

MCU

U1
NODEMCU-32S

5V
3.3V

J1-19
J1-1

J1-2
EN

34_SD_MISO
PLAY_UP
PLAY_DOWN
ARM_MODE

J1-5
J1-6
J1-3
J1-4

IO34
IO35
IO36
IO39

J2-4
TX0
RX0

J2-5

J2-19
J2-18
J2-17
J1-16
J1-17
J1-18

IO6
IO7
IO8
IO9
IO10
IO11

J2-14
J2-15
J2-13
J2-10
J1-13
J1-15
J1-12
J2-16
J2-12
J2-11
J2-9
J2-8
J2-6
J2-3
J2-2
J1-9
J1-10
J1-11
J1-7
J1-8
J1-14

100
102
104
105
1012
1013
1014
1015
1016
1017
1018
1019
1021
1022
1023
1025
1026
1027
1032
1033

2_NRF_CE
4_SD_CS
5_NRF_CSN
SERVO_BILEK
13_SD_SCK
DEBUG_LED
SERVO_BAS
SERVO_PAN
SERVO_TILT
18_NRF_SCK
19_NRF_MISO
21_SDA
22_SCL
23_NRF_MOSI
SERVO_ISARET
SERVO_YUZUK
SERVO_ORTA
SERVO_SERCE
33_SD_MOSI

3.3V

SERVO

VCC
SW2
E-STOP

U3
BUCK_DCDC

IN+
IN-
OUT+
OUT-

1
2
3
4

6V

J2
Screw_Terminal_01x02

1
2

6V

ServoPort_08
J1

SERVO_TILT
SERVO_PAN
SERVO_BAS
SERVO_BILEK
SERVO_YUZUK
SERVO_ORTA
SERVO_SERCE
SERVO_ISARET
SERVO_SERCE

8
7
6
5
4
3
2
1

IN8
IN7
IN6
IN5
IN4
IN3
IN2
IN1

6V

C3
1000uf

C4
1000uf

SD & OLED

+3.3V
JP1
Jumper_3_Open

1
2
3

22_SCL
21_SDA

U7
OLED_128_64

SCL
SDA
VCC
GND

3
4
1
2

+3.3V

Jumper_3_Open
JP2

3
2
1

4_SD_CS
33_SD_MOSI
34_SD_MISO
13_SD_SCK

4
5
7
6

CS
MOSI
MISO
SCK

U5
SD_CARD_MODULE

1
2
3
4
5
6
7
8

GND
GND
GND
GND
GND
GND
GND
GND

DUGME & SWITCH

+3.3V

R6
10K

ARM_MODE

SW3
SW_SPDT_MSM

2
1
3

R7
10K

GND

+3.3V

R9
10K

PLAY_UP

SW5
SW_Push

GND

+3.3V

R8
10K

PLAY_DOWN

SW4
SW_Push

GND

El ile kontrol edilebilen, ESP32 kullanılan robot kol projesinin kol kısmı.

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eklenmeye karar

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Yeni şeyler
eklenmeye karar

Yeni şeyler
eklenmeye karar
verilirse servolar
I2C sürücü ile
geliştirilecektir.

El ile kontrol edilebilen, ESP32 kullanılan robot kol projesinin kol kısmı.

Mustafa Alper KAYA

Mustafa Alper KAYA

Sheet: /
File: ROBOTIC_ARM_BASE.kicad_sch

Title: ESP32 ROBOT KOL KOL KISMI

Size: A4	Date: 2026-01-17	Rev: 0
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Size: A4	Date: 2020-01-17	REV: 0
KiCad E.D.A. 9.0.6		Id: 1/1

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