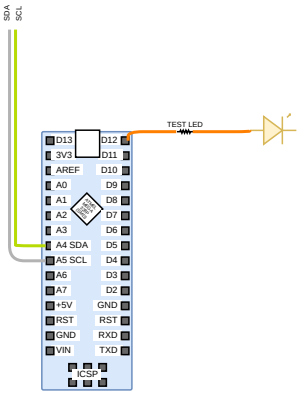
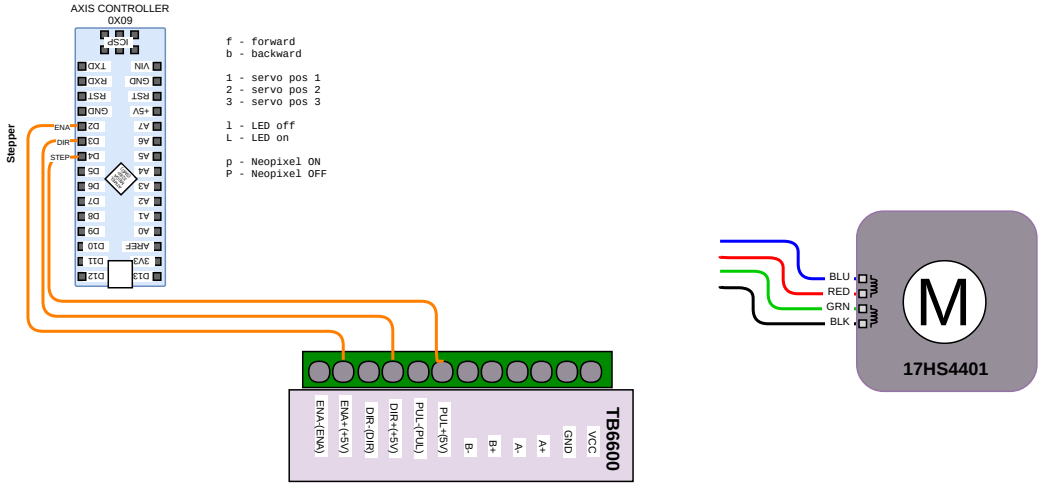
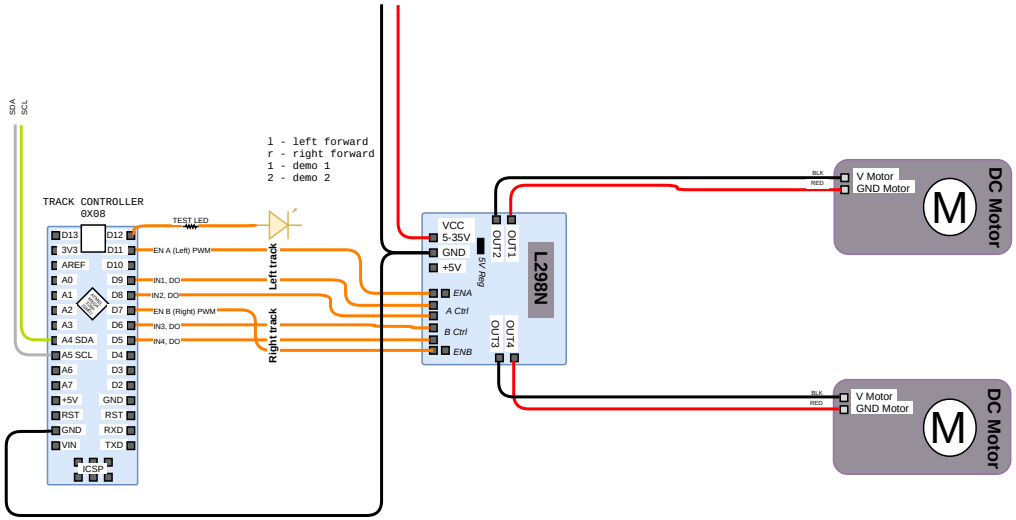
test_servos
02APR2018 OK



test_stepper
NOT USED

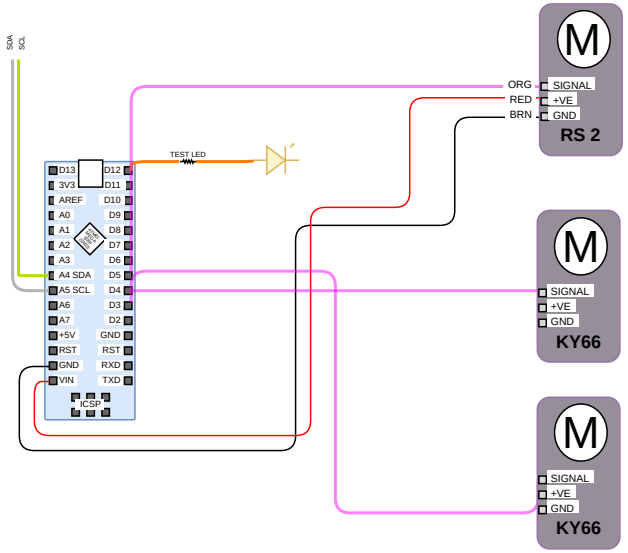


test_track_motors
01APR2018 OK

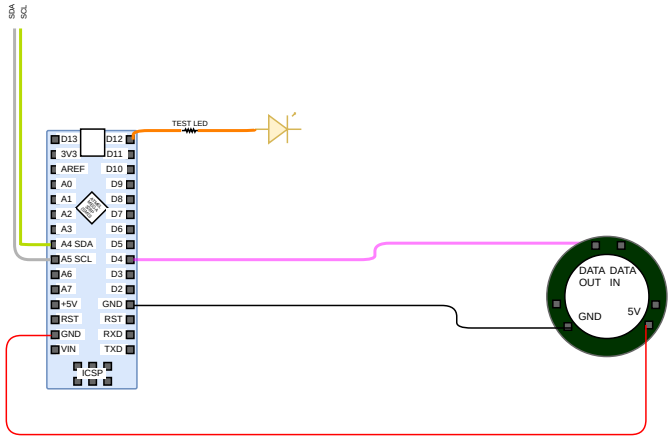



```
/**
* DC
LEFT/RIGHT
TRACK
*
*/
// LEFT motor
int enA = 11;
// Speed, PWM
int in1 = 9;
// H-bridge
int in2 = 8;
// H-bridge
```

test_servos
02APR2018 OK

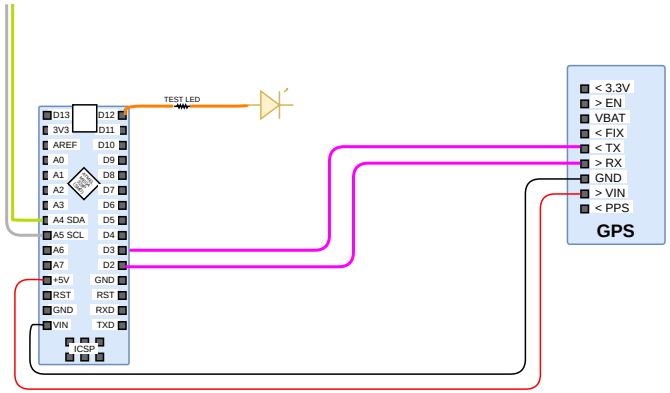


test_neo_pixel



test_gps
02APR2018 OK

NMEA National Marine Electronics Association



$GPGGA,181908.00,3404.7041778,N,07044.3966270,
*W,4,13,1.00,495.144,M,29.200,M,0.10,0000*40*

All NMEA messages start with the $ character, and each data field is separated by a comma

GP represent that it is a GPS position (GL would denote GLONASS).

181908.00 is the time stamp: UTC time in hours, minutes and seconds.

3404.7041778 is the latitude in the DDMM.MMMMM format. Decimal places are variable.

N denotes north latitude.

07044.3966270 is the longitude in the DDDMM.MMMMM format. Decimal places are variabl

W denotes west longitude.

4 denotes the Quality Indicator:

1 = Uncorrected coordinate

2 = Differentially correct coordinate (e.g., WAAS, DGPS)

4 = RTK Fix coordinate (centimeter precision)

5 = RTK Float (decimeter precision.

13 denotes number of satellites used in the coordinate.

1.0 denotes the HDOP (horizontal dilution of precision).

495.144 denotes altitude of the antenna.

M denotes units of altitude (eg. Meters or Feet)

29.200 denotes the geoidal separation (subtract this from the altitude of the antenna to arrive

M denotes the units used by the geoidal separation.

1.0 denotes the age of the correction (if any).

0000 denotes the correction station ID (if any).

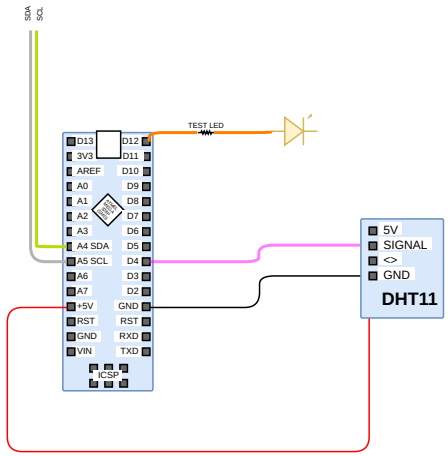
*40 denotes the checksum.

l.

e.

e at the Height Above Ellipsoid (HAE).

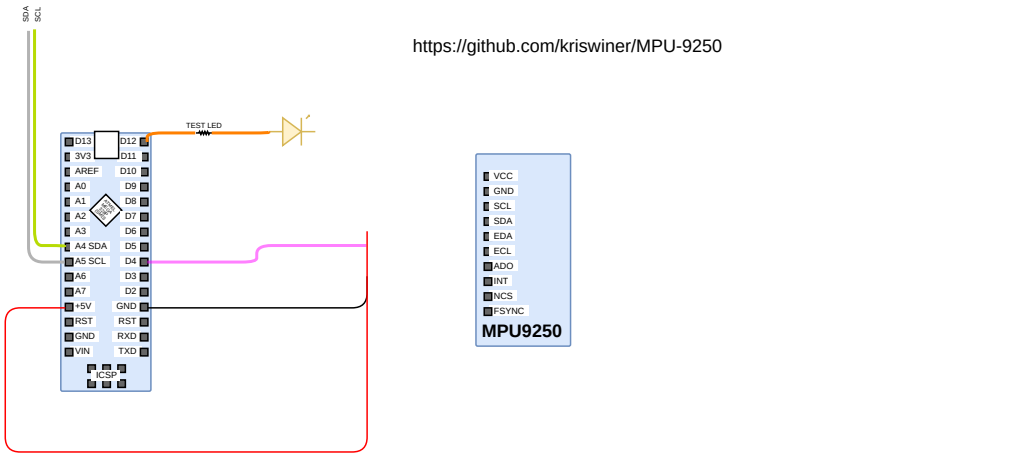
test_temp_hum



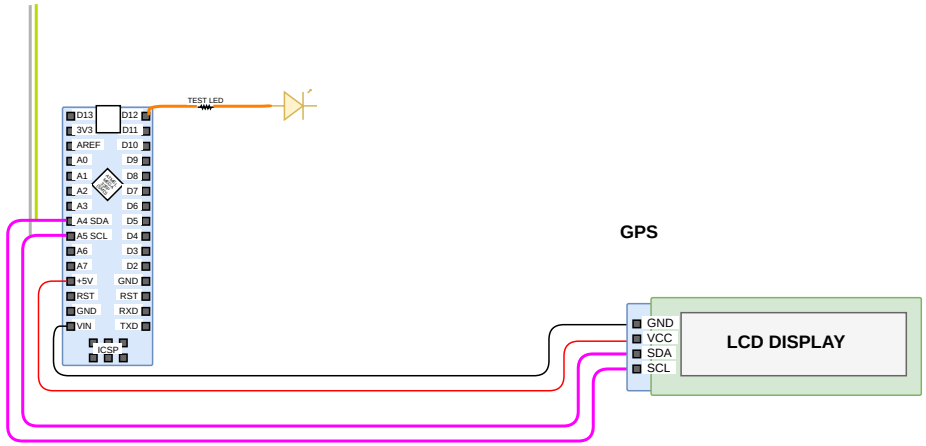
test_accelerometer
02APR2018 OK

https://www.lucidar.me/en/inertial-measurement-unit/mpu-9250-and-arduino-9-axis-imu/

https://github.com/kriswiner/MPU-9250



test_lcd



HD44780 controller

Set the contrast!!!

Run the I2C scanner!!!

test_i2c

https://hackaday.com/2016/07/19/what-could-go-wrong-i2c-edition/

I2C multiplexor!
https://www.adafruit.com/product/2717

https://martin-jones.com/2013/08/20/how-to-get-the-second-raspberry-pi-i2c-bus-to-work/

https://www.raspberrypi.org/forums/viewtopic.php?f=28&t=87715