

Содержание

Camera modules	3
<i>FPC pinouts</i>	5

Camera modules

KLT	http://www.kailaptech.com	Китай, куча модулей камер, MT-SYSTEM вроде поставляет
Sinoseen	https://www.oemcameramodules.com/supplier-440260-mipi-camera-module	Китай, всякие разные модули
BRITECH CMOS?	https://cbritech.en.alibaba.com/productgroup/824337818/Fixed_Focus_Camera_Module.html	Китай, есть дешёвые совсем
XCG?	https://xinchenguang.en.made-in-china.com/product-group/PMkALCKYngVB/MIPI-Camera-module-catalog-1.html	Китай, есть дешёвые совсем
SINCEREFIRST?	https://www.cameramodule.com/fpc-camera-module/	Китай, всякие разные модули
HAMPO?	http://ru.hampotech.com/mipi-camera-module/	Китай, всякие разные модули
Motoshot?	https://www.camemake.com/mipi-camera-module/	Китай, всякие разные модули
CMT?	http://www.camera-module.com/product/mipicameramodule/	Китай, всякие разные модули, мало MIPI?
CK?	https://www.ckvisioncam.com/collection/2-mp-mipi-csi-camera-module	Китай? Цены? Мало?
ALINX	https://alinx.com/en/cate/88.html	Отладки всякие, в том числе модули камер
e-con	https://www.e-consystems.com/cameramodule.asp	Дорогие
Leopard imaging	https://leopardimaging.com/product-category/robotics-cameras/cis-2-mipi-modules/mobile-modules/	Дорогие
TechNexion	https://www.technexion.com/products/embedded-vision/mipi-csi2/	Дорогие
INET?	https://www.inetele.com/	Дорогие?



С автофокусом - обычно большого разрешения

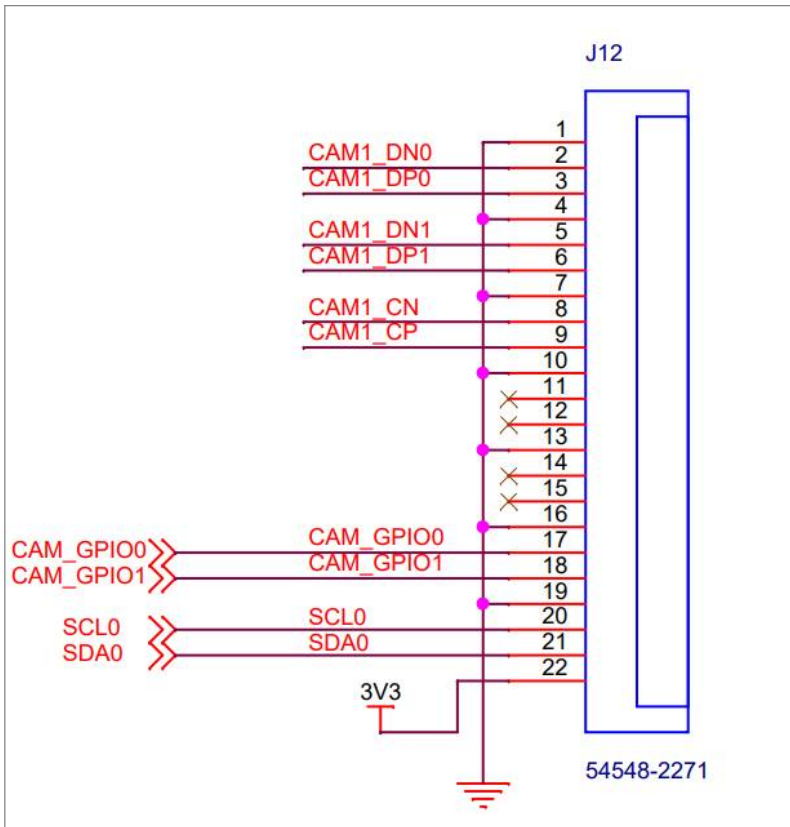
Manufacturer	p\n	resolution	MP	Interface		Shutter
SmartSens	SC031GS	640×480	0.3M	DVP/MIPI/LVDS		Global
SmartSens	sc200ai	1920×1080	2M	MIPI/DVP	???	
GalaxyCore	GC2093	1920×1080	2M	MIPI	???	
SmartSens	SC3336	2312×1304	3M	MIPI/DVP	+++	
Omnivision	os04a10		4M	MIPI/LVDS		
SmartSens	SC4336	2568×1448	4M	MIPI		
SmartSens	SC500AI	2888×1628	5M	MIPI		

Manufacturer	p\n	resolution	MP	Interface		Shutter
SmartSens	SC500AI	2888×1628	5M	MIPI		
SmartSens	SC530AI	2884×1624	5M	MIPI		
GalaxyCore	GC4023					
GalaxyCore	GC4653					
SmartSens	sc230ai					
SmartSens	SC3338					

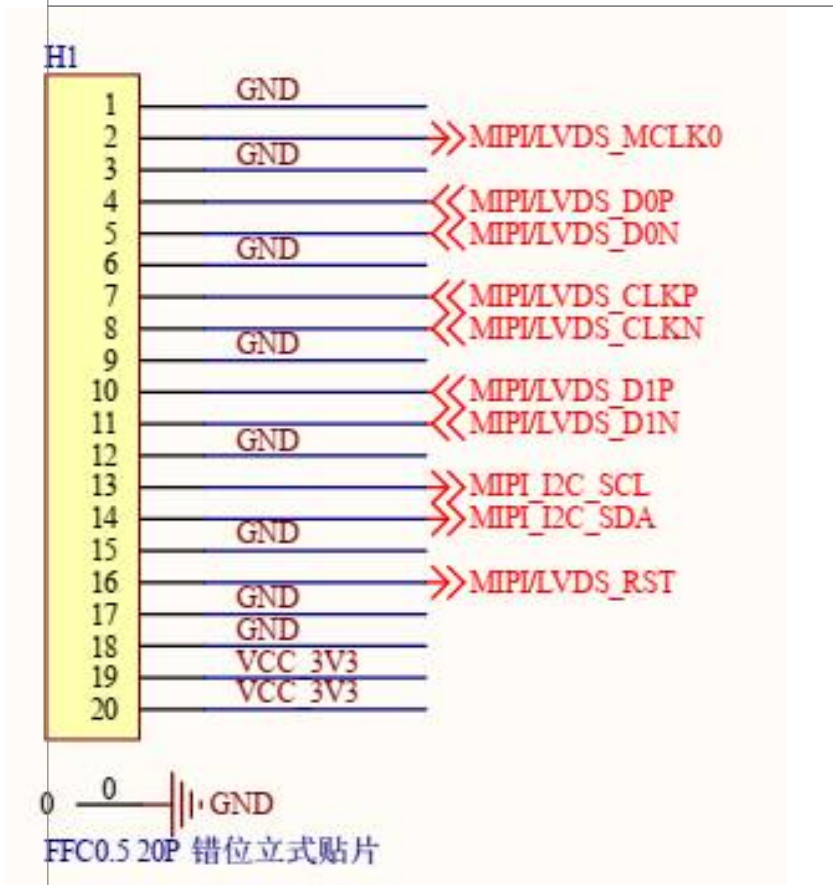
photo	size	lens	focus
	38×38	M12	fixed
	22×15	M12	fixed
	24.5×24.5	M12	Fixed

photo	size	lens	focus
		M12	fixed
			fixed
			fixed
			auto

FPC pinouts

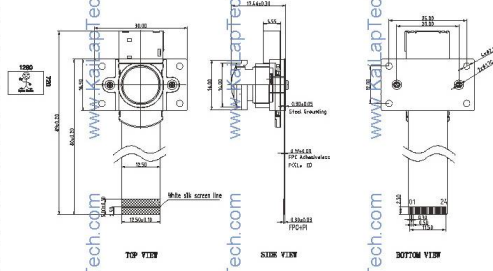


Raspberry PI FPC connector



Rockchip luckfox

RoHS		Version Information		Date
PIN SIGNAL		V1.0		2018-04-20
1 AGND		V2.0		2023-2-11
2 AVDD0.3V				
3 SDA				
4 SCL				
5 PWDN				
6 FSIN/VSYNC				
7 MCLK				
8 MCLK				
9 DQND				
10 MDPOD3				
11 MDND02				
12 DGND				
13 HREF				
14 PCLK				
15 D0				
16 D4				
17 D5				
18 D6				
19 D7				
20 D8				
21 D9				
22 DVDD1.8V				
23 DVDD1.8V				
24 MCLK				



Parameters:

1. Sensor specification:

- Image Sensor: OV9732
- Pixel: 3umx3um
- Lens Type: 1/4
- Important Voltage Description: DVDD1.8V (external power supply)

Lens specification:

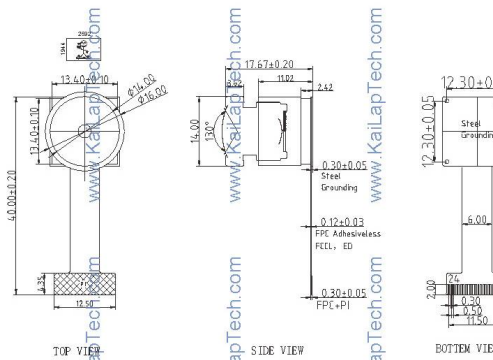
- FOV: 160°(D);148°(H);87°(V);
- F/#: 2.35
- TV distortion: <-29.2%
- Focal length: 1.62mm
- Composition: 6G+IR SWITCH

Designed By: Kevin
 Checked By: Aouly_yan

Model Name: KLT-C3PF-IRSW-OV9732 V2.0
 Projection Type: Unit: mm, Material: Steel Grounding
 Scale: 1:1, Sheet: 1 of 1, Version: 1/0

<http://www.kailaptech.com/Product.aspx?id=2508&l=1110>
 1MP OmniVision OV9732 IR Switch MIPI and DVP Interface
 M12 Fixed Focus Camera Module
 Model No. KLT-C3PF-IRSW-OV9732 V2.0

RoHS		Version Information		Date
1 AVDD(2.8V)		V1.0		2021-3-1
2 DVDD(1.8V)				
3 DVDD(1.5V)				
4 PWDN				
5 NC				
6 NC				
7 NC				
8 NC				
9 NC				
10 NC				
11 NC				
12 DGND				
13 H0_P				
14 H0_C				
15 MCLK				
16 DAT1_P				
17 DAT1_N				
18 CLK_P				
19 CLK_N				
20 DAT0_P				
21 DAT0_N				
22 RESET				
23 NC				
24 M0				



Parameter:

2. Lens specification:

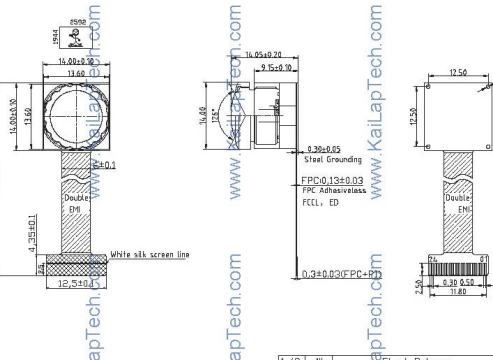
- FOV: 130°
- F/#: 2.2
- TV distortion: <13%
- Focal length: 2.25mm
- Composition: 6G+IR FILTER
- IR Cut Coating: 650-850nm@50%

Designed By: Kevin
 Checked By: Aouly_yan

Model Name: KLT-KS8-OV5643 V1.0 IR850
 Projection Type: Unit: mm, Material: Steel Grounding
 Scale: 1:1, Sheet: 1 of 1, Version: 1/0

<http://www.kailaptech.com/Product.aspx?id=2577&l=1110>
 5MP OmniVision OV5648 MIPI Interface M12 850nm
 Dual Pass Fixed Focus Camera Module
 Model No. KLT-KS8-OV5648 V1.0 IR850

CONNECTOR		Version Information		Date
24PIN DESCRIPTION		V1.0		2018-03-31
1 AVDD(2.8V)				
2 DVDD(1.8V)				
3 DVDD(1.5V)				
4 PWDN				
5 NC				
6 NC				
7 NC				
8 NC				
9 NC				
10 NC				
11 NC				
12 DGND				
13 SDA				
14 SCL				
15 MCLK				
16 DAT1_P				
17 DAT1_N				
18 CLK_P				
19 CLK_N				
20 DAT0_P				
21 DAT0_N				
22 RESET				
23 NC				
24 GND				



Parameter:

- 焦距(F/#): 2.15
- 光圈角(Field of View): 2.35
- 视场角(View Angle): 126°
- 畸变(Distortion): <-15.7%
- 镜头类型(Lens Size): 1/4 inch
- 像素(Pixel Size): 2592x1944
- 感光芯片(Chip Type): OV5640

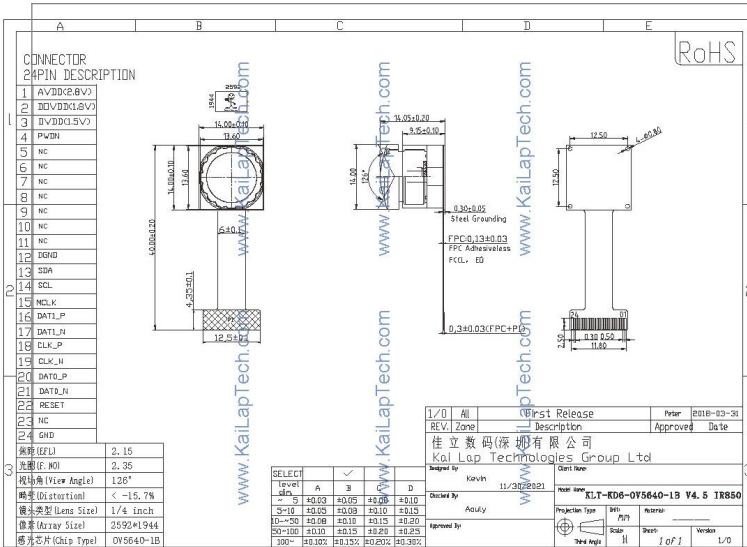
SELECT level: A B D

0-5	±0.03	±0.05	±0.08	±0.10
5-10	±0.05	±0.08	±0.10	±0.15
10-50	±0.08	±0.10	±0.15	±0.20
50-100	±0.10	±0.15	±0.20	±0.25
100-	±0.100	±0.150	±0.200	±0.300

Designed By: Kevin
 Checked By: Aouly_yan

Model Name: KLT-KD6-OV5640 V4.7 IR850D
 Projection Type: Unit: mm, Material: Steel Grounding
 Scale: 1:1, Sheet: 1 of 1, Version: 1/0

<http://www.kailaptech.com/Product.aspx?id=2319&l=1110>
 5MP OmniVision OV5640 MIPI Interface 850nm Dual Pass
 M12 Fixed Focus Camera Module
 Model No. KLT-KD6-OV5640 V4.7 IR850D



<http://www.kailaptech.com/Product.aspx?id=2375&l=1110>
 5MP OmniVision OV5640-1B MIPI Interface 850nm IR Pass
 M12 Fixed Focus Camera Module
 Model No. KLT-KD6-OV5640-1B V4.5 IR850

