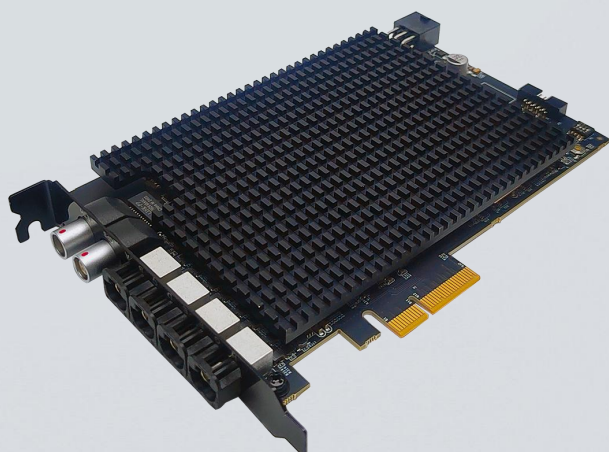


## **[ CoaxCapture ] GMSL Video Capture Card (Gen2)**



**CoaxCapture II GMSL**

**Version 1.0**

**CCG3-8M**

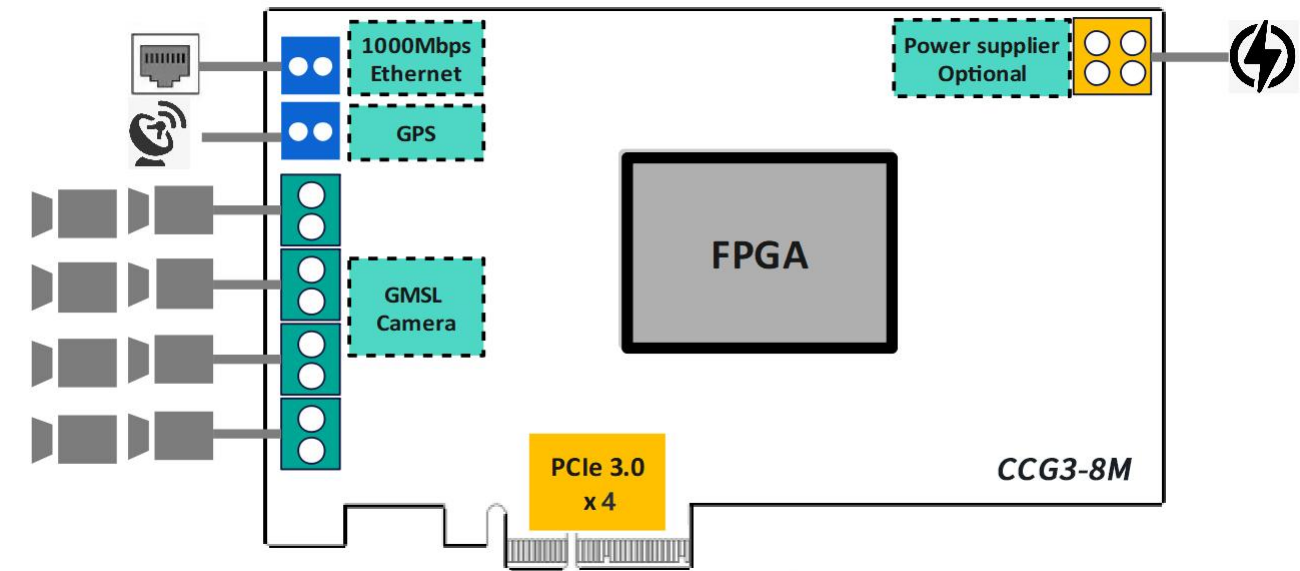
## Product Introduction

【CoaxCapture】 Gen2 Video Capture Card ( Video Capture Card), it is a high-speed image product based on FPGA independently developed by ShenZhen SENSING Technology Co.,Ltd (hereinafter referred to as“SENSING”), and it is one of solutions of autonomous machine.

The speed and bandwidth of Gen2 Video Capture Card are improved double correspondingly due to the use of PCI-e Gen2 technology. The card can connect GMSL/GMSL2 cameras, and has the advantages of high frame rate, high speed, low latency, etc. It is widely used in autonomous machine and Embodied intelligence.

## Product Forms

### CCG3-8M



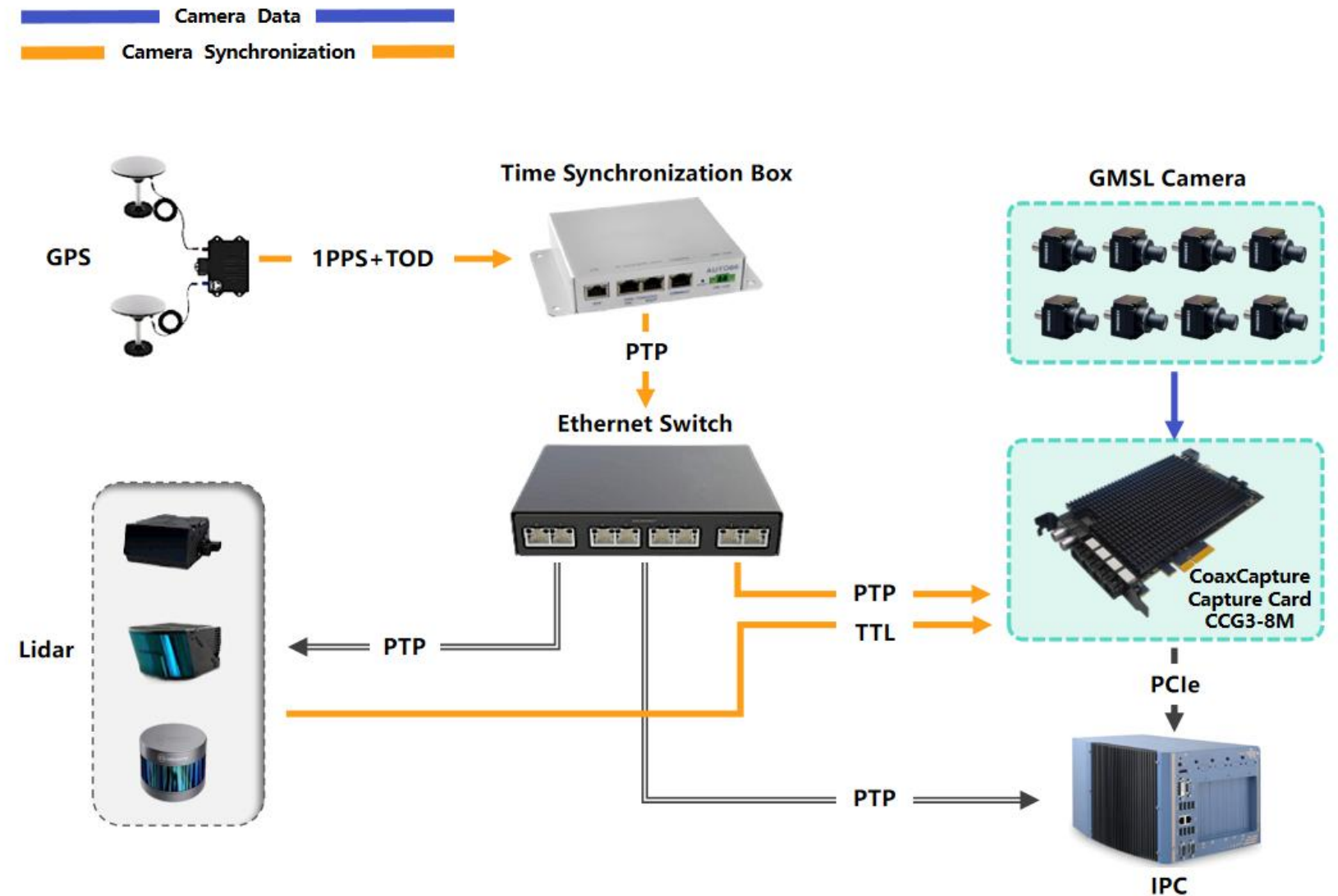
### ✓ CCG3-8M:

- 8 GMSL cameras input, support up to 8 Mega Pixels@ 30 fps;
- PCI-e Gen2\*4lane;
- Support external trigger synchronization;
- Support GPS Timing synchronization;
- Support network PTP timing synchronization;

## Typical Applications

### ✓ Embodied intelligence/machine

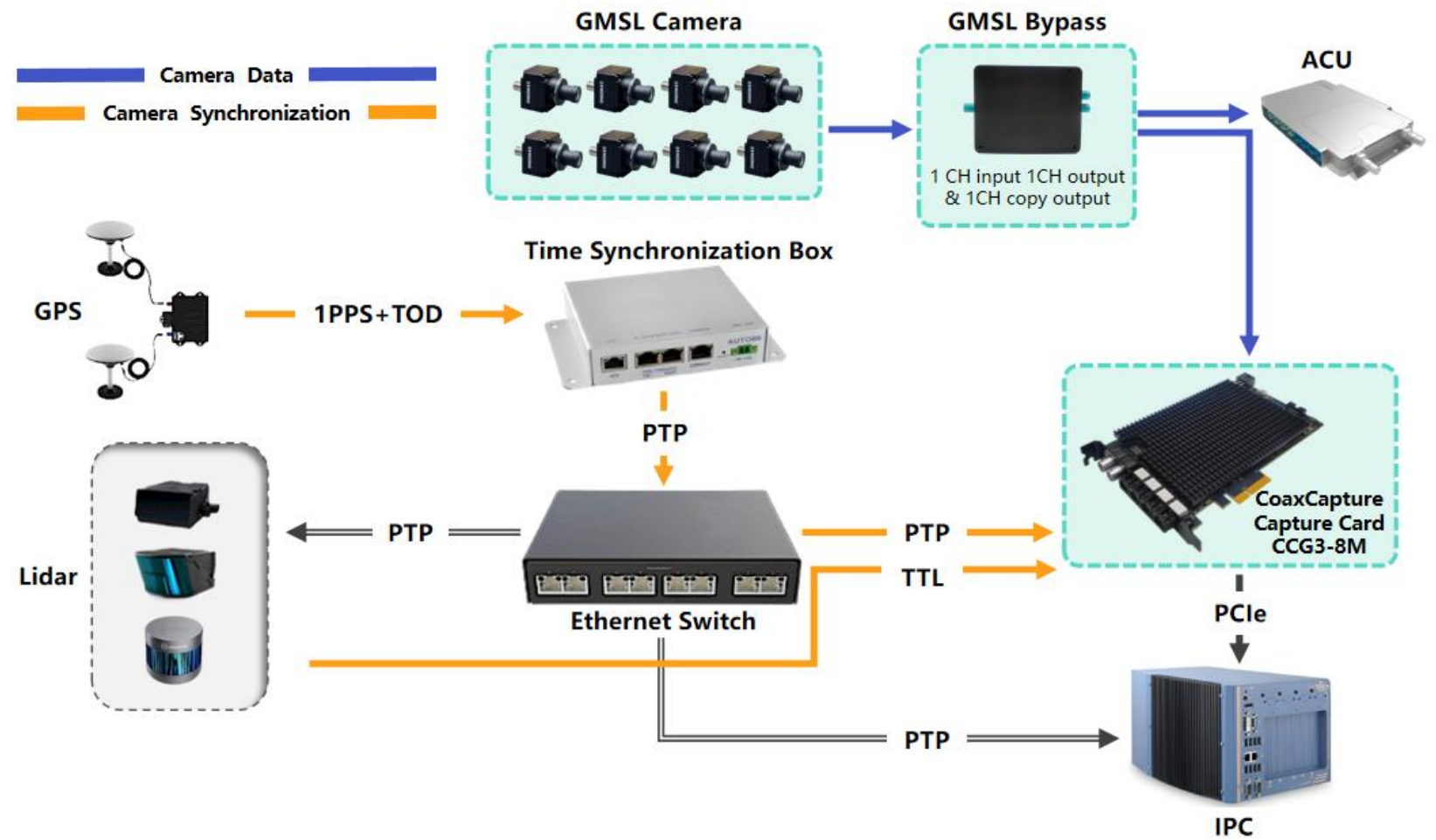
- 2 PCI-e slots support up to connect 16 GMSL cameras;
- Max support 4K@30fps pixel input ;
- PCI Express 3.0;
- Support synchronous alignment of multiple cameras and lidars;
- Support the function of timestamp in the capture card;
- Ultra low latency;
- Support fetching camera exposure parameter;



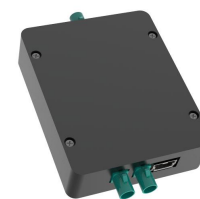
## Typical Applications

### ✓ Autonomous machine data capture

- 2 PCI-e slots support up to connect 16 GMSL cameras;
- Max support 4K@30fps pixel input ;
- Support ACU work of the original vehicle and data capture proceed synchronously;
- Support synchronous alignment of multiple cameras and lidars;
- Support the function of timestamp in the capture card;
- Use GMSL Bypass module realize GMSL camera input to ACU and video capture card synchronously lossless;
- Support RAW and YUV data camera;



SG8-BP0102-GMSL2



Model	Input Port	Output Port	Resolution and max fps
SG8-BP0102-GMSL2	1 port	2 port	Up to 3840*2160@30fps

## Specifications

Product Name	
Product Name	<b>【CoaxCapture】 GMSL Video Capture Card (Gen2)</b>
Model	CCG3-8M
Family	Coaxcapture III GMSL Series

Product Traits	
Processor	Xilinx ZU+ system processor
On Board Memory	6 GByte DDR4-RAM
Processor Board Interface	N/A
Ethernet Interfaces	1GigE: support PTP time Synchronization,Accuracy < 1ms
I/O Interfaces	TTL Trigger,GPS

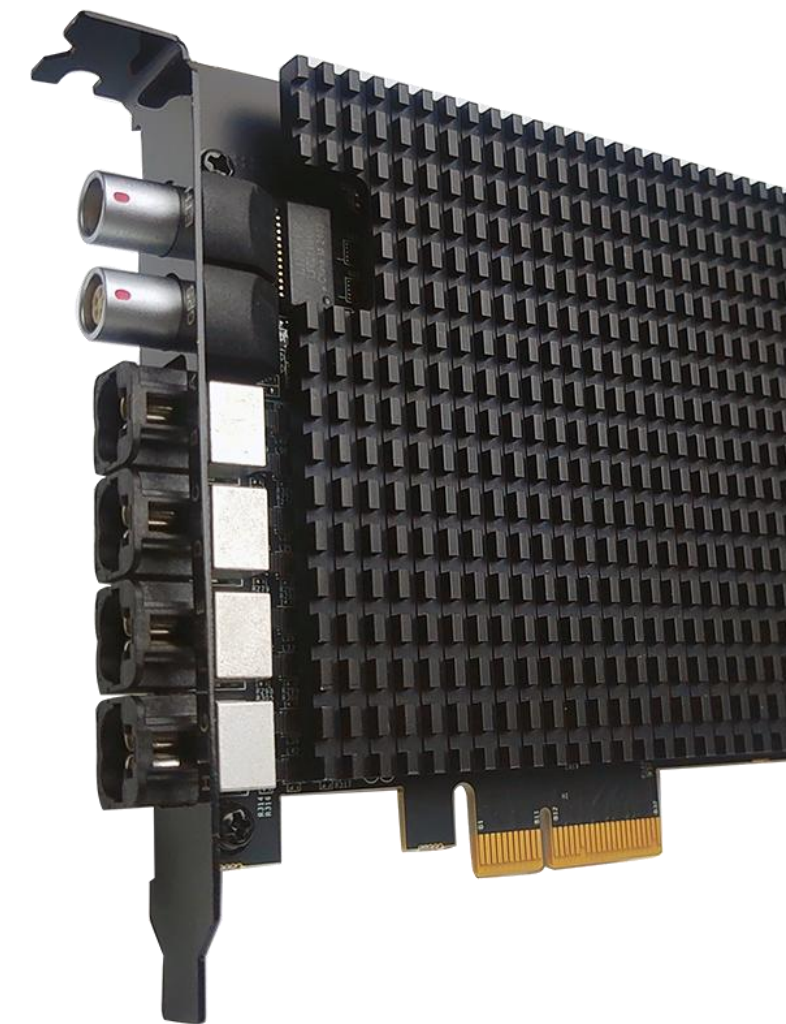
IPC Interface	
PC Bus Interface	PCI Express x4 (Gen 3)
PC Bus Interface	Up to 2GB/s (sustainable) Performance

Installation Structure	
Dimensions	PCIe Standard height Half length card: 167.64mm length x 111.15 mm height
Approximate Weight	300 g
Power Consumption / Power Source	Voltage: 12 V, Typ. Current: 1 A
Operating Temperature	-20°C to 70°C
Storage Temperature	-40°C up to 80°C
Relative Humidity	5% - 90% non-condensing (operating), 0% - 95% (storage)
MTBF	5 yeas

Software	
Software Drivers	Linux 64-bit,Ubuntu18.04/20.04
Software Tools	Documentation, SDK
Software API	V4L2 framework

## Specifications

Camera Interface	
Standard	GMSL
Serializer supported	GMSL/GMSL2 links support MAX96705/MAX9295A/MAX96717F/MAX96717...
Connectors	Amphenol Min-fakra Dual MFK2252AW-001-TL30G-50
Cable Length	Amphenol /250mm MKA2FZ-302LL-FKMZ1-21-01
Power Output	Power Over Cable 4W/9.5V per cable
Camera Support	CCG3-8M: 8 cameras input
Camera Resolution	1-8Mega pixel
Bit Depth	8 bit (YUV422), 8/12/16-bit (RAW)
Data Bandwidth	6 Gbps per cable
Camera manufacturer	SENSING technology(recommend)





# Contact Us

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Click the following website to contact the manufacturer

<https://www.sensing-world.com/lxwm>



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SKYPE



After-sales service platform