	
4	Send Picture	Camera transmits the specified data package to host device	
5	Change ID No.	The host sends this command to change the camera ID NO	
6	Alter Compression Rate	Host sends this to set new picture compression rate to adjust picture quality.	
7	Change Baud Rate	Setting a new Baud Rate for Camera	

Host Snapshot	Camera	Host	ACK& Send Picture	Camera
Host ACK & Report	Camera 2	Host	Get Picture	<u>3</u> Camera

<u>Datasheet</u>

Туре	D/ N Type-850	D/ N Type-940
Sensor		
Туре	1/4 OV CMOS Pro	ogressive Sensor
S/N Ratio	500	dB
Dynamic Range	600	dB
AEC	Ye	S
AGC	Ye	S
AWB	Ye	S
Electronic Shutter	Automatic from 1/60(2	1/50)~1/100,000 Sec.
Lens		
Туре	Double-peak 850-IR Lens	Double-peak 940-IR Lens
Mount	M12	
Focal Length (mm)	2.8 / 3.6	
F.O.V (D.H.V)	120°, 90°, 75° (2.8mm Le	ens F.O.V. for reference)
lris	Fixed	
Infrared Led		
IR Led	6pcs-850 IR Led	6pcs-940 IR Led
Minimum Illumination	1 Lux (IR ON)	
	5 Lux (IR OFF)	
Night Vision	3 Meter-	4 Meter
Day/Night Switch	Auto	
Image		
Resolution	VGA / QVGA / QQVGA	
Pixels	0.3 Mega Pixels	
Compression	JPEG Format	
Video	None	
Day Mode	Fraction Color Cast I mage	Little Color Cast Image
Night Mode	Black & White Image	
Mirror	Erect image with normal installation / flip installation	
OSD Display	None	
CD Cand Changes	None	
SD Card Storage	110	

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Data Frame Type $8+n+1$ Baud Rate (bps) $2400 / 9600 / 14400 / 19200 / 38400 / 57600 / 115200$ ProtocolTV Protocol / OV528 / VC0706Testing SoftwareZMCapture / ZMTOOLSPower $2WC$ Power Supply $5V / 9V-36V$ Standby CurrentTOmA @ 5VWorking CurrentIR Off: 110-130mA @ 5VEnvironment $0.20^\circ C^{\circ}70^\circ C$ (-4°F~158°F)Operate Temp. $-20^\circ C^{\circ}70^\circ C$ (-4°F~158°F)Operate Temp. $-20^\circ C^{\circ}70^\circ C$ (-13°F~167°F)Storage Temp. $-25^\circ C^{\circ}75^\circ C$ (-13°F~167°F)Storage Hum.0%~90% Non-condensingCableCable TypeCable TypeShielded Line / Non-shielded LineCable TypeShielded Line / None / FBDConnectorWire Lead Only / DB9 Female Connector / OthersPilN 1: VCC (Red Wire)PIN 1: VCC (Red Wire)PilN 2: TXD (Green Wire)PIN 3: RXD (Yellow Wire)PilN 3: RXD (Yellow Wire)PIN 5: GND (Black Wire)Physical Index0.15 (for Reference)Product Size (mm)50*56*30	UART Interface	RS232 / RS485 / TTL		
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Product Size (mm) 50*56*30	Physical Index			
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Packing Method Gift Box	Product Size (mm)	50*56*30		
	Packing Method	Gift Box		