



VCO2LT

GMSL Camera® 2.5MP GMSL2 Camera

ISP (Image Signal Processor) built-in of camera's image sensor



Feature

- Output format: Uncompressed YUV422 format
- S-mount IP67/IP69K compliant lens focused
- Autoware Compatibility
- High Dynamic Range of 120dB
- High Sensitivity and Low Noise
- LED Flicker Mitigation
- FCC , CE and RoHS
- Extreme Temperature Support -40~+85 degree

Introduction

The VC021T camera is a GMSL (Gigabit Multimedia Serial Link) camera specifically designed for automotive applications. It has a resolution of 2.5 MP at 1920 x 1280 pix.

Featuring Sony Semiconductor Solutions' ISX021 back-side illumination stacked CMOS image sensor SoC, this camera enables HDR imaging over 120dB, LED flicker mitigation (LFM), and motion artifact-free image capturing at a frame rate of up to 30fps.

The ISP (Image Signal Processor) built into the C1 camera's image sensor performs various image processing tasks, including lens distortion correction, to achieve optimal image quality for automotive applications. The C1 camera also supports an external triggering mechanism, which is essential to achieve capture synchronization with other sensor modalities such as LiDAR or RADAR, enabling sensor fusion.

VC021T are built to operate in harsh environmental conditions, the operating temperatures as low as -40°C to as hot as 85°C.

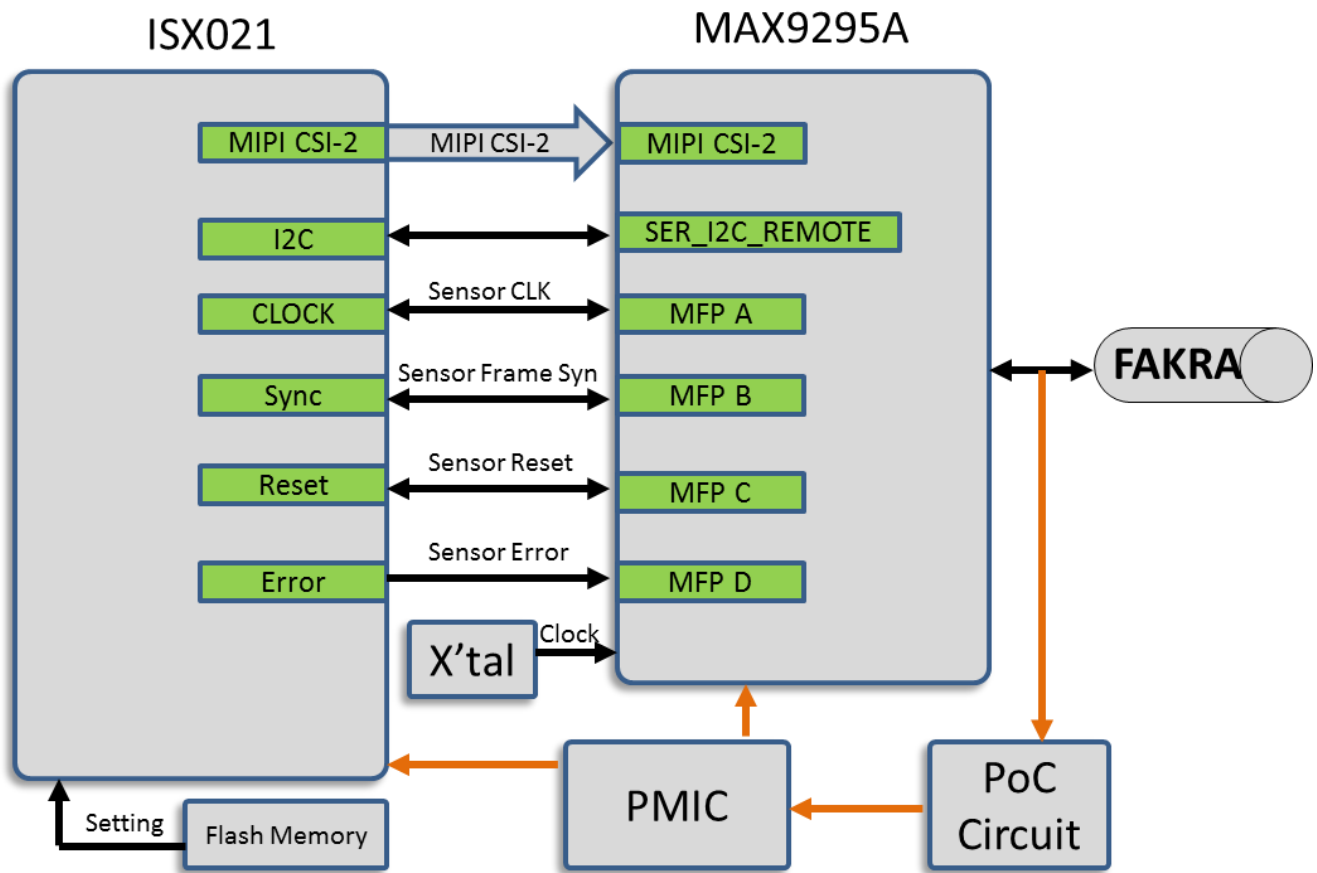
Specifications

ISP – Image Signal Processor	Integrated on Image Sensor
IMAGE SENSOR	Sony Semiconductor Solutions ISX021
MAX Resolution	1920*1280
Frame Rate	@30fps
Pixel Size	3.0um
Serializer	MAXIM MAX9295A
Output Image Format	YUV422 8bit
Camera Interface	GMSL2, Up To 6Gbps
Power	9V~12V DC
Power consumption	< 1.7W
Connector	FAKRA Z code
Shutter Type	Rolling Shutter
Ingress Protection	IP69K
Dimension	W: 38.5mm, L:38.5mm, H:31.46mm
Operating Temp	-40 to 85°C
Storage Temp	-40 to 85°C
Relative Humidity	15% to 95%, non-condensing

Application

- Autonomous driving
- Traffic light recognition
- Object recognition
- Remote monitoring
- Visual SLAM

Block Diagrammation



Ordering Information

Model	HFOV	VFOV	F.No.	EFL	Depth of Field	Water Proof	Lens Mount
VC021T -046	46°	32°	2.2	14.9mm	185cm - Infinity	IP69K	AA
VC021T -085	78°	56°	1.7	18.59mm	112cm - Infinity	IP69K	AA
VC021T -120	111°	77°	1.8	21.01mm	106.7cm - Infinity	IP69K	AA
VC021T -198	162°	125°	2	15.79mm	33cm - Infinity	IP69K	AA

Appearance



Dimension

