



# ALI019 AUTOMOTIVE ADAS CAMERA MODULE

Product Specification

1/3.8 1280\*960 Automotive ADAS Camera Module

info@alg-imaging.com  
HK ALG INTERNATIONAL LIMITED

## ➤ General Description

The AL019A2 series camera module is 1Megapixel high-performance camera for automotive ADAS application; Using Sony ISX019 chip, with on-chip ISP, it has a high dynamic range of over 120dB and low dark noise in night vision scenes. This product has high reliability and is widely used in automotive vision applications.

## ➤ Features

- High quality image by large pixel size;
- Low latency data transfer with GMSL;
- Over 120dB High dynamic range;
- Automotive grade high reliability performance, IP67 protection level;
- Provide camera intrinsic parameters from internal EEPROM (by customer needs);

## ➤ Applications

- Autonomous driving surround view
- Environmental perception of industrial robots

## ➤ Key Specifications

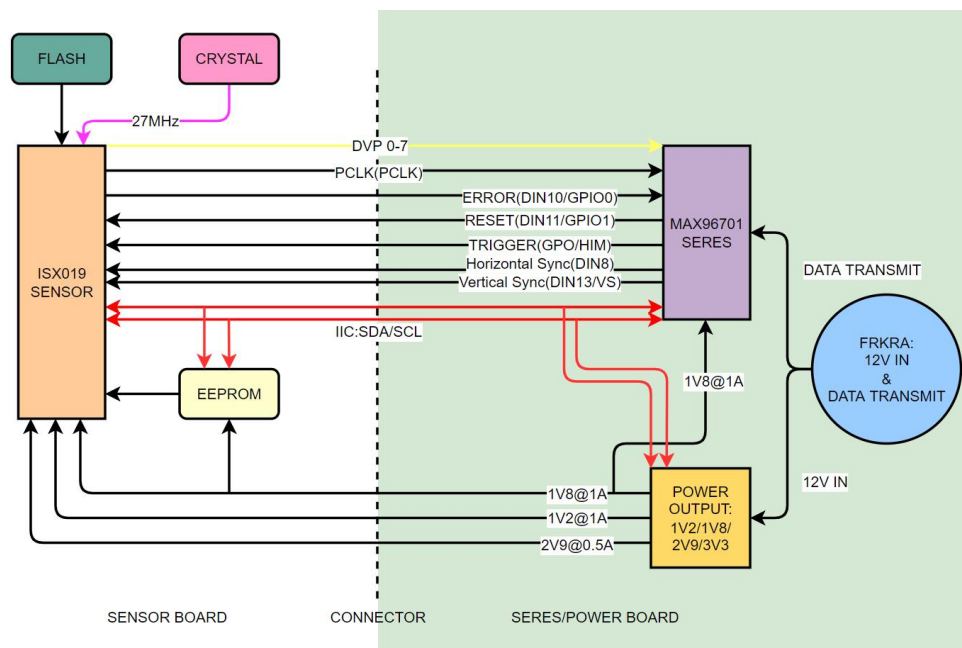
Type	Parameter	Annotation
Field of View	58°/120°/189°/196°	
Photosensitive chip	SONY ISX019	
ISP chip	On chip	
Optical size	1/3.8 inch CMOS	
Pixel size	3.0μm	
Frame rate	25fps(Typical value)	
Resolution	1280 (H) x960 (V)	
Exposure mode	Rolling Shutter	
Dynamic range	120dB	
Image format	YUV422-8bit	
Color Pattern	RGGB	
Serializer chip	MAXIM Max96701	
Output interface	GMSL1(LVDS)	
Working voltage	9V-12V	
Package type	BGA	
Camera interface	Coaxial	
Coupler	Amphenol (default Z Type Fakra)	
Operating temperature	-40°C ~ +85°C	
Storage temperature	-40°C ~ +105°C	

## ➤ Models and Lens

Model Number	HFOV	VFOV	EFL	F. no	Protection
ALI2106-SAX-SATA-IP67	58.2±2°	43.2±2°	3.62±5%	1.6±5%	IP67
ALI2112-SAX-SATA-IP67	120±3°	98±3°	1.27±5%	2.2±5%	IP67
ALI2119-SAX-SATA-IP67	189±3°	147±3°	0.94±5%	2.05±5%	IP67
ALI2119-SAH-SATA-IP67	196±4°	152±3°	0.97±0.01	2.06±5%	IP67

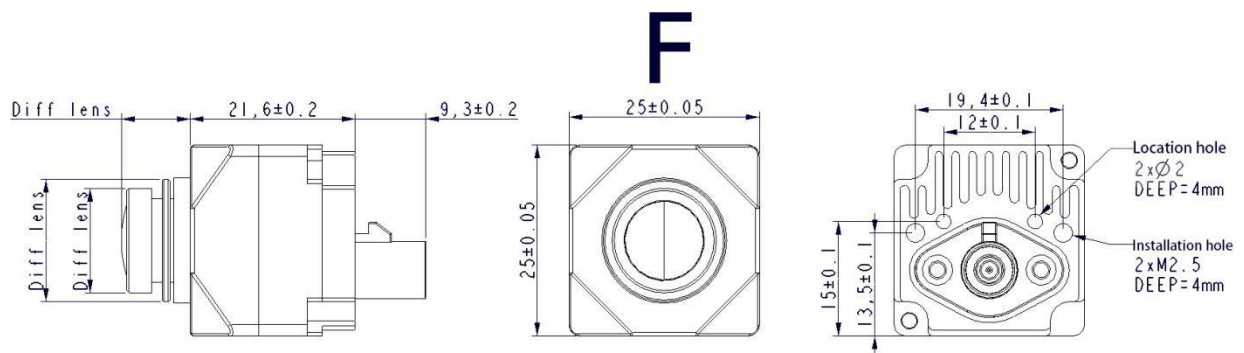
➤ System Diagram

Type	Parameter	Annotation
Serializer	MAXIM Max96701	
IIC address	0x80(8bit address)	Max96701 IIC address
CMOS clock frequency	27MHz	crystal oscillator
GMSL rate	GMSL1 MODE	
CMOS Reset control pin	DIN11/GPIO1	Default pull-up1.8V
IIC Pin	Pin A8 SDA Pin A7 SCL	
CMOS Exposure synchronization signal FSIN	FSYNC use GPO/HIM HSYNC use DIN8 VSYNC use DIN13/VS	



ALI019 camera module diagram

## ➤ Dimensions



## ➤ Accessories

Wire harness name	Wire harness model	Wire harness specifications
Amphenol female to female cable	344-00006-10321	Waterproof Φ2.8 coaxial shielded wire-RG174 L=2000MM
Amphenol male to female cable	344-00006-10321B	Waterproof Φ2.8 coaxial shielded wire-RG174 L=2000MM
Amphenol SMB Connect the female head	344-00006-10487	Waterproof Φ2.8 coaxial shielded shielded wire-RG174 L=500MM

➤ **Contact Us**

HK ALG INTERNATIONAL LIMITED

Website: [www.alg-imaging.com](http://www.alg-imaging.com)

Email: [info@alg-imaging.com](mailto:info@alg-imaging.com)

Telephone: +86-755-27218150