12V

24V

P1

P4

2(Tx), 3(Rx)

EN

22

15

17

5 6 7 8 9 10 11 12 4 3v3

4-Axis

Mecanum Wheel Stepper Motor Driver

**Arduino Nano**

**Robot Mecanum**

**Wheels Control**

XP XD YP YD ZP ZD AP AD EN 5V

DO

DO

4

3

7/P, 6/D, 5/E

8(Tx), 12(Rx)

5

4

IN/Tx

IN/Rx

Tx/Rx

7805

P2

P3

7805

11/P, 10/D, 9/E

**Arduino Nano**

**On-chassis Stepper Motors (2) Control**

7805

**1:8 UART**

**Mux**

Tx/Rx

EN

EN

Front SM Home Position Optocoupler

Rear SM Home Position Optocoupler

On-chassis Rear LASER

On-chassis Front LASER

nRF52840 Pro Mini

19

20

21

S3

S2

S1

On-chassis Front Stepper Motor Driver

On-chassis Rear Stepper Motor Driver