**TABEL PENELITIAN**

1. Tabel Alamat Pin Komponen

|  |  |  |
| --- | --- | --- |
| No | ESP32 ports | usage |
|  |  |  |
| 1 | Vin | VCC (TCS-3200) |
| 2 | GPIO 25 | S0 (TCS-3200) |
| 3 | GPIO 33 | S1 (TCS-3200) |
| 4 | GPIO 32 | S2 (TCS-3200) |
| 5 | GPIO 35 | S3 (TCS-3200) |
| 6 | GND | GND (TCS-3200) |
| 7 | 3.3V | VCC (IR Sensor) |
| 8 | GND | GND (IR Sensors) |
| 9 | GPIO 12 | OUT (IR Sensor) |
| 10 | GPIO 26 | PWM (Servos) |
| 11 | GPIO 27 | PWM (Servos) |
| 12 | Vin | VCC (Servo) |
| 13 | Vin | VCC (Servo) |
| 14 | GND | GND (Servos) |
| 15 | GND | GND (Servos) |
| 16 | GND | GND(I2C LCDs) |
| 17 | Vin | VCC(I2C LCDs) |
| 18 | GPIO 21 | SDA(I2C LCDs) |
| 19 | GPIO 22 | SCL(I2C LCDs) |
| 20 | GPIO 19 | VCC (Push Button Reset) |
| 21 | GND | GND (Push Button Reset) |

2. Tabel Pengujian Komponen

|  |  |  |
| --- | --- | --- |
| **NO** | **KOMPONEN** | **BERFUNGSI (YA/TIDAK)** |
| 1 | Mikrokontroler ESP32 | Ya |
| 2 | Sensor Warna TCS-3200 | Ya |
| 3 | Sensor Infrared | Ya |
| 4 | Motor Servo MG966R | Ya |
| 5 | Motor Servo MG966R | Ya |
| 6 | Motor Stepper Nema 17 | Ya |
| 7 | LCD 20X4 I2C | Ya |

3. Tabel Keseluruhan Alat

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Object | Number of Attempts | TCS-3200 Sensor Value | | | Detected colors | Condition of Servo Motor (Fruit Sorting Door) | | Description |
| Red | Green | Blue | 0 | 45 |
| Fresh Fruit | Trial 1 | 472 | 392 | 267 | Fresh |  | - | Success |
|  | Trial 2 | 498 | 401 | 299 | Fresh |  | - | Success |
|  | Trial 3 | 534 | 424 | 308 | Fresh |  | - | Success |
|  | Trial 4 | 525 | 418 | 303 | Fresh |  | - | Success |
|  | Trial 5 | 528 | 420 | 305 | Fresh |  | - | Success |
| Rotten Fruits | Trial 1 | 147 | 60 | 12 | Rotten | - |  | Success |
|  | Trial 2 | 201 | 112 | 39 | Rotten | - |  | Success |
|  | Trial 3 | 176 | 83 | 28 | Rotten | - |  | Success |
|  | Trial 4 | 159 | 78 | 16 | Rotten | - |  | Success |
|  | Trial 5 | 243 | 124 | 53 | Rotten | - |  | Success |