

Sense.TOF

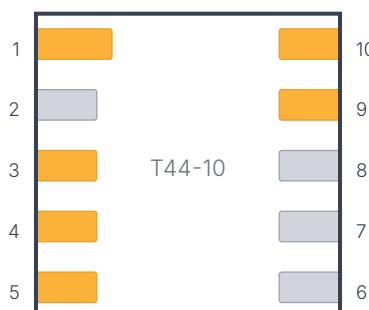
time-of-flight distance

The Sense.TOF is a single-zone time-of-flight distance sensor based on the ams-Osram TMF8806, which uses a Class-1 eye-safe 940 nm VCSEL laser emitter with SPAD detection. It provides 1-mm sensing resolution over a range from 1 centimeter to 5 meters (extendable to 10 meters) with a max output data rate of 30Hz. The sensor features on-chip histogram processing, a 24-degree field of view, and pre-installed firmware suitable for obstacle detection, proximity sensing, collision avoidance, and autofocus applications.

Overview

Revision	a
Package	T44-10
Supply	2.7–3.3V
Component	TMF8806
Interfaces	I2C

Pad Assignments



(top view)

PAD	TYPE	FUNCTION	NOTE
1	power	GND	
3	digital	EN	internap pull-up resistor enables the sensor by default; connect to GND to disable
4	interface	I2C.CLK	
5	interface	I2C.DAT	
9	digital	INT	programmable interrupt output
10	power	V+	2.7-3.6V

Interfaces

I2C		
Mode	slave	
Max Clock	1MHz	
Address	0x41 (default)	
Format	7-bit addr	
FUNCTION	REQ	PAD(S)
I2C.CLK	No	4
I2C.DAT	No	5