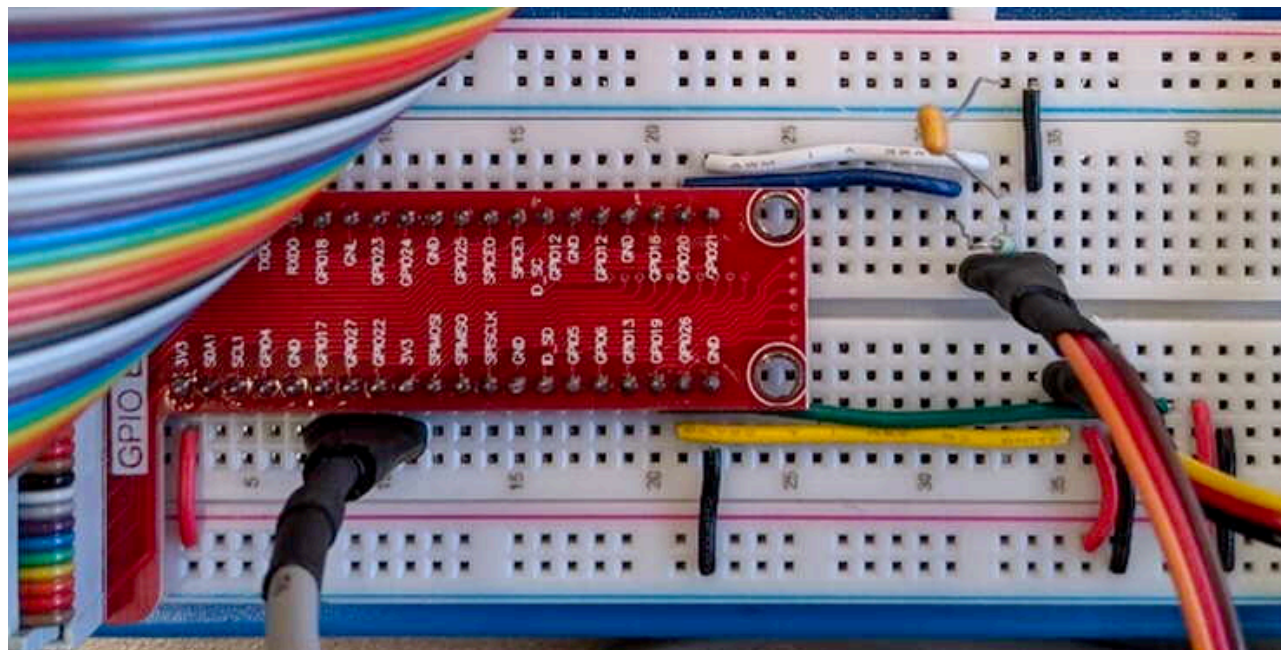
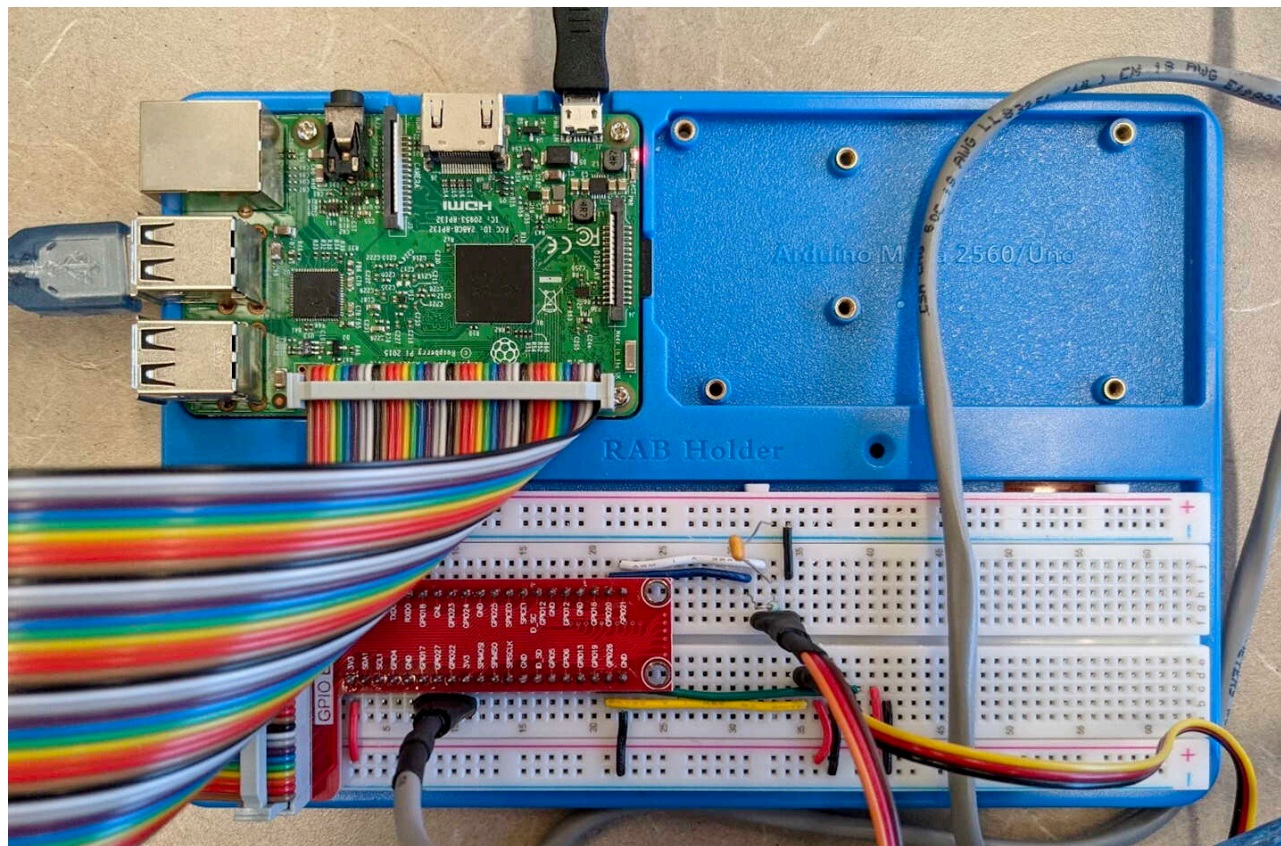


Notes on transitioning Tensile-Tester electronics from prototype

LA - Linear Actuator

ROT - Two stepper motors on rotary tables they are counter-rotating and connected to one driver

Prototype RPI GPIO	Description	Final RPi GPIO
21	LA_DIRECTION, direction of linear actuator	21
20	LA_DRIVE, power to linear actuator. Lowpass RC filter used to smooth PWM signals	20
26	ROT_SWITCH, switch indicating zero position of rotary tables	16
27	ROT_ENABLE, enable rotary table stepper driver	27
22	ROT_DIRECTION, direction of rotary table rotation	22
17	ROT_DRIVE, drive signal to rotary table stepper motors	17
3V3	Power from RPi to stepper driver	3V3





Ribbon Wire Colour	Header Pin	RPi GPIO	Description
Yellow	14	GND	GND
Orange	13	21	LA_DIRECTION
Red	12	GND	GND
Brown	11	20	LA_DRIVE
Black	10	GND	GND
White	9	16	ROT_SWITCH
Gray	8	GND	GND
Purple	7	3V3	3V3
Blue	6	GND	GND
Green	5	22	ROT_DIRECTION
Yellow	4	GND	GND
Orange	3	27	ROT_ENABLE
Red	2	GND	GND
Brown	1	17	ROT_DRIVE