CS20-MIPI Module Product Specification

Date	Version	Description
October 8, 2023	V0.1	First Draft
December 3, 2023	V0.2	Update 2D drawing and part parameters description

Contents

1、 Module Description

Product Description:

The CS20-MIPI module consists of RX component with a resolution of 640*480 and TX component operating in the 940nm wavelength, equipped with a ToF image sensor. Utilizing ToF technology, the module excels in capturing three-dimensional information about objects and spaces, showcasing remarkable features such as long-range capability and low power consumption. Additionally, the module employs a standard MIPI-CSI2 interface for the output of RAW data.

Product Features:

- Full resolution (1280 x 960) with up to 60 frames per second of raw data.
- MIPI-CSI2 standard interface: 2 lanes (1.6 Gbps per lane).
- Output formats: RAW10, RAW12.
- Camera Control Interface (CCI) and I2C compatible, two-wire serial communication circuit up to 1MHz.

2、Technical Parameters

Technical Parameters	
Resolution	640*480/320*240
FOV	H70°xV55°
Measure Distance	0.1-5m, indoor
VCSEL Wavelength	940nm
Accuracy	0.1~0.5m: ±2.5cm; 0.5~5m: ±1% @ 90% reflectivity
Dimensions	Appendix 1 2D drawing
Date Transmission	RAW10
Powering Method	IOVDD_ToF(1.8V)，VCSEL_3V3，VCC_3V3
Power Consumption	TBD
Operating System	Android, Windows, Linux, ROS
Operating Temperature	-10 ~ 50℃
Safety	Laser CLASS1

3、Storage Conditions

Conditions	Description	Min	Max	Unit
Storage Temperature		-15	60	°C
	Humidity	Temperature/RH: 40°C/90%		
Operating Temperature		-10	50	°C

4、Module Cleaning Procedures

1. Avoid using any chemicals or water on the camera lens.

2. Use a lens blower brush to remove dust and dirt from the lens as thoroughly as possible.

3. Wipe with a dry, clean microfiber cloth.

5、Disclaimer

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Appendix 1: Module Drawings