### Description

This image recording module is a standard module which can be designed for various applications by firmware change. We will provide some standard firmware but also help customer making his own application.

#### **Features**

- Small in size: 80x55mm
- On board Flash memory (option)
- ~ On board SD card (option)
- ~ DC12V operation
- Allow 2 video channels input √
- √ Video output to TV
- Trigger input active low Alarm output active low √
- √
- ~ Keyboard input – 4 bits with common ground
- ✓ Preset NTSC or PAL TV system input
- ✓ Preset JPG/AVI for simple operation
- 2mm pin connectors

## **Connector Description**

Note: the connectors shown below will depend on the firmware design, not applicable for all models.

Connector	Function	Remark		
JP1	Select NTSC/PAL	Need to be selected before power up		
J1	NC	For debug purpose,		
J2	SD card slot	Support up to 2G SD card		
J3	Select JPG/AVI	Need to be selected before power up		
J4	Keyboard input	4 bit binary input		
J5	Video out	2-pins, To output video signal to TV set		
J6	Camera input	4-pins, for 2 ch video input and power supply		
J7	Trigger input	3-pins, for 2 trigger input, active low		
J8	Aux DC input/output	2-pins, for DC12V input/output		
J9	Alarm output	2-pins, for alarm output, active low		

#### **Application Examples**

The following examples are ready to production, detail spec and operation please refer to the relevant document

Model No	Application	Description	
8100	General Purpose	Full function, 4 bit key input, with motion detect	
8101	IO1 Door Phone Single channel, single folder		
8102	Taxi Cam	Single channel, 2-key operation	
8103	Vehicle Black Box	2-ch switching, auto capture, 3sec/frame/channel	
8105	Video recording only	Slow recording, VGA format, playback like VCR	

# Electrical Characteristics (at room temperature 25C)

Parameter	Condition	Min	Туре	Max	Unit
Operation Voltage		7.5	12	13.5	V
Operation Current		238	145	128	mA
Standby Current	No Video o/p	215	130	120	mA
Alarm Output current	At 3V	-	-	40	mA
Trigger Input Voltage		0	-	0.9	V

#### Image and file storage information

Image format	Still picture: JPG, VGA (640x480)		
	Video: MJPEG, QVGA (320x240), 5fps		
File size per image	~80KB (HQ) ~40KB(SQ) ( depends on scene )		
File size per video clip(10sec)	~600KB		
Max image number per folder	1024 images		
Max folder number per card	1024 folders		
Max memory size for SD card	2G		

