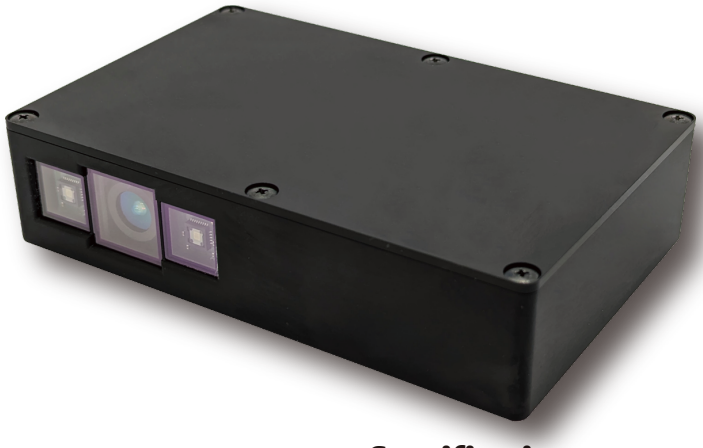
TOPPAN

Under development

3D Time of Flight Camera

C11U

This product is a 3D Time of flight(ToF) camera equipped with TOPPAN's 3D ToF sensor and a depth calculation unit (Depth Engine) optimized for its proprietary sensing "hybrid ToF" technology. It is ideal for use in autonomous robot applications that require object detection, such as in factory automation (FA), service robots, and obstacle detection.



Features

- TOPPAN's short-pulse based ToF sensing method provides accurate 3D sensing with high frame rate and less motion artifacts
- High ambient light tolerance for 3D ToF sensing in environments up to 100,000 lx
- Signal HDR mode without frame rate deterioration
- The built-in smart interference cancellation function enables the use of multiple cameras in the same space
- IP67 dustproof and waterproof performances of the ToF camera body
- TOPPAN ToF SDK for multi-OS platforms

Contents

- ToF camera
- USB cable, Power supply adaptor
- Camera manuals
- TOPPAN ToF SDK
  - SDK manual
  - Example Demo viewer

Specification

Sensing method	Short pulse ToF
ToF sensor	TPHT4030A 3D ToF sensor
Pixel structure	4tap + Drain ToF pixel
Active pixels	640 x 480
Working range	0.5 ~ 7m
Repeatability (Depth noise)	1% @Distance
Accuracy	1% @Distance
Light source	940nm VCSEL Laser class 1 product (IEC/EN 60825-1:2014)
Operation mode	Normal (Typ. 30fps) High speed (120fps) HDR
Exposure mode	Manual, Auto
FoV	90° x 68°
Dimensions	120 x 80 x 33.5mm (camera body)
Weight	< 400g
Operating Temperature	-25 ~ 60℃
Communication I/F	USB3.1(Gen1) [UVC1.5]
Power consumption	TBD (<15W)
External clock sync.	Available
Ambient light tolerance	up to 100,000 lx
IP rating	IP67
Product certification	RoHS, CE, FCC
Development platform	Windows / Linux(Ubuntu) / ROS2 64-bit TOPPAN ToF SDK

TOPPAN ToF Sensing BLOG
Latest Activity and Technology Updates

TOPPAN ELECTRONICS WEBSITE
ToF Camera Product Information and Inquiries

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