

Overzicht: pinnen van RPI

Academiejaar 2020 – 2021

Team 1: Safety First

Vereiste pinnen per component

| Componenten | Vereiste Pinnen |
|--------------------|---|
| Reflectiesensor | 6 of 8 GPIO's |
| Afstandssensor | MISO, MOSI, SCLK, CE0 of CE1, GND, 3.3V, 5V |
| Kleursensor | SCL, SDA, GND, 3.3V |
| Motoren DRV8833 | 6 GPIO's, 5V (PMW) |

Aansluitingen

| | |
|------------|-----------|
| 3.3v | 5v |
| SDA (i2c) | 5v |
| SCL (i2c) | GND |
| GPIO4 | GPIO14 |
| GND | GPIO15 |
| GPIO17 | GPIO18 |
| GPIO27 | GND |
| GPIO22 | GPIO23 |
| 3,3v | GPIO24 |
| MOSI (spi) | GND |
| MISO (spi) | GPIO25 |
| SCLK (spi) | CE0 (spi) |
| GND | CE1 (spi) |
| GPIO0 | GPIO1 |
| GPIO5 | GND |
| GPIO6 | GPIO12 |
| GPIO13 | GND |
| GPIO19 | GPIO16 |
| GPIO26 | GPIO20 |
| GND | GPIO21 |

Onze componenten

| | |
|-------------------|-------------------|
| 3.3v | 5v |
| Kleursensor 6 | 5v |
| Kleursensor 2 | GND |
| Reflectiesensor 1 | Reflectiesensor 2 |
| GND | Reflectiesensor 3 |
| Reflectiesensor 4 | Reflectiesensor 5 |
| Reflectiesensor 6 | GND |
| Reflectiesensor 7 | Reflectiesensor 8 |
| 3,3v | GPIO24 |
| ADC 5 | GND |
| ADC 6 | GPIO25 |
| ADC 7 | ADC 1 |
| GND | X |
| X | X |
| Motor 1 | GND |
| Motor 2 | Motor 3 |
| Motor 4 | GND |
| Motor 5 | Motor 6 |
| GPIO26 | GPIO20 |
| GND | GPIO21 |