Controller assemblage lijst

# Top\_layer

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| locatie | Naam | component | Mount | aantal | Fabrikant | leverancier | Ordercode |
| R1, R2, R3, R4 | 220ohm THT weerstand | MRS25000C2200FCT00 | THT | 4 | Vishay | Farnell | 9466045 |
| R5, R6, R7, R10 | 1kohm SMD0603 weerstand | CRCW06031K00FKEA | SMD0603 | 4 | Vishay | Farnell | 1469740 |
| R8 | 20kohm SMD0603 weerstand | CRCW060320K0FKEA | SMD0603 | 1 | Vishay | Farnell | 1469774 |
| R9 | 120ohm SMD0603 weerstand | CRCW0603120RFKEA | SMD0603 | 1 | Vishay | Farnell | 1652832 |
| USB1 | USB3.0 Type A Right Angle | 48405-0003 | THT | 1 | Molex | Farnell | 2401585 |
| U1 | Bus Transceiver RS485 | MAX485CPA+ | THT | 1 | Maxim | Farnell | 2519431 |
| Q1, Q2 | Bipolar (BJT) Single Transistor, NPN | 2N3904BU | THT | 2 | ON SEMICONDUCTOR | Farnell | 1700648 |
| P1, P2, P4, P5 | 3pin jst connector header | B3B-XH-A (LF)(SN) | THT | 4 | JST | Farnell | 1516277 |
| P3 | 28P 2x14 Pin header 90 graden | TSW-114-08-T-D-RA | THT | 1 | SAMTEC | Farnell | 2032883 |
| CN1, CN2, CN4, CN5 | 2pin jst connector header | B2B-XH-A (LF)(SN) | THT | 4 | JST | Farnell | 1516276 |
| CN3, CN6 | 4pin jst connector header | B4B-XH-A (LF)(SN) | THT | 2 | JST | Farnell | 1516278 |
| CN7 | 7pin jst connector header | B7B-XH-A (LF)(SN) | THT | 1 | JST | Farnell | 1516283 |
| H1, H2 | 15P pin header | SSW-115-01-T-S | THT | 2 | SEMTEC | Farnell | 2779587 |
| N01 | Arduino Nano rev.3 | Joy-it board Arduino |  | 1 | Joy-it | Conrad | 1678142 |

Note: N01 word na solderen in H1 en H2 geplaatst met de USB poort richting connector CN6 en P1.

# Benodigdheden voor verbindingen met PCB

## PWM

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Locatie | Naam | Component | Fabrikant | Leverancier | Ordercode |
| CN3 | 4pin jst connector receptacle | XHP-4 | JST | Farnell | 1516266 |

## Digitaal

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Locatie | Naam | Component | Fabrikant | Leverancier | Ordercode |
| P1 | 3pin jst connector receptacle | XHP-3 | JST | Farnell | 1516265 |

## RS485

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Locatie | Naam | Component | Fabrikant | Leverancier | Ordercode |
| CN6 | 4pin jst connector receptacle | XHP-4 | JST | Farnell | 1516266 |

## CAN0

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Locatie | Naam | Component | Fabrikant | Leverancier | Ordercode |
| P5 | 3pin jst connector receptacle | XHP-3 | JST | Farnell | 1516265 |

## CAN1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Locatie | Naam | Component | Fabrikant | Leverancier | Ordercode |
| P4 | 3pin jst connector receptacle | XHP-3 | JST | Farnell | 1516265 |
| CN7 | 3pin jst connector receptacle | XHP-7 | JST | Faenell | 1516270 |
|  | CAN Driver SPI | DEBO CAN MODUL | Joy-IT | Reichelt | DEBO CAN MODUL |

## Servo

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Locatie | Naam | Component | Fabrikant | Leverancier | Ordercode |
| P2 | 3pin jst connector receptacle | XHP-3 | JST | Farnell | 1516265 |
|  | Servo | Nader invullen | Nader invullen | Nader invullen | Nader invullen |

## Switch

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Locatie | Naam | Component | Fabrikant | Leverancier | Ordercode |
| CN5 | 2pin jst connector receptacle | XHP-2 | JST | Farnell | 1516264 |
|  | SPST-NO druk knop | R13-502A-05-B | Multicomp | Farnell | 1634622 |

## PWR LED

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Locatie | Naam | Component | Fabrikant | Leverancier | Ordercode |
| CN1 | 2pin jst connector receptacle | XHP-2 | JST | Farnell | 1516264 |
|  | LED 3mm groen 20mA | HMLP-1540 | Broadcom | Farnell | 1003204 |

## LC LED

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Locatie | Naam | Component | Fabrikant | Leverancier | Ordercode |
| CN2 | 2pin jst connector receptacle | XHP-2 | JST | Farnell | 1516264 |
|  | LED 3mm rood 20mA | HMLP-1340 | Broadcom | Farnell | 1003201 |

## Buzzer

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Locatie | Naam | Component | Fabrikant | Leverancier | Ordercode |
| CN4 | 2pin jst connector receptacle | XHP-2 | JST | Farnell | 1516264 |
|  | Transducer, Piezo, 3 VDC to 16 VDC | AI-1440-TWT-12V-R | PUI AUDIO | Farnell | 1838978 |

Note: Alle connectoren gebruiken Crimp contact BXH connectoren van Farnell (ordercode: 1516301)