USB2.1600万像素AF定焦高清摄像头模组

Specifications book
规格书

Model No 型号	DH-*HD16MAB*
Description 描述	1600 万像素AF自动对焦高清摄像头模 组
Customer Name 客户名称	
Version 版本	

Approved			
	COMPILATION 编制	AUDIT 审核	AUTHORIZATION 批准
Manufacture 制作			
	du	XU	Jean

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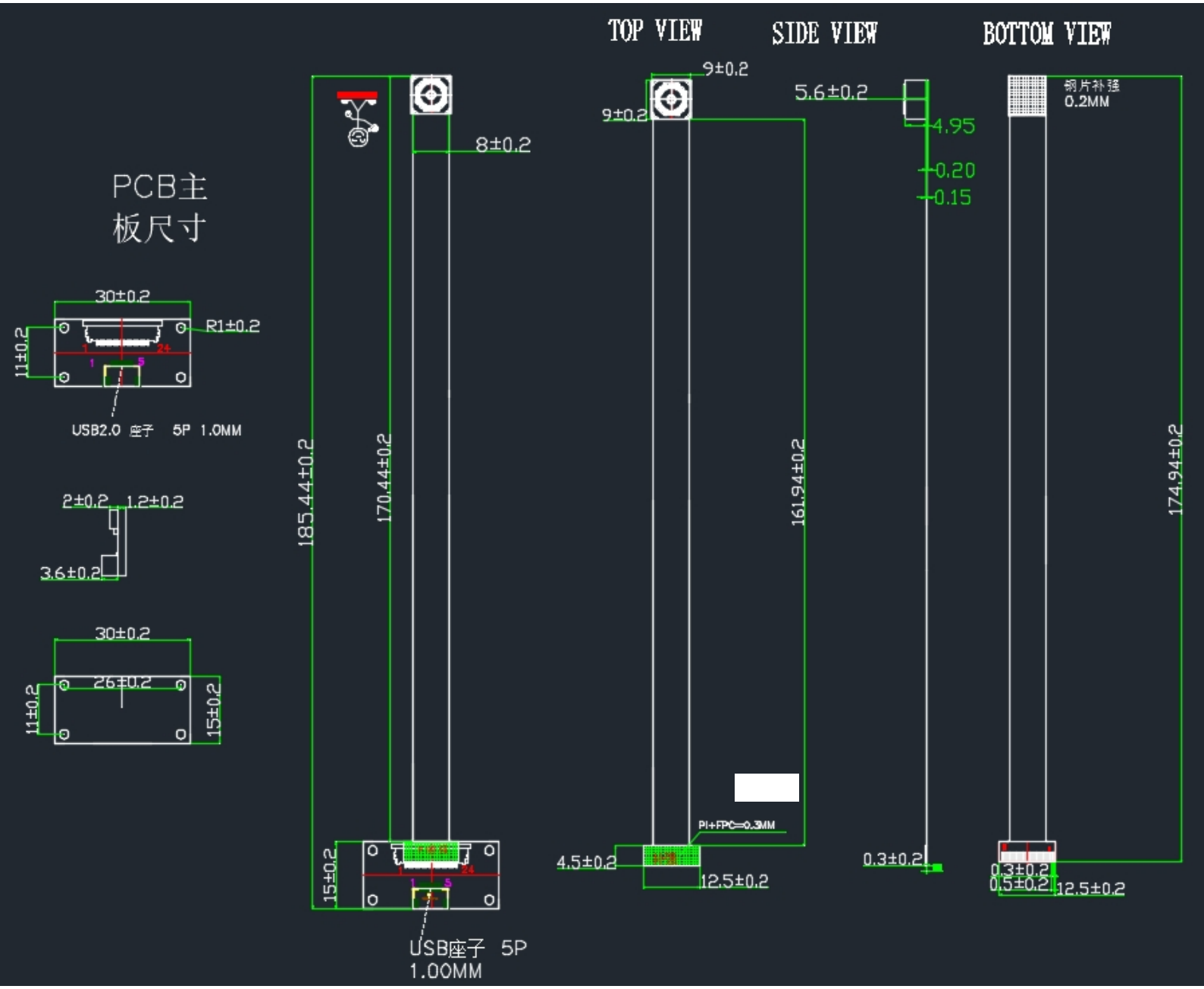
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I. KEY SPECIFICATION 主要规格参数

Items 项目	Description 参数
Sensor 传感器	1/2.8Inch CMOS IMX298
Pixel size 像元尺寸	1.12um
Max Resolution 最大分辨率	4608Hx3456V
View Angle 角度	D:78.4° H：66.2° V:52.4° FB:4.53 EFLM:3.95 FNO:1.8
dynamic range 动态范围	72.5dB
Image Color 图像颜色	彩色
Microphone 麦克风	不支持
White Balance 白平衡	自动
Type of Focusing 对焦方式	AF 自动对焦
Output & Power Supply 输出	USB2.0
Video Stream Format 视频格式	MJPEG, YUY2
USB 接口	USB 座子 4p 2.0mm 插件
Module Size 模块尺寸	30mm*15mm+软排
Requested Systems 支持系统	WinXP/Vista/Windows 7 (32bit/64bit)/Windows 8/Windows 10/MAC OSX EI captain 10.11.4 and Linux /Android

2. PRODUCT DIMENSION 产品尺寸

摄像头主板尺寸结构：



3. PIN DESCRIPTION 拼脚定义

Pin No.	Signal Name	Wire Color	Description
1	VCC		5V Power
2	DM		USB2.0 Data-
3	DP		USB2.0 Data+
4	GND		GND
5	GND		GND

4. SENSOR SPECIFICATION 传感器规格

Type 传感器型号	IMX298 CMOS Image Sensor
Resolution 像素分辨率	16MP
Image size 图像尺寸	Diagonal 5.7mm(Type 1/2.8)
Total number of pixels 最大像素	4608(H) x 3456(V) approx. 8.26Mpixel
Number of effective pixels 有效像素	4608(H) x3456(V) approx. 8.08Mpixel
Chip size 传感器尺寸	6.18mm(H) x 5.85mm(V)
Unit cell size 像元尺寸	1.12um(H) x 1.12um(V)

III. SUPPORTED RESOLUTION AND FRAME RATE 分辨率及帧数

FORMAT 格式	RESOLUTION 分辨率	FRAME RATE 帧数率	
		USB2.0	USB3.0
MJPEG	4608*3456	5fps	N/A
	3264 x 2448 (8MP)	15fps	N/A
	2592X1944 (5MP)	15fps	N/A
	2048*1536 (2K)	15fps	N/A
	1920x1080 (1080P)	30fps	N/A
	1600x1200 (UXGA)	30fps	N/A
	1280X720 (720P)	30fps	N/A
	640X480 (VGA)	30fps	N/A
YUY2	4608*3456	N/A	N/A
	3264 x 2448 (8MP)	N/A	N/A
	2592X1944 (5MP)	N/A	N/A
	1920x1080 (1080P)	N/A	N/A
	640X480 (VGA)	N/A	N/A

IV. ELECTRICAL SPECIFICATION 电气规格

1. OPERATING CONDITION 产品条件

Condition 条件	**Specification 范围**
Operating Voltage 工作电压	USB DC +5V Supply
Operating Current 工作电流	＜260mA
Operating Temperature 工作温度	-20º ~ +70º
Storage Temperature 存储温度	-20º ~ +105º
Humidity 湿度	80 ~85%

V. APPEARANCE TEST 外观测试

Appearance Test Standard 外观测试标准

A. The Definition of Appearance 外观定义

Appearance of camera modules 相机模组外观

B. Test Methods测试方法

a. Test Specialists

Who had been trained and have normal capacity for differentiating colors. Their vision achieves more than 1.0. And all our test specialists passed the standard and strict test.

人员：外观检查人员需经过培训并且辨色能力正常，其视力应达到1.0以上(矫正后达到1.0以上亦可)，辨色能力应可通过标准测试。

b. Distance and Time 距离和时间

Observation distance: 10-15mm 观察距离： 10-15mm

Observation time for each surface: 3-5 seconds

观察时间为每个表面 3 ~ 5 秒

c. Test Environment 检验环境

Appearance inspection should be under the not glaring fluorescent lamp.

The minimum illumination should be more than 100 feet candle light brightness, or 1.5meter distance under 60W fluorescent lamp.

外观检验应在不刺目的荧光灯下检查，其最低照度应在 100 尺烛光亮度以上，或者是60W日光灯，1.5m距离下检验。

d. Observation Angle 观察角度
Observation angle between 0-68 degree. 观察角度在 0-68°

C. Acceptance Criteria 接受标准

a. Degree of Cleanliness
Components have no stains, dust and grease.
清洁程度：部件必须没有脏污，没有灰尘，没有油污及其他污迹。

b. Mounting Surface
Components have no scratches, gouge marks, sink marks, buckling, fracture, indentation and other defects.

装配表面：需装配的零部件应避免有划痕、凿痕、凹痕、弯折、破裂、压痕、擦伤或其它因不当装配所引起的缺陷。

VI. RELIABILITY TEST 可靠性测试

Items 项目	**Conditions** 条件	**Specification** 规格
高温实验 High Temperature Test	温度Temp: 70℃ 时间 Time: 24H	无异常 No Abnormalities
低温测试 Low Temperature Test	温度Temp: -20℃ 时间Time: 24H	无异常 No Abnormalities
温度实验 Humidity Test	温度Temp: 70℃ 湿度Humidity: 80-85% 时间Time: 24H	无异常 No Abnormalities
镜头座拉力试验 Cable Tensile Strength Test	荷重Load: 4KG 持续时间Time of duration: 60 S	无异常 No Abnormalities
跌落测试（单体） Drop Test (Single Product)	高High: 60CM 回数Times: 10	电性能正常 Electric properties is normal
跌落测试（整箱） Drop Test (One Carton)	高High: 60CM 一角一边六面Method: Vertical drop by six sides, one corner and three 木板上edges	电性能正常 Electric properties is normal
震动测试（单体） Vibration Test (Single Product)	1.震动机的震动频率调至50Hz； Vibration machine vibration 震动测试（单体） Vibration Test frequency to 50Hz 电性能正常 2. 震 动 幅 度 Vibration amplitude Electric normal 1.5MM； 3.震动时间 Vibration time 30 Minutes	电性能正常 Electric properties is normal
弯曲试验 Bending Test	用弯曲测试治具将PCBA弯曲10度 PCBA 10 degree curve with bending instrument	电性能正常 Electric properties is normal
插拔实验 Pull and Plug Test	回数Times: 200	电性能正常 Electric properties is normal

VII. PACKING STANDARDS 包装标准

A. Make the strict packaging standards according to products characteristics. With anti-static, damp proof, quakeproof, mould proof and prevent rough handling properties during the use and storage period.
根据产品特点制定严格的包装标准。
具有防静电、防潮、防震、防霉、防止使用和贮存期间的粗暴装卸性能。

B. Shipping Mark Contents 装运唛头内容

Supplier Name, Product Name, Product Number, Date of Manufacture, Order Number 供应商名称、产品名称、产品编号、生产日期、订单号

C. Packaging and packing solution according to customers' requirements, and then sealing to confirm. 包装和包装方案根据客户的要求，然后密封确认

D. Carton box 纸板箱
- Carton size : 38 * 38 * 28cm 25pcs/ctn 纸板尺寸：38×38×28cm 25 /箱
- Carton weight : 6KG by CBM/CTN 纸箱重量：6kg by CBM /箱