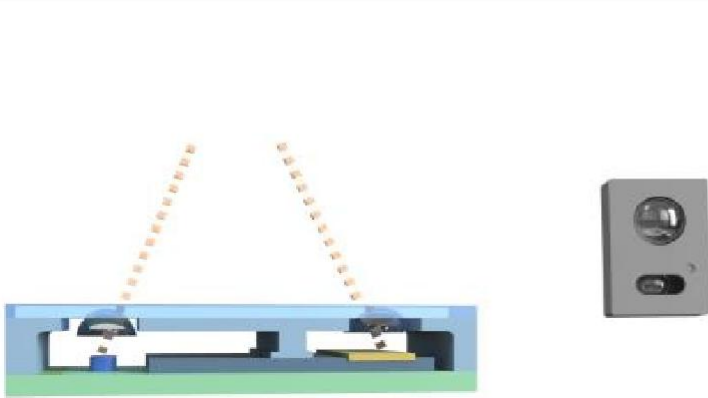


dToF 测距芯片

dToF 单光子雪崩二极管 (SPAD) 传感器是通过直接向测量物体发射光脉冲, 并测量反射光脉冲和发射光脉冲之间的时间间隔, 得到光的飞行时间, 从而直接计算待测物体的深度, 是未来实现激光雷达 (LiDAR) 小型化、低成本、可量产的最佳方案。

The dToF single photon avalanche diode (SPAD) sensor directly emits light pulses to the measured object, and measures the time interval between the reflected light pulses and the emitted light pulses to obtain the light flight time, so as to directly calculate the depth of the object to be measured. It is the best scheme to realize the miniaturization, low cost and mass production of lidar in the future.



测量精准

Accurate measurement

响应快速

Fast response

低功耗

Low power consumption

高速 I2C 接口

Compatible with fast I2C mode interface

特
征
Features

扫地机器人避障

Cleaning robot obstacle avoidance

电子设备接近传感

Electronic device proximity sensing

快速对焦

Fast auto-focus

工业安全测距

Industrial safe distance control

应
用
Application

主要参数 Parameters

参数 Parameters	规格 Specification
电源电压	2.7~3.6V
SPAD 像素阵列	16 * 16
距离测量范围	0.1 ~ 10 m
距离测量精确度	< 2 cm
距离测量分辨率	1 mm
LED 驱动频率	20 MHz
I2C 时钟频率	400 kHz