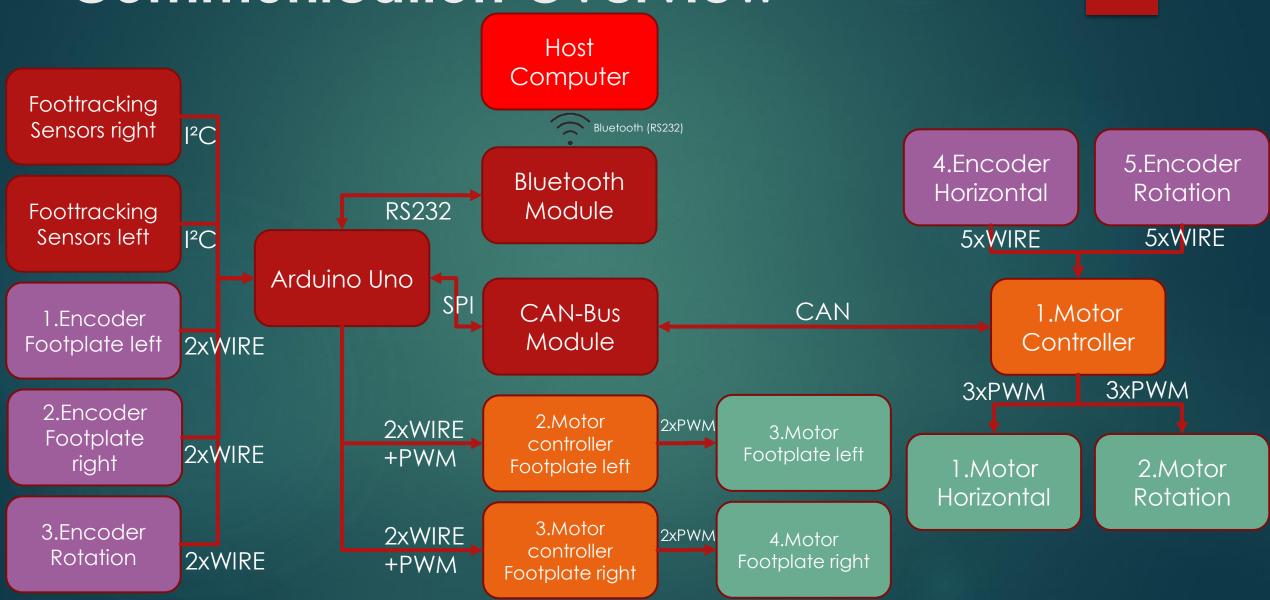
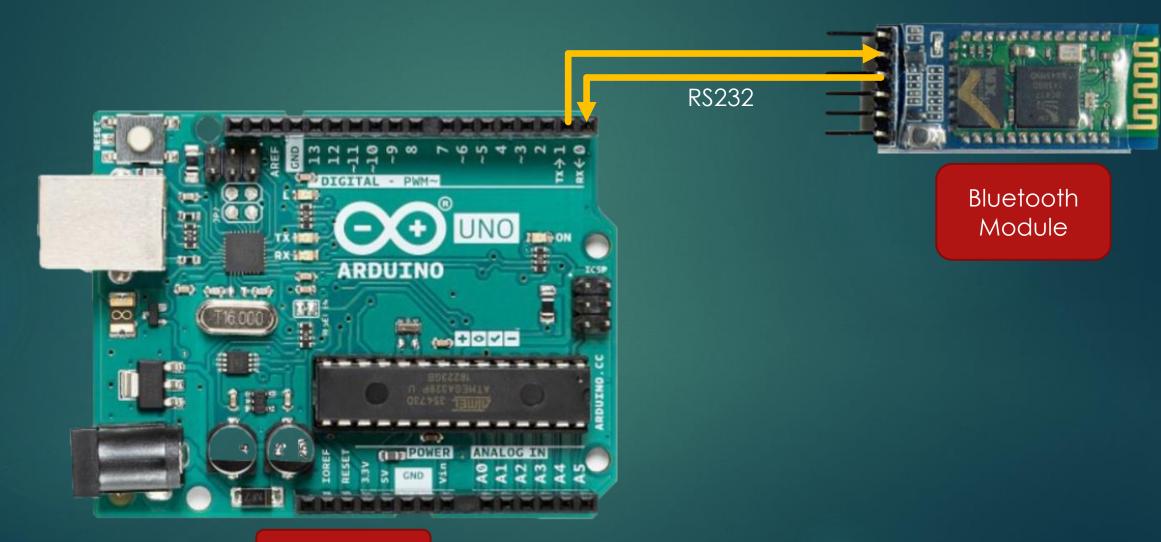
VR-Crosswalk

COMMUNICATION BETWEEN EACH COMPONENT

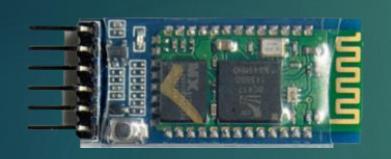
Communication Overview



Arduino Uno – Bluetooth Module



Bluetooth Module – Host Computer



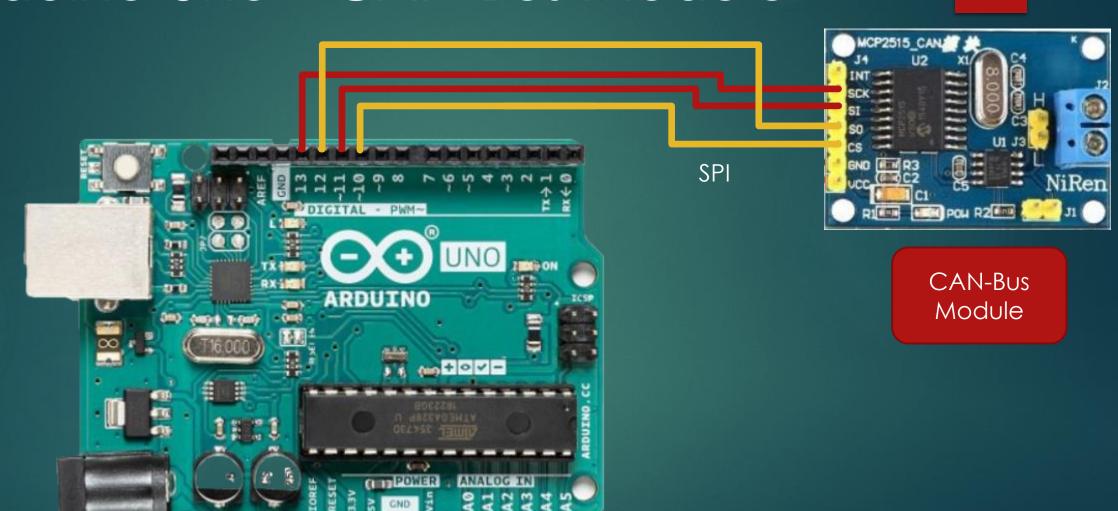
Bluetooth Module





Host Computer

Arduino Uno – CAN-Bus Module



CAN-Bus Module – 1.Motor Controller

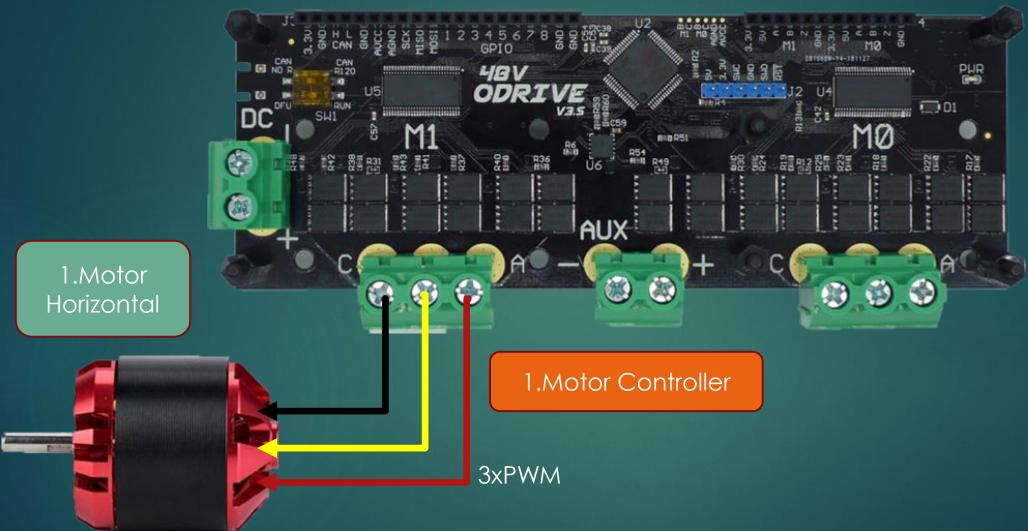


CAN-Bus Module

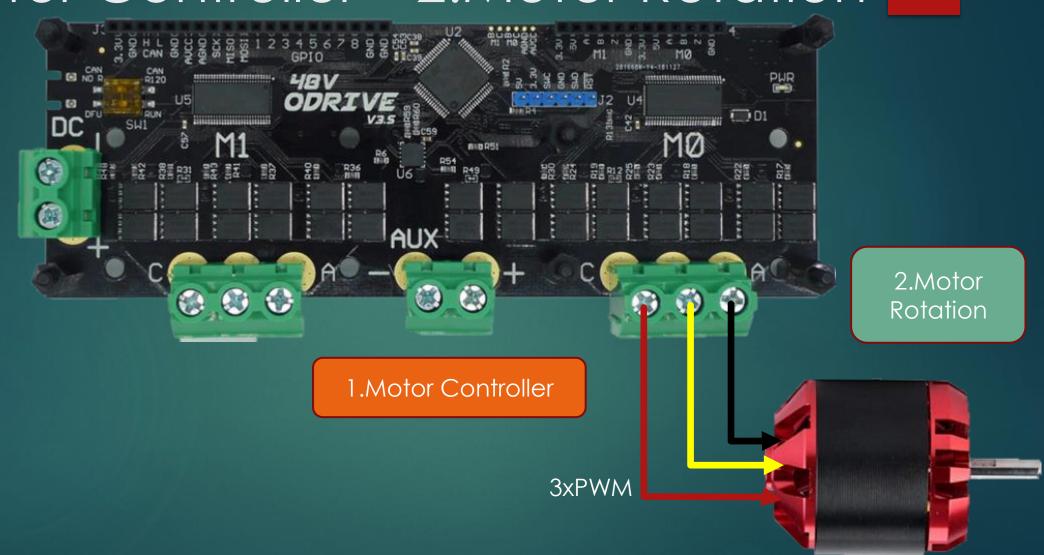


1.Motor Controller

1.Motor Controller – 1.Motor Horizontal



1.Motor Controller – 2.Motor Rotation

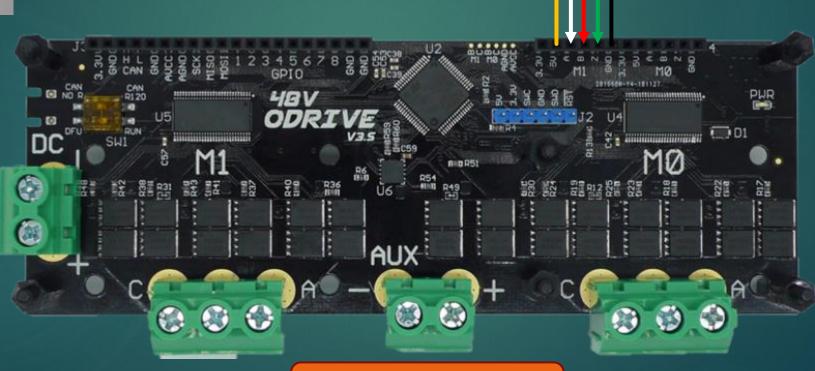


1.Motor Controller – 4.Encoder Horizontal



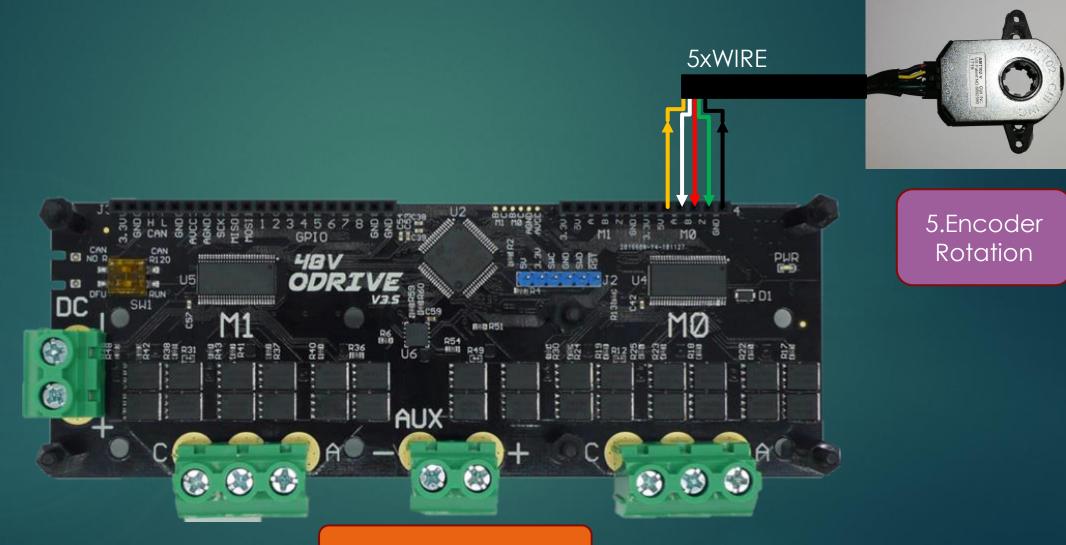
5xWIRE

4.Encoder Horizontal



1.Motor Controller

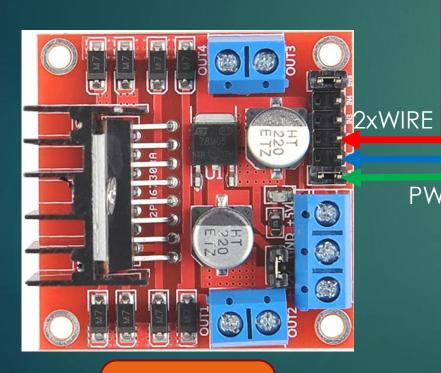
1. Motor Controller – 5. Encoder Rotation



1.Motor Controller

Arduino Uno – 2. Motor controller

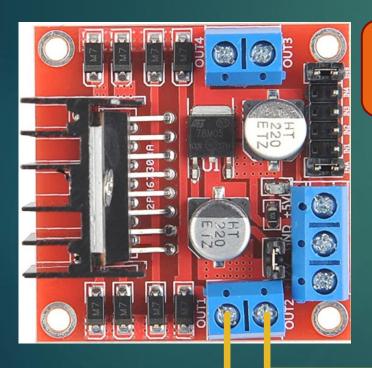
Footplate left



PWM

2.Motor controller Footplate left

2.Motor controller Footplate left – 3.Motor Footplate left



2.Motor controller Footplate left

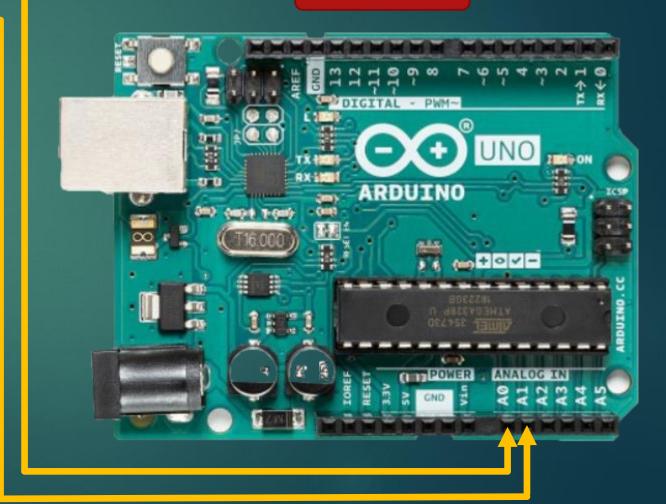


2xPWM

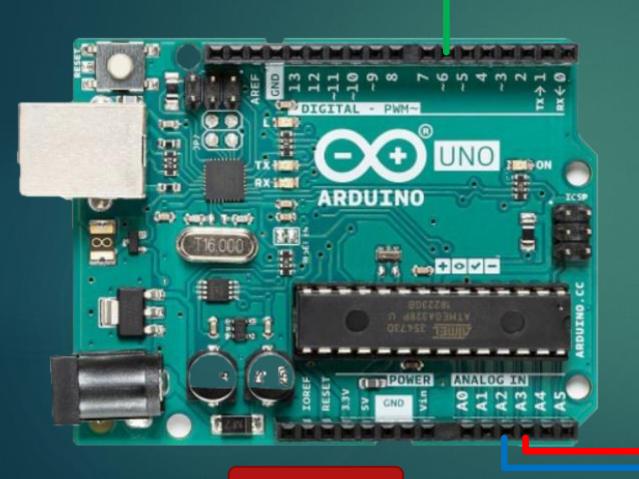
Arduino Uno – 1.Encoder Footplate



2xWIRE



Arduino Uno – 3. Motor controller Footplate right

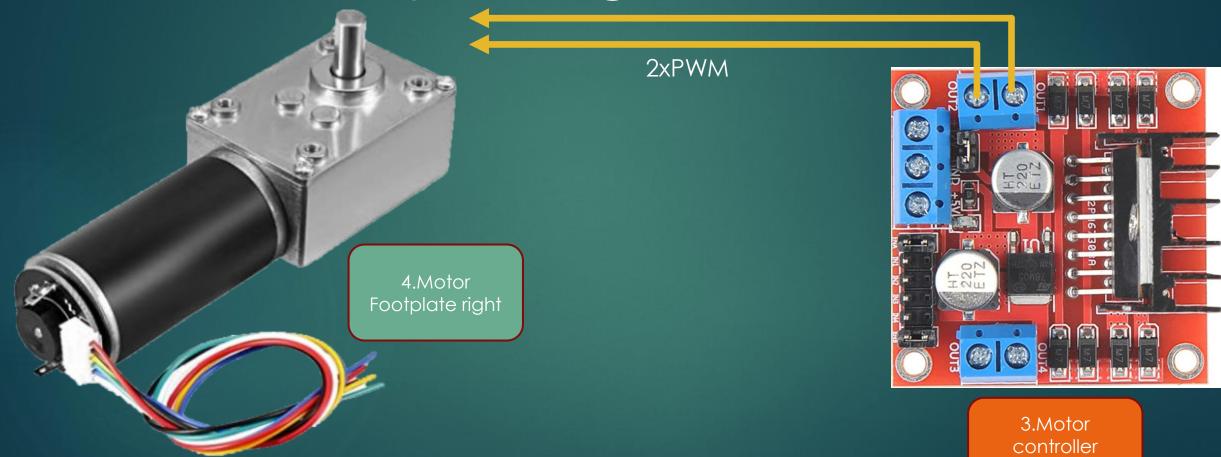


PWM

2xWIRE

3.Motor controller Footplate right

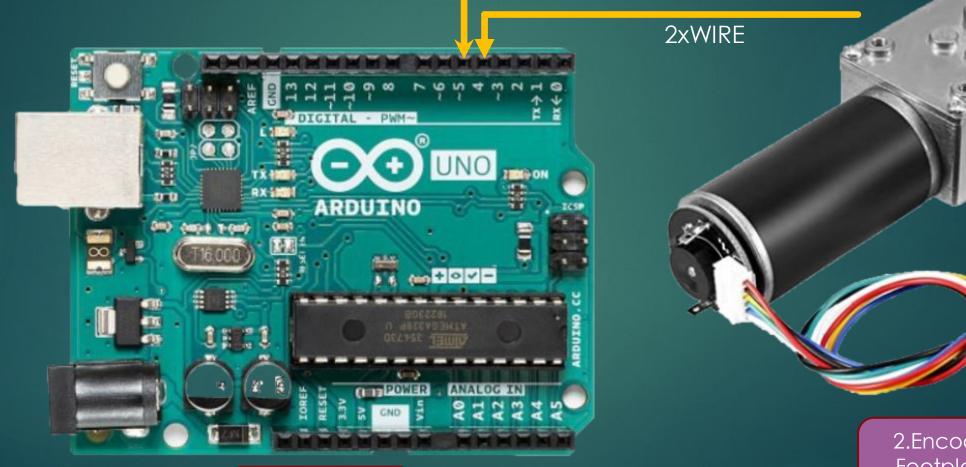
3. Motor controller Footplate right – 4. Motor Footplate right



Footplate right

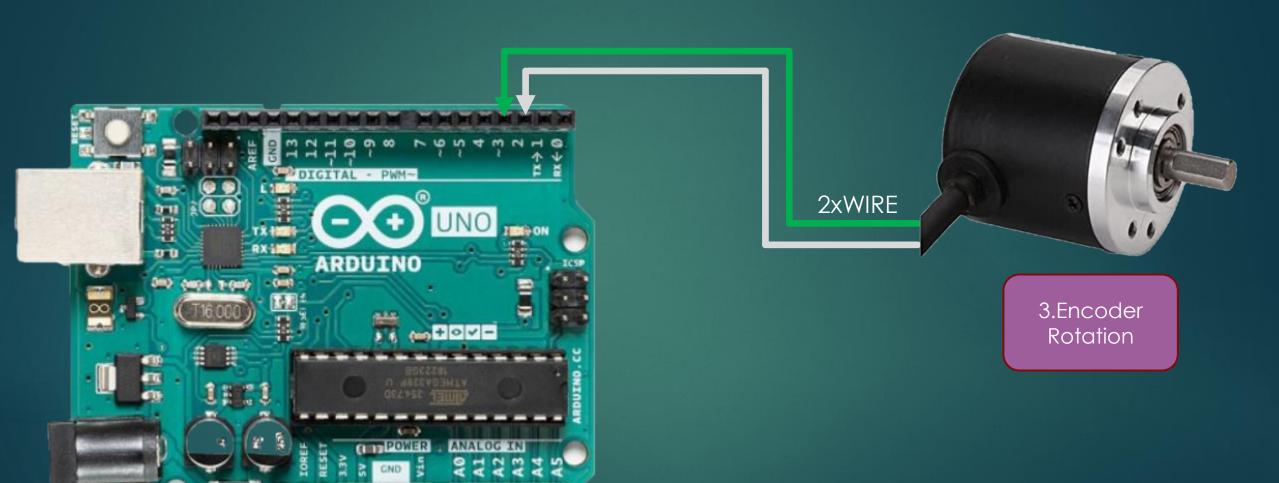
Arduino Uno – 2.Encoder Footplate right

Arduino Uno

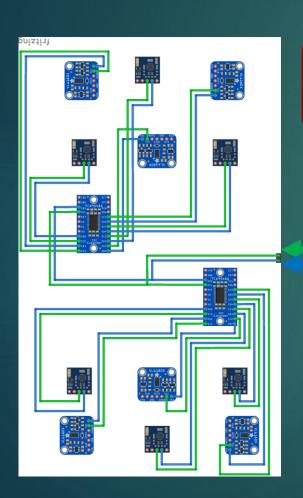


2.Encoder Footplate right

Arduino Uno – 3.Encoder Rotation

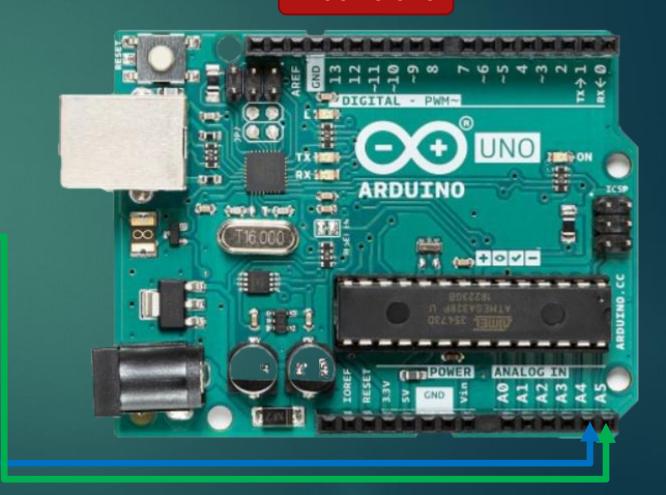


Arduino Uno – Foottracking Sensors left



Foottracking Sensors left

I²C



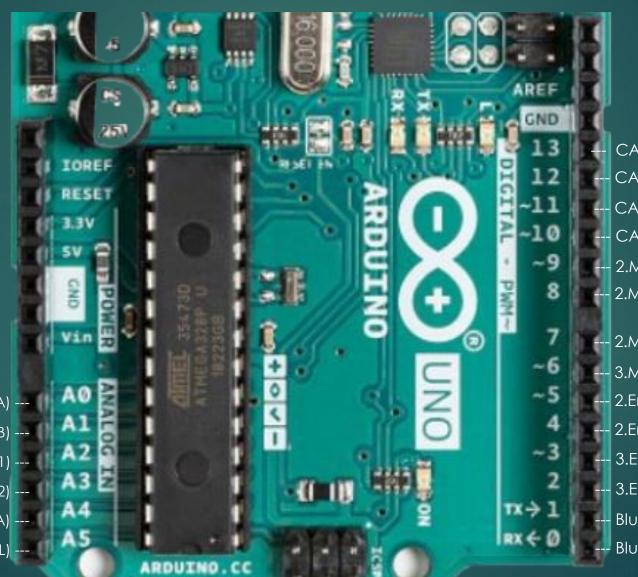
Arduino Uno – Foottracking Sensors right

Arduino Uno



Foottracking Sensors right I²C

Arduino Uno – PIN Overview



CAN-Bus Module (SCK)

CAN-Bus Module (S0)

CAN-Bus Module (SI)

CAN-Bus Module (CS)

2.Motor controller Footplate left (PWM/Enable)

2.Motor controller Footplate left (EN1)

2.Motor controller Footplate left (EN2)

3.Motor controller Footplate right (PWM/Enable)

2.Encoder Footplate right (Channel A)

- 2.Encoder Footplate right (Channel B)

--- 3.Encoder Rotation (Channel A)

--- 3.Encoder Rotation (Channel B)

--- Bluetooth Module (RX)

Bluetooth Module (TX)

1.Encoder Footplate left (Channel A) -

1.Encoder Footplate left (Channel B) -

3. Motor controller Footplate right (EN1) --

3. Motor controller Footplate right (EN2) --

Foottracking Sensors (SDA) ---

Foottracking Sensors (SCL) -