

Specification

Product Name:1/4"CMOS LCD Module

Product Model: JDMG139 VER:100

Customer P/N:_____

Date: 2015-6-3

USER			MANUFACTURER		
Quality by	Engineer by	Authorized by	Prepared by	Checked by	Authorized by

Catalogue

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Version content

Date	Version	Content
2015-6-3	A0	The engineering sample

1.Profile:

JDMG139 CMOS camera module is comprised by 1/4'CMOS Image sensor, this camera has PAL and NTSC system format and applies to difference electric equipment that need capture video signal. The main functions include intelligent exposure system, intelligent backlight compensation and auto avoid 50Hz light flicker etc.

2. Characters:

- Video output ($1.0\pm0.2V_{p-p}$ / 75 ohm)
- PAL & NTSC system formats
- Intelligent backlight compensation

3. Application Area:

- Office electronic device
- Equipment & Instrument and measuring tools
- Machine equipment
- Supervising equipment (Car Monitor & Portable video capture and remote monitoring)
- Home supplies (Video door phone & video phone)

4. Electronic spec.:

NO	Items	Parameter instruction		Remarks
1	Image sensor	1/4inch CMOS		
2	Image system	PAL、NTSC		Default: PAL
3	Effective pixel	720*576		
4	Sync. Mode	Built-in Sync		
5	Horizontal Resolution	650TVL		
6	Pixel size	5.6um*5.6um		
7	S/N ratio	46dB		
8	Min.LUX	0.1LUX(F:2.0)		
9	Exposure system	Intelligent exposure &Intelligent backlight compensation auto avoid 50Hz light flicker		
10	Electric shutter	1/50(1/60)-1/10000S		
11	Gamma adjust	>0.45		
12	Video output	1.0±0.2Vp-p/ 75 ohm		
13	Night lighting compensation	Equipped with white light		
14	FPS	50FPS (PAL) /60FPS (NTSC)		
15	Starting time	<500ms		
16	Input voltage	DC12V ±25%		Max range: +7V~+16V
17	Consumption	DC+12V; 40mA±10mA		
18	Working Temp.	-20℃ ~ 70℃		
19	Storage Temp.	-40℃ ~85℃		
20	Humidity	5~95% RH		
21	Image display direction	Capture upright image when the board on that direction		
22	Product size	38 (L) ×38 (W) ×28.7 (H)		
23	Normal lens parameters	Focal length	4.3mm	
		Diagonal angle of view	55±3°	
		Horizontal view angle	42±3°	
		Vertical angle of view	32±3°	
		Relative distortion	<-8.3%	

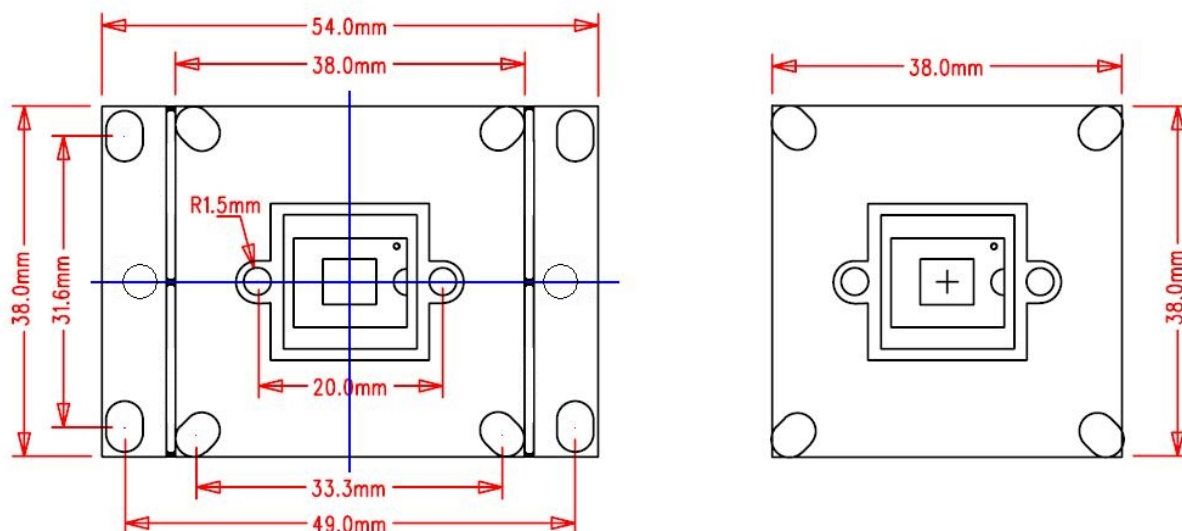
		Focusing distance	40cm(Close);1.5M(Far)	
		Spectral character	650nm without IR	

5. Reasonable test

NO	test items	testing conditions	Judgment										
1	High Temp. function test	+12VV, high temp.70℃； 8H aging test	Test is ok after 8H										
2	Low Temp. function test	+12V, low temp. -20℃： 8H aging test	Test is ok after 8H										
3	Temp.& Humidity test	Temp.:70℃； Humidity 93%； 32H aging test	Test is ok after 32H										
4	High Temp. storage test	Temp.:85℃； 8H	Product will be ok after normal temp.										
5	Low Temp storage test	Temp.: -40℃； 8H	Product will be ok after normal temp.										
6	Life test	12V DC； Continuous on/off； 48H	The product will be ok after normal temp.										
7	Discontinuous power supply test	Input 9V\12V\15V,turn on/off in every 5s,test 4H for each voltage	Every Voltage is normal after shock										
8	ESD test	Contact discharge: 6.0KV Air discharge: 8.0KV Horizontal/Vertical discharge: 8.0KV	Function and appearance are all ok										
9	Vibration test	1. Vibration standard: (1).Direction: Y direction (2).Range: 2mm (3).Frequency: 10HZ to 50HZ (4).Surface:1surface fixed when testing another 3 surface (5). Time: 30mins./every surface	The camera structure &function is normal after vibration, all accessories& blister are ok.										
10	Drop test	1. Drop standard: (1). Floor: concrete floor steel plate (2). Direction: corner、 three sides、 six surface (3). Drop way: free falling (4). Height: according to the product's weight as follows: <table><tr><td>Weight</td><td>Height</td></tr><tr><td>0kg<W≤4.5kg</td><td>91cm</td></tr><tr><td>4.5kg<W≤11.8kg</td><td>76cm</td></tr><tr><td>11.8kg<W≤23.1kg</td><td>61cm</td></tr><tr><td>23.1kg<W≤45.4kg</td><td>46cm</td></tr></table>	Weight	Height	0kg<W≤4.5kg	91cm	4.5kg<W≤11.8kg	76cm	11.8kg<W≤23.1kg	61cm	23.1kg<W≤45.4kg	46cm	The camera structure and function is normal after dropped ,all of accessories& blister are well.
Weight	Height												
0kg<W≤4.5kg	91cm												
4.5kg<W≤11.8kg	76cm												
11.8kg<W≤23.1kg	61cm												
23.1kg<W≤45.4kg	46cm												

6 Structural drawing:

Following size units are: mm, tolerance ± 0.2 mm(exclude marked)



Diagram

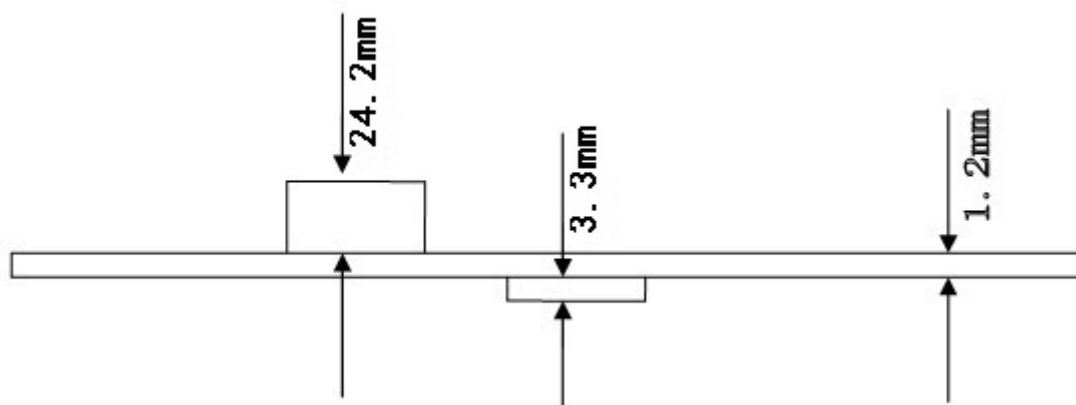
Front



Back



+12V
GND
VIDEO



7. Packing



Step1:Use 8*9 bubble bag



Step 2: Use 5.6CM(L)*3.5CM(W)*4.4CM(H)Packing box



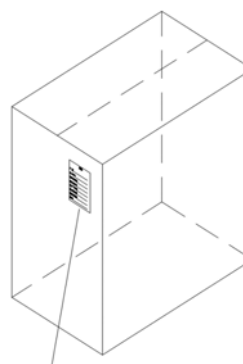
Step 3: Put the board into packing box



Step 5:put all the boxes to carton



Step 4: Then packed and stick P/N No.



Step 6: Stick label and packed the carton

8. Label

The outside information of each carton as follows:

Manufacturer'S code:

Order Number:

Material Specification :

Raw numbers :

Production date :

Delivery Quantity :

Delivery Date :

Guarantee period :

Remark :

9. Precautions:

- 1、the input voltage don't exceed the value stated on the specification , in order to avoid damage to the module.
- 2、The connector can't be reversed , reverse burn the board and affect the use of the product.
- 3、This is a electronic product, so processing, assembly , operation need to take anti -static measures to avoid affecting product performance.
- 4、Lens is glass product, place carefully to avoid breakage.
- 5、Lens is glass-made product, please take anti-dust, loss prevention measures to prevent the image quality.

10. Product naming rules

