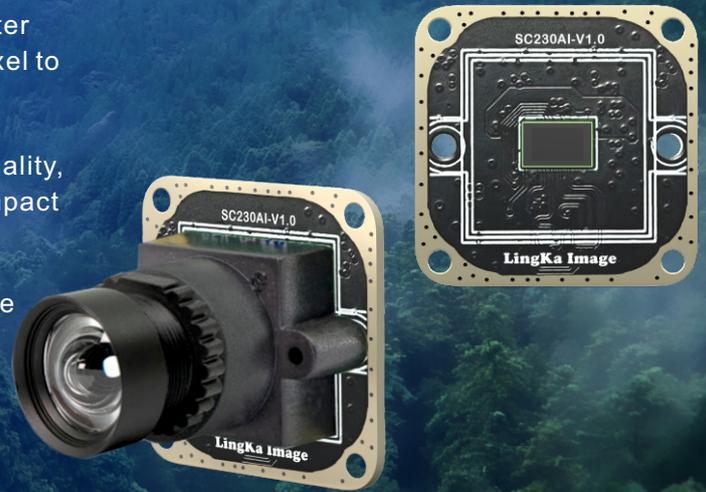


# LingKa SC230AI

- LingKa 230AI features an Smartsens 230AI roller shutter sensor with a type 1 / 2.8 color CMOS 2.0M effective pixel to achieve 1920 x 1080 resolution.
- LingKa 230AI provides a high sensitivity, high image quality, high dynamic range, low noise, low power in a very compact package.
- Inter-changeable M12 S-Mount lenses to fully integrate the LingKa 230AI into your embedded system are available upon request.



## Specifications

### Sensor Information

CMOS Sensor	Smartsens 230AI
Active Pixels	1920 (H) x 1080 (V)
Pixel Size	2.9 $\mu\text{m}$ x 2.9 $\mu\text{m}$
Optical Format	1 / 2.8
Shutter Type	Roller Shutter
Chromaticity	Color
Max Frame Rate	60 fps
Chief Ray Angle	15°
Input Clock Range	6 - 64 MHz (Default 27MHz)
Bit Depths	Raw 10 / 8 bit

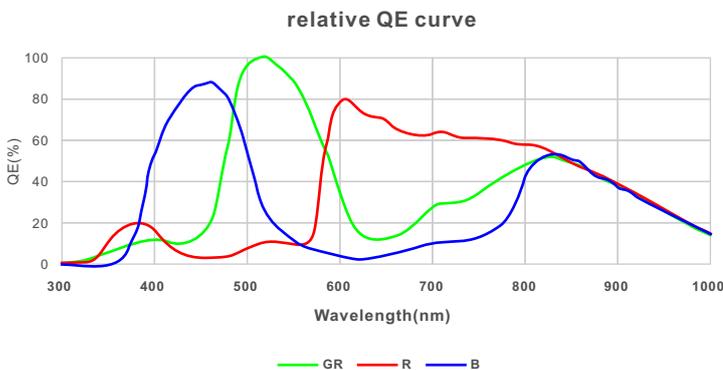
### Interface

Data Transmission	MIPI CSI-2, up to 4 Lanes
Communication Interface	I2C
Connector	DF40C-40DP-0.4V(51)(Header)

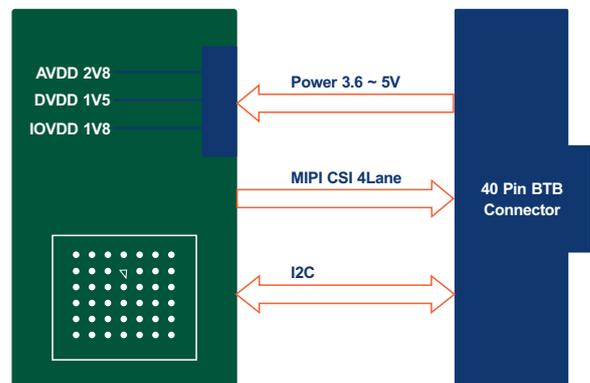
### Support

Platform	Linux Rtos
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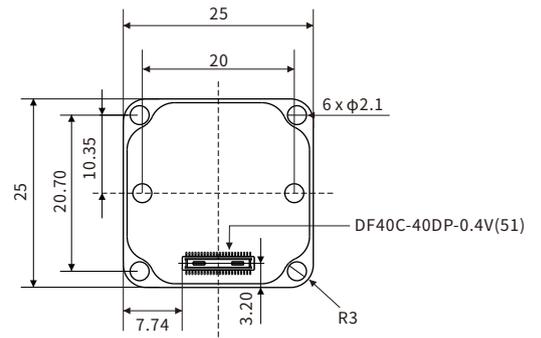
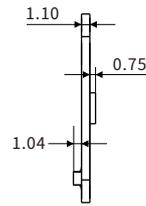
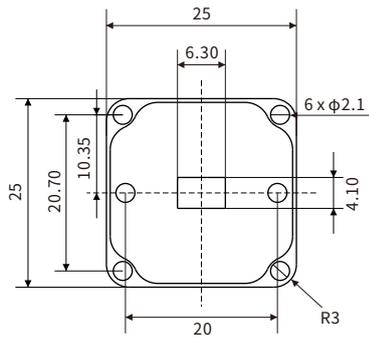
### Spectral Characteristics



### Block Diagram



**Mechanical Dimension**  
(units in mm)



**Environmental and Mechanical**

L x W x H	25 x 25 x 3.6 mm
Mass	< 8g
Operating Temperature	-40° ~ 85°C
Storage Temperature	-40° ~ 125°C
Ambient Humidity	10% to 90% RH

**Certification and Compliance**

Certification	Compliant with CE / FCC / RoHS / REACH directives
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**Power**

Supply Voltage	3.3~5V
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**Connector Pin Definition**

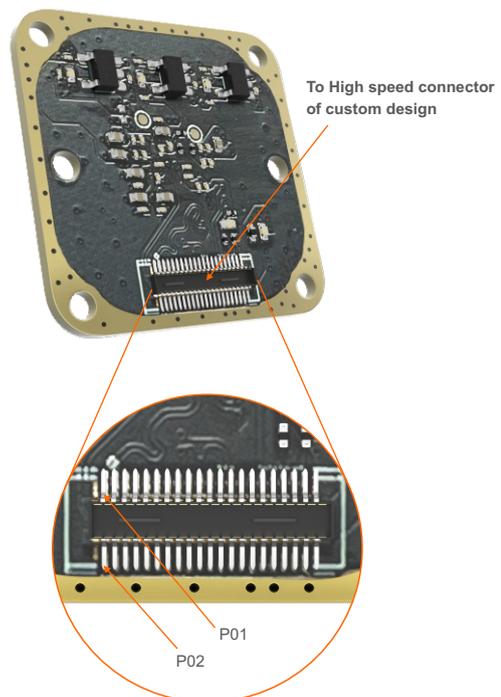
Pin Definition			
P01	MIPI_DP3	P02	NC
P03	MIPI_DP3	P04	NC
P05	NC	P06	NC
P07	NC	P08	NC
P09	NC	P10	NC
P11	NC	P12	NC
P13	NC	P14	MIPI_DP1
P15	NC	P16	MIPI_DN1
P17	NC	P18	NC
P19	NC	P20	NC
P21	Gnd	P22	MIPI_DP0
P23	MIPI_CLKP	P24	MIPI_DN0
P25	MIPI_CLKN	P26	MIPI_DP2
P27	NC	P28	MIPI_DN2
P29	NC	P30	Gnd
P31	I2C_SCL	P32	Gnd
P33	I2C_SDA	P34	Gnd
P35	X_Reset	P36	L
P37	Gnd	P38	L
P39	X_Cap_Mclk	P40	L

**Lens Information**

Lens Type	YT10069
Focus Length	1.7 mm
F/No.	1.0
FOV (Diagonal)	83°
TTL	22.0 mm
Range	30 cm to Infinity

Lens Type	cw-bl1828-3mp
Focus Length	1.8 mm
F/No.	1 / 2
FOV (Diagonal)	185°
TTL	22.0 mm
Range	26 cm to Infinity

LingKa can provide a suitable customized lens solution based on customer demand



**LingKa SC230AI**

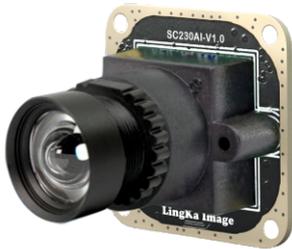
2MP Smartsens 230AI Camera Sensor

**Package Content**

- LingKa SC230AI

**LingKa SC230AI**

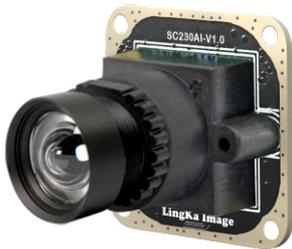
2MP Smartsens 230AI Camera Sensor with M12 185°/83° lens

**Package Content**

- LingKa SC230AI
- M12 Holder with diagonal FOV 185°/83° lens

**LingKa SC230AI**

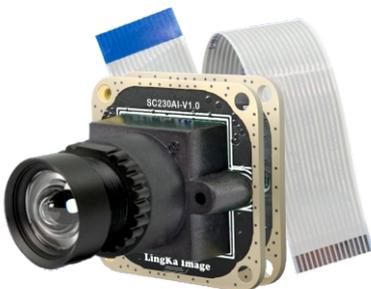
2MP Smartsens 230AI Camera Sensor with M12 185°/83° lens

**Package Content**

- LingKa SC230AI
- M12 Holder with diagonal FOV 185°/83° lens

**LingKa SC230AI**

2MP Smartsens 230AI Camera Sensor with M12 185°/83° lens and Ext Soc/AD board,it can support lcd/wifi/analog signal

**Package Content**

- LingKa SC230AI
- M12 Holder with diagonal FOV 185°/83° lens
- Ext Soc/AD board,it can support lcd/wifi/analog signal



For more details, check LingKa Embedded Vision products.  
[www.Link-Card.com.cn](http://www.Link-Card.com.cn)