



## TOF DISTANCE SENSOR WIRELING

AST1024

This Wiring features a VL53L0X Infrared Time-of-Flight sensor, most often used for distance detection between 2cm and 2m!

**Note\* 5-Pin Wiring cables not included and sold separately.**

### VL53L0X Time-of-Flight Sensor Specs

- Fully integrated miniature module
  - 940 nm laser VCSEL
  - VCSEL driver
  - Ranging sensor with advanced embedded microcontroller
- Fast, accurate distance ranging
  - Measures absolute range up to 2m
  - Reported range is independent of the target reflectance
  - Advanced embedded optical cross-talk compensation to simplify cover glass selection
- Eye safe
- I<sup>2</sup>C
  - Compatible with 400 kHz (FAST mode)
  - Address: 0x52

## TinyDuino Power Requirements

- Voltage: 3.0V - 5.5V
- Current:
  - Hardware Standby: 5uA
  - Software Standby: 6uA
  - Timed Ranging Inter Measurement: 16uA
  - Active Ranging Average Consumption: 19mA

## Pins Used

- A5/SCL - I<sup>2</sup>C Serial Clock line
- A4/SDA - I<sup>2</sup>C Serial Data line

## Dimensions

- 10mm x 10mm (.393 inches x .393 inches)
- Max Height (from the lower bottom of Wirelingto upper top Wireling Connector): 3.70mm (0.15 inches)
- Weight: 1 gram (.04 ounces)

You can also use this Wireling without the TinyDuino – modifying the connecting cable by removing the opposite connector and stripping/tinning the wires, you can solder the connector cable to any other microcontroller board of your choice!

- **VL53L0X Datasheet**
- **Schematic**
- **Eagle Files**
- **Sample Arduino code**

