**TABEL PENELITIAN**

1. Tabel alamat pin komponen Arduino 1

|  |  |  |  |
| --- | --- | --- | --- |
| No | Component | They compose Pin Address | Arduino Pin Address 1 |
| 1 | Sensor Turbidity | VCC | 5V |
|  |  | GND | GND |
|  |  | A0 | A1 |
| 2 | Sensor DS18B20 | VCC | 5V |
|  |  | GND | GND |
|  |  | Data | D13 |
| 3 | Sensor pH | VCC | 5V |
|  |  | GND | GND |
|  |  | GND | GND |
|  |  | P0 | A0 |
| 4 | RTC | VCC | 5V |
|  |  | GND | GND |
|  |  | SCL | A5 |
|  |  | SDA | A4 |
| 5 | Motor Servo | VCC | 5V |
|  |  | GND | GND |
|  |  | Pulse | D12 |
| 6 | Relay | VCC | 5V |
|  |  | GND | GND |
|  |  | Signal | D5 |
| 7 | LoRa SX1278 | VCC | 3V |
|  |  | GND | GND |
|  |  | TXD | RXD |
|  |  | RXD | TXD |
|  |  | M1 | GND |
|  |  | M0 | GND |
| 8 | LCD 16x2 I2C | VCC | 5V |
|  |  | GND | GND |
|  |  | SDA | SDA |
|  |  | SCL | SCL |

1. Tabel alamat pin komponen Arduino 2

|  |  |  |  |
| --- | --- | --- | --- |
| No | Component | Component Pin Address | Arduino Pin Adress 2 |
| 1 | LCD I2C | VCC | 5V |
|  |  | GND | GND |
|  |  | SDA | SDA |
|  |  | SCL | SCL |
| 2 | LoRa SX1278 | VCC | 3V |
|  |  | GND | GND |
|  |  | TXD | RXD |
|  |  | RXD | TXD |
|  |  | M1 | GND |
|  |  | M0 | GND |

1. Tabel pengujian komponen

|  |  |  |
| --- | --- | --- |
| NO | KOMPONEN | BERFUNGSI (YA/TIDAK) |
| 1 | Sensor kekeruhan | Ya |
| 2 | Sensor suhu | Ya |
| 3 | Sensor PH | Ya |
| 4 | Servo terhadap motor servo | Ya |
| 5 | Motor servo | Ya |
| 6 | LoRa SX1278 | Ya |

1. Tabel pengujian keseluruhan alat

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Jarak LoRa Transceiver ke Receiver | Kualitas Air | | | Pakan Ikan Otomatis | | | Deskripsi |
| Hasil Sensor Turbidity | Hasil Sensor DS18B20 | Hasil Sensor PH-4502C | Hasil RTC | Hasil Servo | Hasil Pompa Air |
| 50m | 689 | 28℃ | 6,92 | Pagi | Membuka | Mati | Berhasil |
| 1000 | 29℃ | 6,85 | Sore | Membuka | Mati | Berhasil |
| 100m | 689 | 29℃ | 7,08 | Pagi | Membuka | Mati | Berhasil |
| 1000 | 30℃ | 6,98 | Sore | Membuka | Mati | Berhasil |
| 150m | 1000 | 29℃ | 6,75 | Pagi | Membuka | Mati | Berhasil |
| 1289 | 28℃ | 7,21 | Sore | Membuka | Mati | Berhasil |
| 200m | 1000 | 29℃ | 6,85 | Pagi | Membuka | Mati | Berhasil |
| 1550 | 28℃ | 6,75 | Sore | Membuka | Mati | Berhasil |