

Pmod™ Time of Flight (ToF) Sensor Module

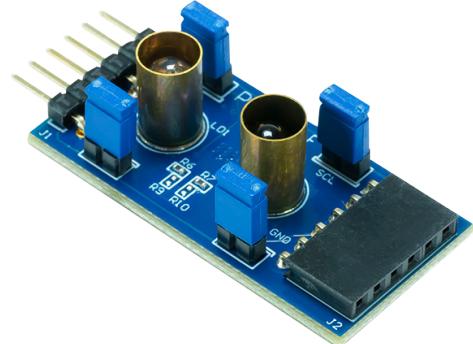
Product Overview

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Description

Digilent Pmod™ Time-of-Flight (ToF) Sensor Module is a compact I/O board designed to digitally report the distance measured by the ToF-based signal processing integrated circuit. This ToF module features a 16-bit resolution, 6-pin Pmod connector with an I²C interface, and onboard EEPROM.



The ToF sensor module operates using the principle of Square Wave Modulated Indirect Time of Flight (SWM-ITOF) in the frequency domain and obtains distance measurements from the phase shift. The sensing is done by an external emitter (LED) and detector (Photodiode). The Pmod ToF can measure distances of up to five meters and communicate with host FPGA and SoC boards via I²C protocol.

Features

- Optimized low-power modes
- Enables proximity detection and distance measurement
- 16-bit resolution
- Onboard EEPROM to save calibrations
- 6-pin Pmod connector with I²C interface
- Pass-through Pmod host port for daisy-chaining

Specifications

- 2.7V to 3.3V power supply voltage
- 10kHz to 400kHz and 100kHz (typical) serial clock frequency
- 55mA maximum current consumed
- 860nm wavelength
- ±3° emission angle

Mouser Part Number

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To learn more, visit <https://www.mouser.com/new/digilent/digilent-pmod-tof-sensor/>