

产品规格书

Specification

产品名称 (Product) 摄像头模组 Camera Module摄像头 (Camera Module): JDCU27S108版本号 (Version): R1.00

镜头 (Lens): _____

客户名称 (Customer): _____

客户型号 (Cust.P/N): _____

日期 (Date): _____

客户 CUSTOMER			承制方 MANUFACTURER		
品质 Quality	工程 Engineer	审批 Approved	审核 Checked	批准 Approved	销售 Sales

目 录 Contents

目 录 Contents.....	2
版 本 Version.....	3
1. 概 况 Profile.....	4
2. 应用范围 Application.....	4
3. 电气规格 Specifications.....	4-5
4. 可靠性测试 Reliability Testing.....	6-7
5. 结构图 Structural Diagram.....	8-9
6. 视场角 View Angle.....	9
7. 包装 Packing.....	10
8. 外箱标签 Carton Box Mark.....	11
9. 注意事项 Notes.....	11
10. 命名规则 Naming Rule.....	12
11. 配线 Accessory Cable.....	12

1. 概况 Profile:

JDCU27S108 R1.00 USB CMOS 彩色摄像模组, 采用 1/2.7inch CMOS 影像传感器。1920*1080 分辨率; 适用于需要摄取视频信号的各种电子设备中, 具有分辨率调节, 自动白平衡、自动曝光控制、自动增益控制、色彩饱和等图像效果调节、YUV2/MJPEG/H.264 编码输出、宽动态等功能。

JDCU27S108 1.00 CMOS USB camera module is comprised by 1/2.7" CMOS Image sensor. Resolution at 1920*1080; It is suitable for various electronic devices that need to ingest video signals. It has the functions of automatic white balance, automatic exposure control, automatic gain control, color saturation and video color adjusting, H.264/YUV2/MJPEG decode, WDR, etc.

2. 应用范围 Application

- 办公室电子设备 Office electronic device
- 仪器、仪表和测量用具 Equipment & Instrument and measuring tools
- 机器设备 Machine equipment
- 监视设备 (车用监视器、便携视频采集、远程监视) Supervising equipment (Car Monitor & Portable video capture and remote monitoring)
- 家居用品 (可视门铃、可视电话) Home supplies (Video door phone & video phone)
- 人脸识别 Face recognition


3. 电气规格 Specifications

NO	项目/Item	参数说明/Specification	备注/Remark
1	有效像素/ Effective pixel	1928H×1088V	
2	像素大小/ Pixel Size	3μm x3μm	
3	图像面积/ Image area	5832μm×3288μm	
4	输出图像格式/Output image format	YUV2/MJPEG /H.264	
5	对焦/Focusing	手动/ Manual	
6	信噪比/ S/N ratio	41dB	
7	动态范围(dynamic Range)	96dB	
8	支持的分辨率与帧速 (Default MJPEG) Supported resolution and frame rate	1920x1080 MJPEG@ 30fps /YUY2@5fps/H.264@30fp 1280x720MJPEG@30fps/ YUY2@10fps/H.264@30 fps 640x480 MJPEG@60fps /YUY2@30fps/H.264@30 fps	
9	快门类型/Shutter Type	Electronic rolling shutter and GRR	
10	接口类型/Interface Type	USB2.0 High Speed	
11	USB 线材/USB wire	可选 Optional: 1M/2M/3M/5M	
12	自动曝光控制/Automatic exposure	支持/Support	
13	自动白平衡/Automatic white balance	支持/Support	
14	自动增益控制/Automatic gain control	支持/Support	

NO	项目/Item	参数说明/Specification			备注/Remark	
15	可调节参数/Adjustable parameter	亮度 对比度 色饱和度 色调 清晰度 伽玛 白平衡 逆光对比 曝光度 Brightness contrast color saturation tone clarity gamma white balance backlight contrast exposure				
16	供电及接口/Power supply and interface	USB BUS POWER 5P-1.0mm 插座/ Socket				
17	系统支持/System Support	Win XP/Vista/Win7/Win8/Linux with UVC(above linux-2.6.26) MAC-OS X 10.4.8 or later/Android 4.0 or above with UVC				
18	电压/ Voltage	DC5V				
19	功耗/ Power Consumption	DC+5V 电压时: 电流为 170mA±10mA DC+5V Voltage: current:170mA±10mA				
20	工作环境温度/ Working Temp.	0℃ ~ 60℃				
21	储存环境温度/ Storage Temp.	-30℃ ~ 85℃				
22	湿度/ Humidity	15~85% RH				
23	产品尺寸/ Dimension	38mm (L) × 38 mm (W)				
24	镜头参数 1 Lens Parameter 焦距 Focus: 3.2mm	分辨率 Resolution	VGA	720P	1080P	
		对角线视角 Diagonal view angle	105°	100°	140°	
		水平视角 Horizontalview angle	80°	88°	105°	
		垂直视角 Vertical view angle	60°	48°	60°	
		对焦距离 Focus Distance	40CM(近焦 Near) 1.5M (远焦 Far)			
		相对畸变 Distortion	<-21%			
		光谱特性 Spectrum	650nm 不感红外型 650nm Non-inductive infrared type			
25	镜头参数 2 Lens Parameter 焦距 Focus: 3.6mm	分辨率 Resolution	VGA	720P	1080P	
		对角线视角 Diagonal view angle	80°	85°	105°	
		水平视角 Horizontalview angle	65°	72°	90°	
		垂直视角 Vertical view angle	48°	40°	48°	
		对焦距离 Focus Distance	40CM(近焦 Near) 1.5M (远焦 Far)			
		相对畸变 Distortion	<-18%			
		光谱特性 Spectrum	650nm 不感红外型 650nm Non-inductive infrared type			

4. 可靠性测试 Reliability Testing

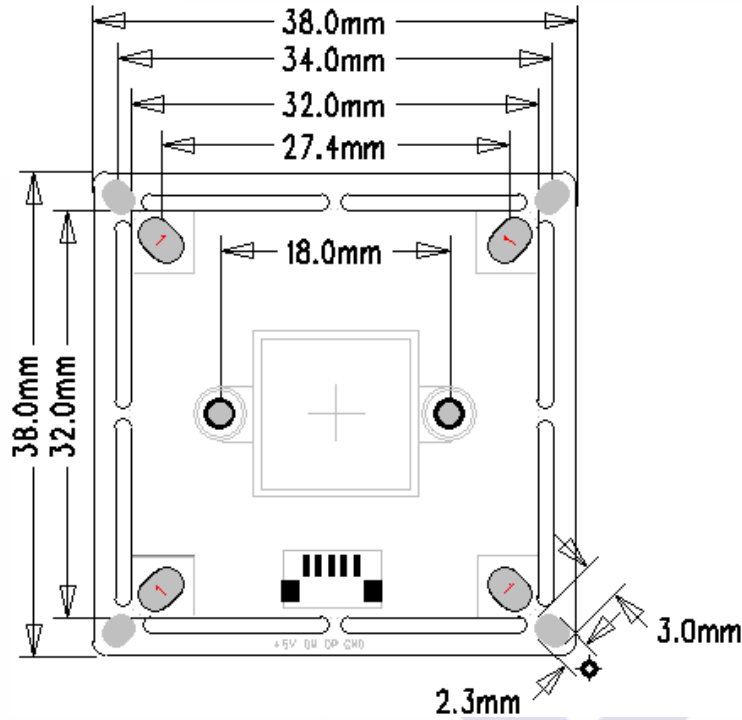
NO	试验项目 Testing Item	试验条件 Testing Conditions	判定标准 Judgment Standard
1	高温功能试验 High Temp. Test	+5V 通电, 高温 60℃; 8H 通电 +5V, high temp.60℃; 8H aging test	在 8H 测试中工作正常 Proper Functioning in 8H
2	低温功能试验 Low Temp. Test	+5V 通电, 低温 0℃; 8H 通电 +5V, low temp. 0℃; 8H aging test	在 8H 测试中工作正常 Proper Functioning in 8H
3	温湿度测试 Temp.& Humidity test	温度 60℃; 湿度 83%; 32H 通电 Temp.:60℃; Humidity 83%;32H aging	在 32H 测试中工作正常 Proper Functioning in 32H
4	高温贮存试验 High Temp. storage test	温度 70℃; 8H Temp.:70℃;8H	恢复常温后产品正常 Proper Functioning after test
5	低温贮存试验 Low Temp. storage test	温度-30℃; 8H Temp.: -30℃;8H	恢复常温后产品正常 Proper Functioning after test
6	寿命试验 Aging Test	5V 通电; 连续开关机; 48H 5V DC; Continuous on/off; 48H	在 48H 测试冲击中工作正常 Proper Functioning after 48H
7	静电放电试验 ESD test	接触放电 Contact discharge: 6.0KV 空气放电 Air discharge: 8.0KV 水平/垂直接触放电: 8.0KV Horizontal/Vertical discharge: 8.0KV	产品功能和外观无问题 Function and appearance are all ok
8	振动试验 Vibration test	1.振动标准: (1).振动方向: Y 方向 (2).振动幅度: 2mm (3).振动频率: 10HZ to 50HZ (4).振动表面: 紧靠一角的三个面 (5).振动时间: 30 分钟/每个面 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	振动后,摄像机结构及功能应正常,所有配套附件及吸塑不出现异常现象 The camera structure &function working good after vibration, all accessories& blister have no change.

NO	试验项目 Testing Item	试验条件 Testing Conditions	判定标准 Judgment Standard										
9	跌落试验 Drop test	1. 跌落标准: (1). 跌落地面: 水泥地板或钢板 (2). 跌落方位: 一角、三边、六面 (3). 跌落方式: 自由下落 (4). 跌落高度: 根据产品的重量依照下表而定 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 border="1" data-bbox="528 943 991 1167"> <thead> <tr> <th>重量 Weight</th> <th>高度 Height</th> </tr> </thead> <tbody> <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> </tbody> </table>	重量 Weight	高度 Height	0kg < W ≤ 4.5kg	91cm	4.5kg < W ≤ 11.8kg	76cm	11.8kg < W ≤ 23.1kg	61cm	23.1kg < W ≤ 45.4kg	46cm	 跌落后, 摄像机结构及功能应正常, 所有配套附件及吸塑不出现异常现象 The camera structure and function is normal after dropped, all of accessories & blister are well.
重量 Weight	高度 Height												
0kg < W ≤ 4.5kg	91cm												
4.5kg < W ≤ 11.8kg	76cm												
11.8kg < W ≤ 23.1kg	61cm												
23.1kg < W ≤ 45.4kg	46cm												

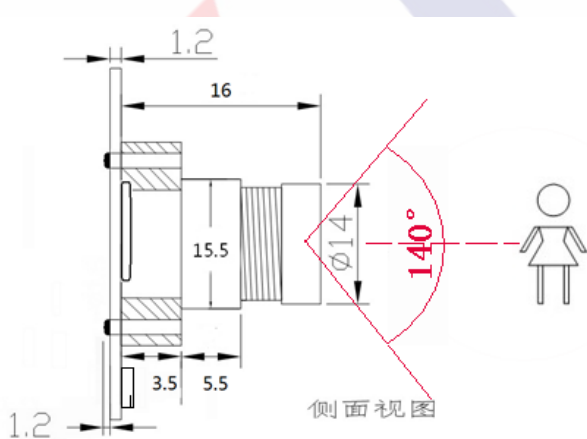
5. 结构图 Structure Diagram

以下标注尺寸单位为：mm，公差为±0.2mm(已标注公差除外)

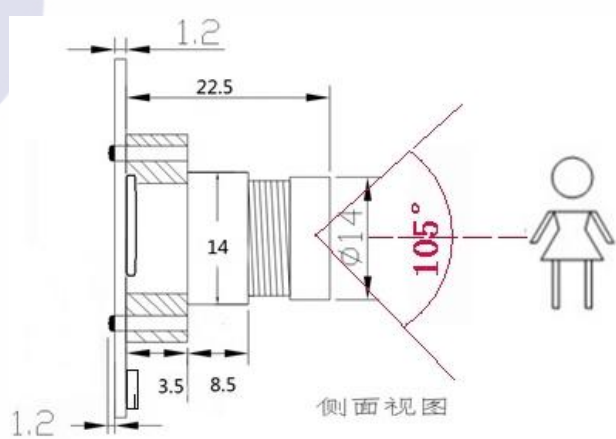
Following size units are: mm, tolerance±0.2mm(exclude marked)



3.2mm 镜头侧视图:
3.2mm side view:



3.6mm 镜头侧视图:
3.6mm side view:

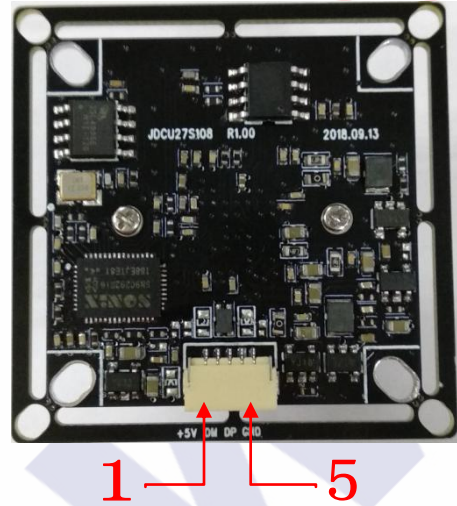


实物图/Picture of real products

正面 (front) :



背面 (reverse) :

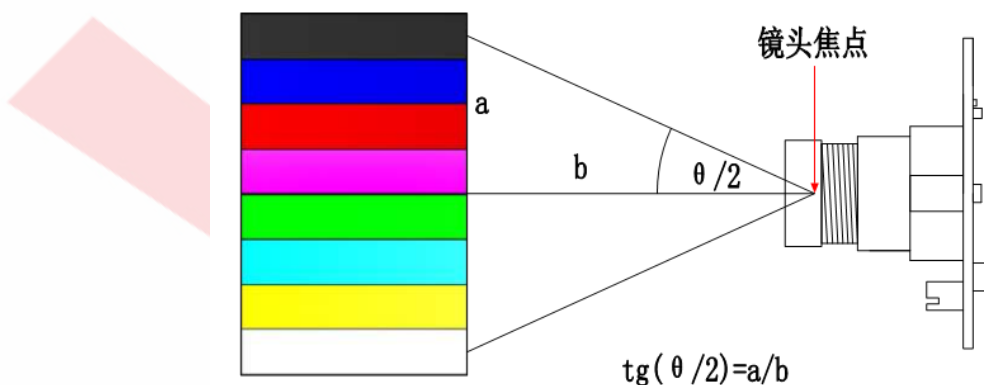


接口定义 Connector Definition:

序号/ NO.	接口定 /Interface Definitions	I/O/P	定义说明/ Description	备注/ Remarks
1	USB+5V	I	+5V 电源/+5V power supply	
2	USBD-	I	USB 数据线-/USB data line -	
3	USBD +	O	USB 数据线+/USB data line +	
4	USBGND	I	地/GND	
5	USBGND	I	地/GND	

6. 视场角 View Angle

标注尺寸单位为: mm, 公差为±0.2mm Size units are: mm, tolerance±0.2mm



注: 测量全景时镜头到彩条板距离 b, 可以约算出视角

Note: The view angle could be calculated though measure b distance between lens to testing board.

7. 包装 Packing



步骤 1: 用 8*9 气布袋包装。

Step1:use 8*9 bubble bag



步骤 2: 用 5.6CM(长)*3.5CM(宽)*4.4CM(高)包装盒。

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



步骤 3: 把装有板的汽布袋装入包装盒。

Step 3: put the board into packing box.



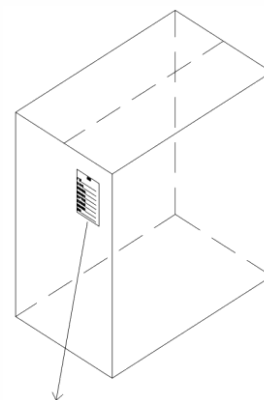
步骤 4: 然后盖上包装盒贴上型号。

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



步骤 5:把已检验合格品放入包装箱

Step 5:put all the boxes to carton



步骤 6:贴好物品标签并用胶纸包好纸箱

Step 6: Stick label and packed the carton

8. 外箱标签 Carton Mark

外箱标签的内容如下 The carton box mark include below information:

厂家码 Vendor Number :

订单号 Order Number :

物料规格 Part Specifications :

原料编号 Part Number :

生产日期 Production Date :

交货数量 Delivery Qty :

保障期限 Delivery Date :

备注 Remark :

9. 注意事项 Notes

- 1、输入电压请勿超过规格书上规定值以免损坏模组。

The input voltage don't exceed the value stated on the specification , in order to avoid damage to the module.

- 2、接口连接线不能接反，接反容易烧坏板子，对产品的使用造成影响。

The connector can't be reversed , reverse burn the board and affect the use of the product.

- 3、此驱动板为电子产品,所以加工、组装、操作时需注意防静电措施，以免影响产品性能。

This is a electronic product, so processing, assembly , operation need to take anti -static measures to avoid affecting product performance.

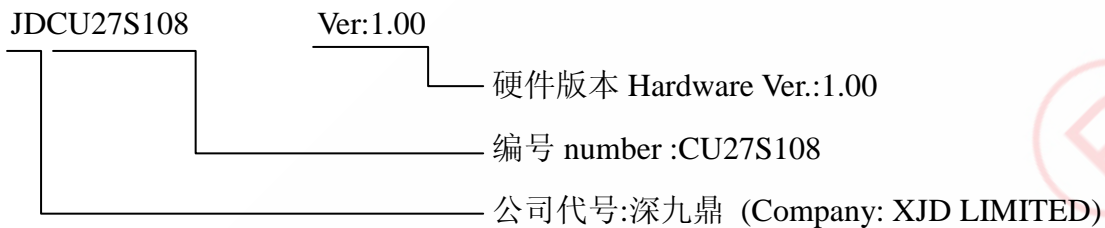
- 4、镜头是玻璃制品小心拿放，以免破裂。

Lens is glass product, place carefully to avoid breakage.

- 5、镜头是玻璃制品注意防尘、防损，以免影响图像较果。

Lens is glass-made product, please take anti-dust, loss prevention measures to prevent the image quality.

10. 命名规则 Naming Rule



11. 配线 Accessory Cable

一头 5P/1.0mm， 一头 USB 接口。

5P/1.0mm on one side and USB on the other.

