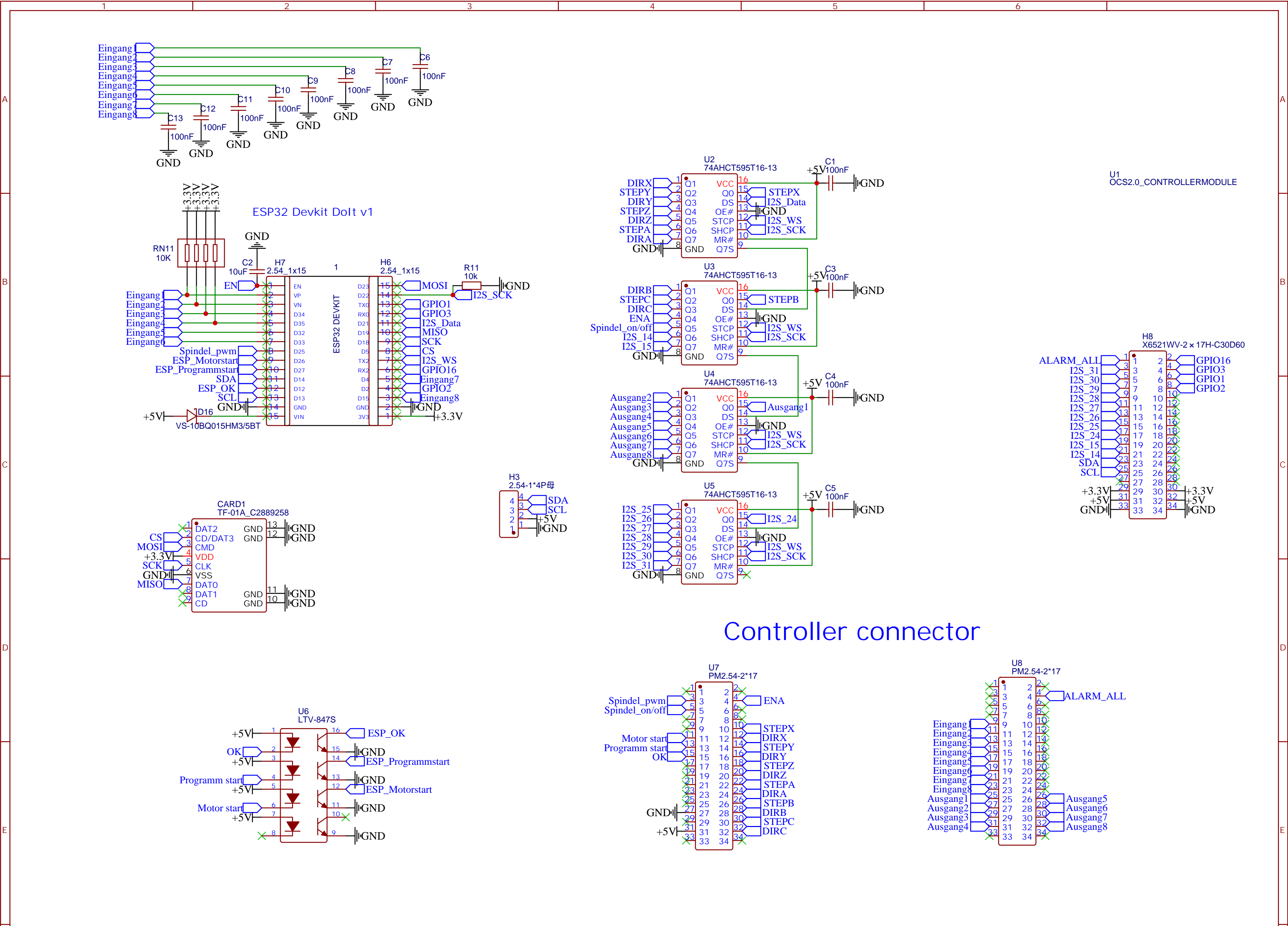X-Limit = Eingang 1
Y-Limit = Eingang 2
Z-Limit = Eingang 3
Spindle Enable = Spindle on/off
Spindle = Spindel pwm
Spindle Direction = Ausgang 3
Flood = Ausgang 2
Mist = Ausgang 1

probe input = Eingang 5
driver enable = ENA

cycle start = programm start
feed hold = motor start
reset = OK
safety door = Eingang 4

ESP32 Devkit DoIt v1

Controller connector

U2 74AHCT595T16-13
DIRX, STEPY, DIRY, STEPZ, DIRZ, STEPA, DIRA
Q1 VCC, Q2 Q0, Q3 DS, Q4 OE#, Q5 STCP, Q6 SHCP, Q7 MR#, GND Q7S
STEPX, I2S_Data, GND, I2S_WS, I2S_SCK
+5V C1 100nF GND

U3 74AHCT595T16-13
DIRB, STEPC, DIRC, ENA, Spindel_on/off, I2S_14, I2S_15
Q1 VCC, Q2 Q0, Q3 DS, Q4 OE#, Q5 STCP, Q6 SHCP, Q7 MR#, GND Q7S
STEPB, GND, I2S_WS, I2S_SCK
+5V C3 100nF GND

U4 74AHCT595T16-13
Ausgang2, Ausgang3, Ausgang4, Ausgang5, Ausgang6, Ausgang7, Ausgang8
Q1 VCC, Q2 Q0, Q3 DS, Q4 OE#, Q5 STCP, Q6 SHCP, Q7 MR#, GND Q7S
Ausgang1, GND, I2S_WS, I2S_SCK
+5V C4 100nF GND

U5 74AHCT595T16-13
I2S_25, I2S_26, I2S_27, I2S_28, I2S_29, I2S_30, I2S_31
Q1 VCC, Q2 Q0, Q3 DS, Q4 OE#, Q5 STCP, Q6 SHCP, Q7 MR#, GND Q7S
I2S_24, GND, I2S_WS, I2S_SCK
+5V C5 100nF GND

U1 OCS2.0_CONTROLLERMODULE

H8 X6521WV-2× 17H-C30D60
ALARM_ALL, I2S_31, I2S_30, I2S_29, I2S_28, I2S_27, I2S_26, I2S_25, I2S_24, I2S_15, I2S_14, SDA, SCL, +3.3V, +5V, GND
GPIO16, GPIO3, GPIO1, GPIO2, +3.3V, +5V, GND

RN11 10K
+3.3V +3.3V +3.3V

H7 2.54_1x15 EN, EN, VP, VN, D34, D35, D32, D33, D25, D26, D27, D14, D12, D13, GND, VIN
Eingang1, Eingang2, Eingang3, Eingang4, Eingang5, Eingang6, Spindel_pwm, ESP_Motorstart, ESP_Programmstart, SDA, ESP_OK, SCL, GND

ESP32 DEVKIT

H6 2.54_1x15 D23, D22, TX0, RX0, D21, D19, D18, D5, TX2, RX2, D4, D2, D15, GND, 3V3
MOSI, GPIO1, GPIO3, I2S_Data, MISO, SCK, CS, I2S_WS, GPIO16, Eingang7, GPIO2, Eingang8, GND, +3.3V

C2 10uF
GND
R11 10k GND I2S_SCK
+5V D16 VS-10BQ015HM3/5BT

CARD1 TF-01A_C2889258
DAT2, CD/DAT3, CMD, VDD, CLK, VSS, DAT0, DAT1, CD
CS, MOSI, +3.3V, SCK, GND, MISO
GND, GND, GND, GND, GND, GND

H3 2.54-1*4P
SDA, SCL, +5V, GND

U6 LTV-847S
+5V, ESP_OK
OK, +5V, GND
Programm start, +5V, ESP_Programmstart
Motor start, +5V, ESP_Motorstart
GND, GND

U7 PM2.54-2*17
Spindel_pwm, Spindel_on/off, Motor start, Programm start, OK, GND, +5V
ENA, STEPX, DIRX, STEPY, DIRY, STEPZ, DIRZ, STEPA, DIRA, STEPB, DIRB, STEPC, DIRC

U8 PM2.54-2*17
Eingang1, Eingang2, Eingang3, Eingang4, Eingang5, Eingang6, Eingang7, Eingang8, Ausgang1, Ausgang2, Ausgang3, Ausgang4
ALARM_ALL, Ausgang5, Ausgang6, Ausgang7, Ausgang8

Eingang1, Eingang2, Eingang3, Eingang4, Eingang5, Eingang6, Eingang7, Eingang8
C6 100nF, C7 100nF, C8 100nF, C9 100nF, C10 100nF, C11 100nF, C12 100nF, C13 100nF
GND

TITLE: Sheet_1
REV: 1.0
Company: Your Company
Sheet: 1/1
Date: 2022-04-24 Drawn By: timoa
EasyEDA