MATRIX Laser Sensor V2

MS-009 V2

Warning: Laser sensor V1 and V2 are **Different Sensors**, and use **Different Code**.

1.Feature

· Fully integrated miniature module.
· Measures absolute range up to 2m.
· Class 1 laser device compliant.

2. Application

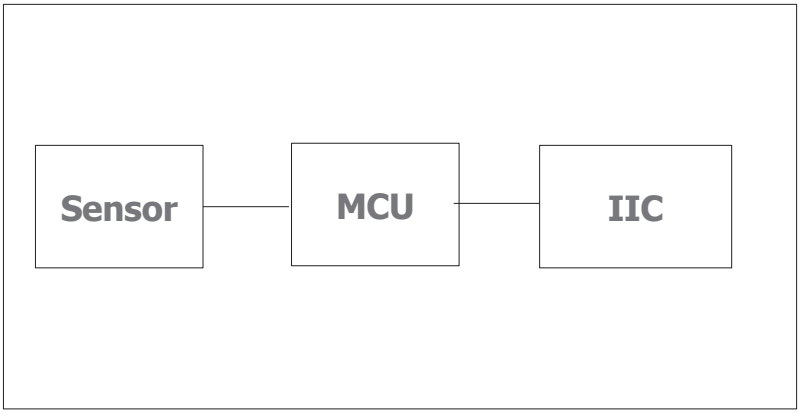
· Camera detection
· Spirit level meter
· Location of the robot

3. Introduction

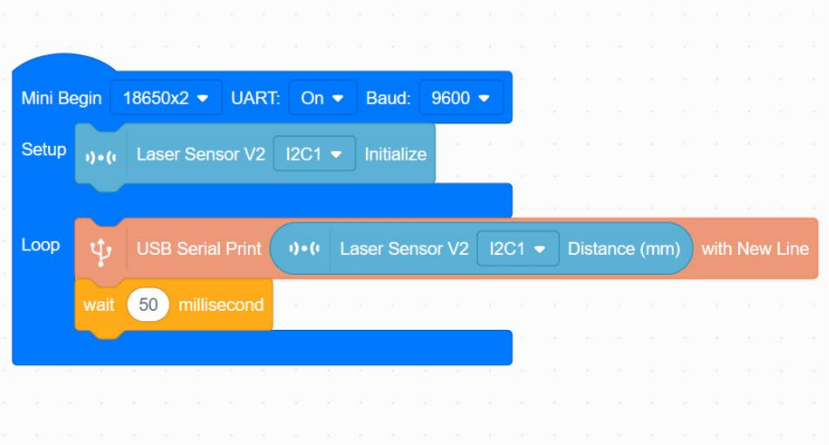
MATRIX Laser Sensor V3 is a distancing sensor, with VL53L0X ToF (Time-of-Flight), 940 nm laser VCSEL, which is more accurate and stable, communicate by I2C interface.

Support 50mm to 1200mm distance detection at 30Hz sample rate, scale down to 1mm.

4. Block Diagram



4.Example Code of Block and C++

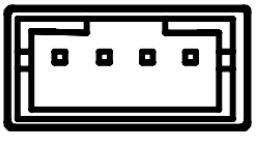



```ino
#include "MatrixMiniR4.h"

void setup()
{
  MiniR4.begin();
  MiniR4.PWR.setBattCell(2);
  Serial.begin(9600);
  MiniR4.I2C1.MXLaserV2.begin();
}

void loop()
{
  Serial.println(MiniR4.I2C1.MXLaserV2.getDistance());
  delay(50);

}
```

· After download program into controller, open Serial Monitor to observe.

5. Hardware Spec

· Voltage: 3.3v – 5v
· Infrared emitter: 940 nm
· Resolution: 1mm



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JST PH2.0

Pinout-I2C			
NO.	Name	I/O	Description
1	SDA	I/O	Serial data line.
2	SCL	I	Serial clock line.
3	VCC	O	Supply voltage.
4	GND	-	Supply ground.

· For More technical info of Sensor, Please visit manufacturer datasheet.