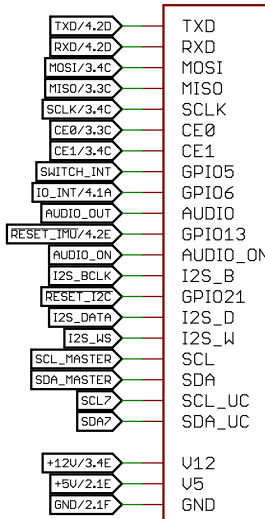
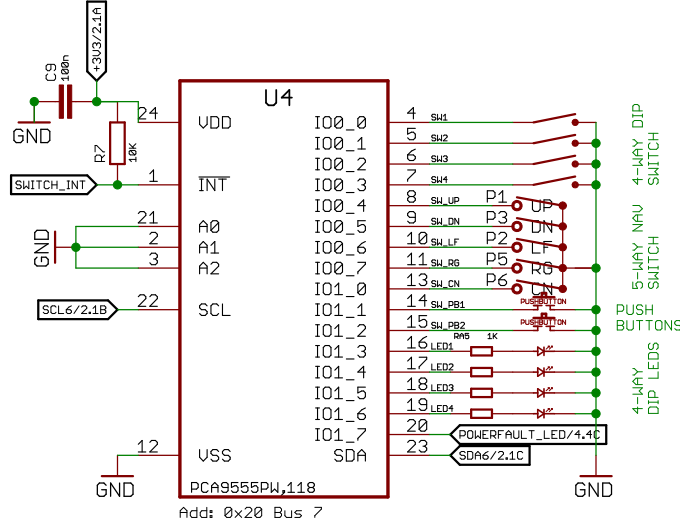


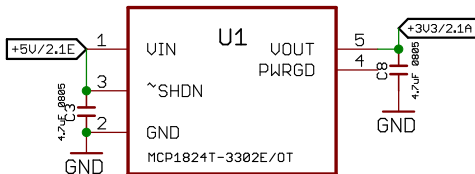
Connectors to YRL039 Power Supply Board



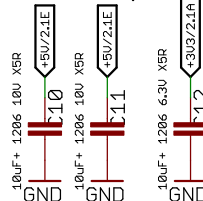
DIP & NAVIGATION SWITCHES



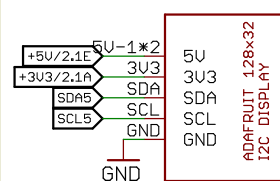
3.3V LDO Regulator



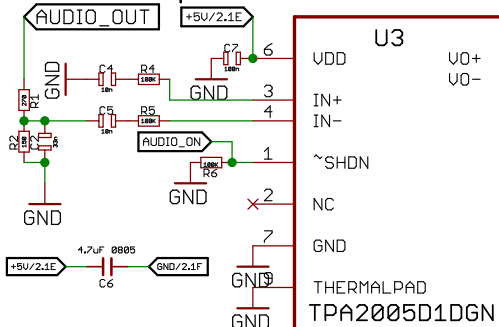
Bulk Caps



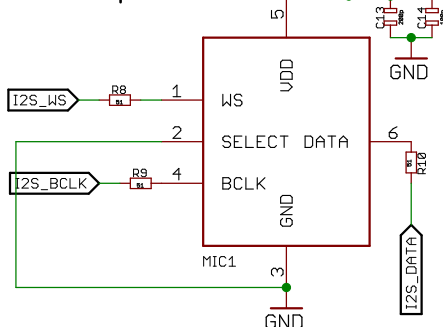
OLED Header



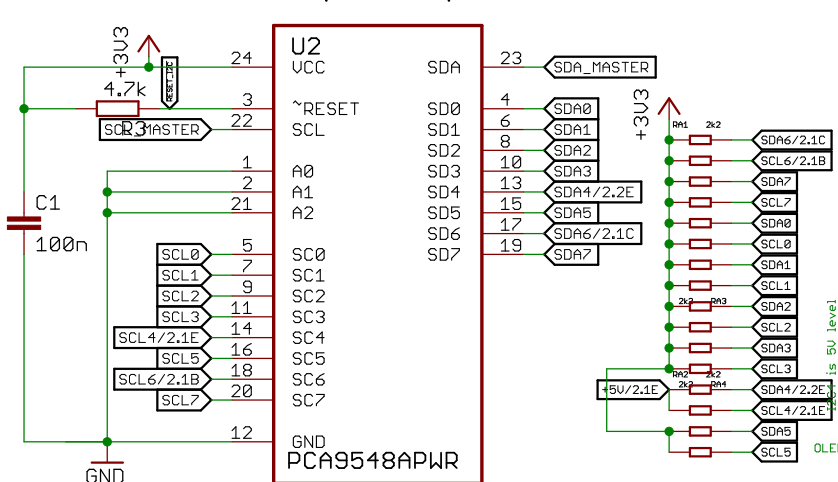
Audio Amplifier



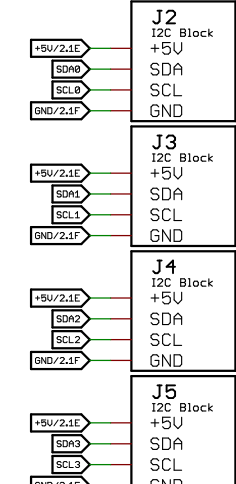
Microphone



I2C switch and pull-ups

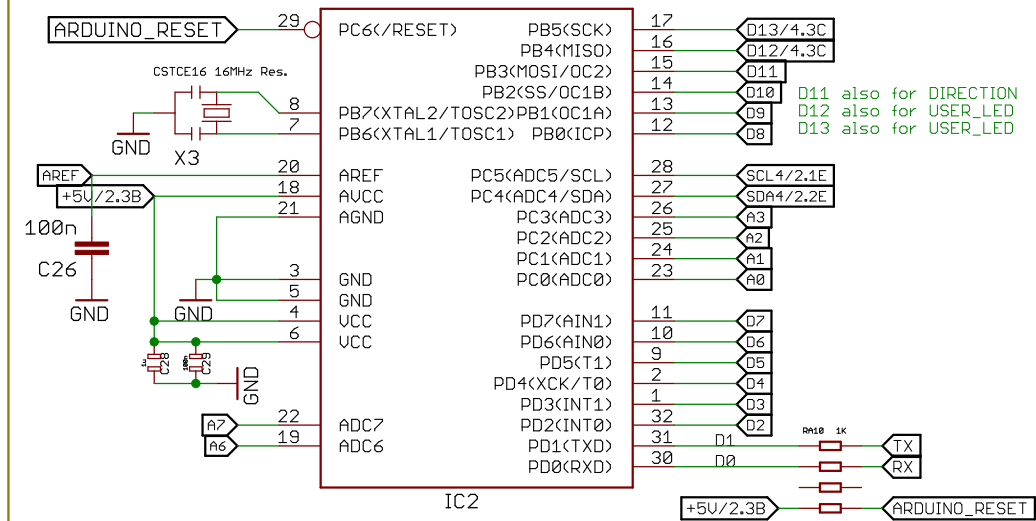


I2C Sockets

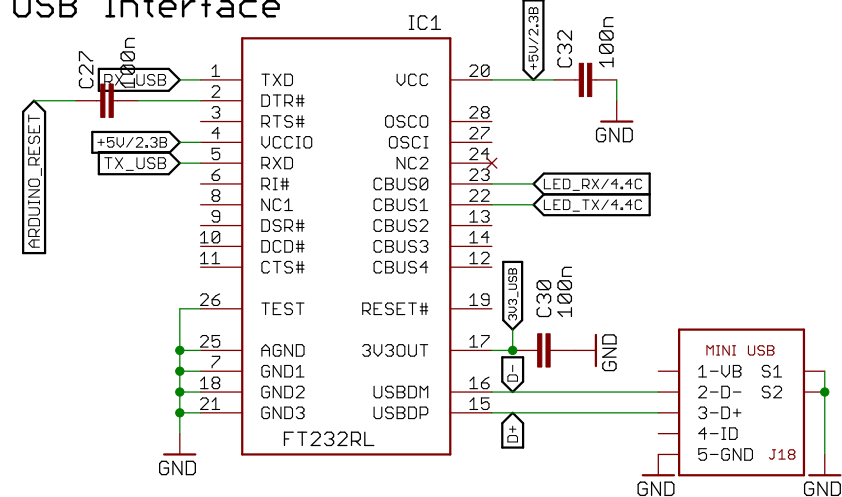


Arduino Microcontroller

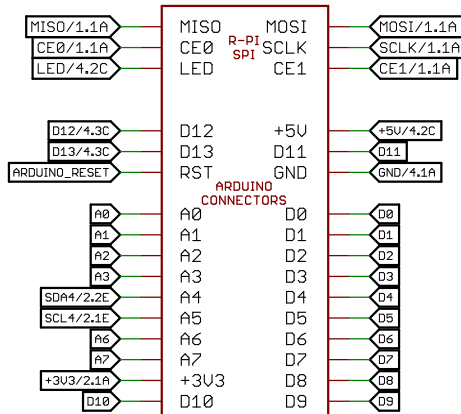
ATMEGA328P-AU



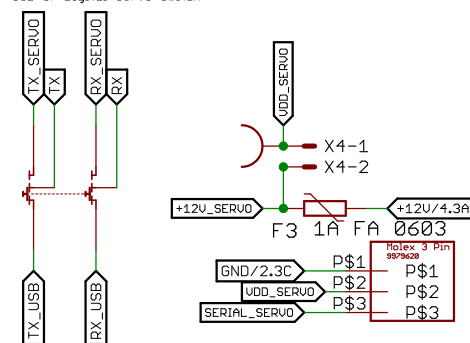
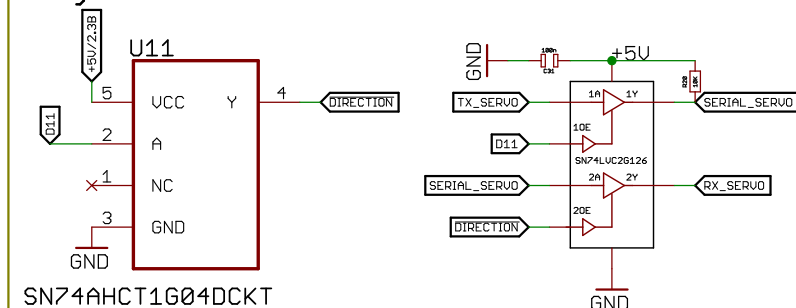
USB Interface



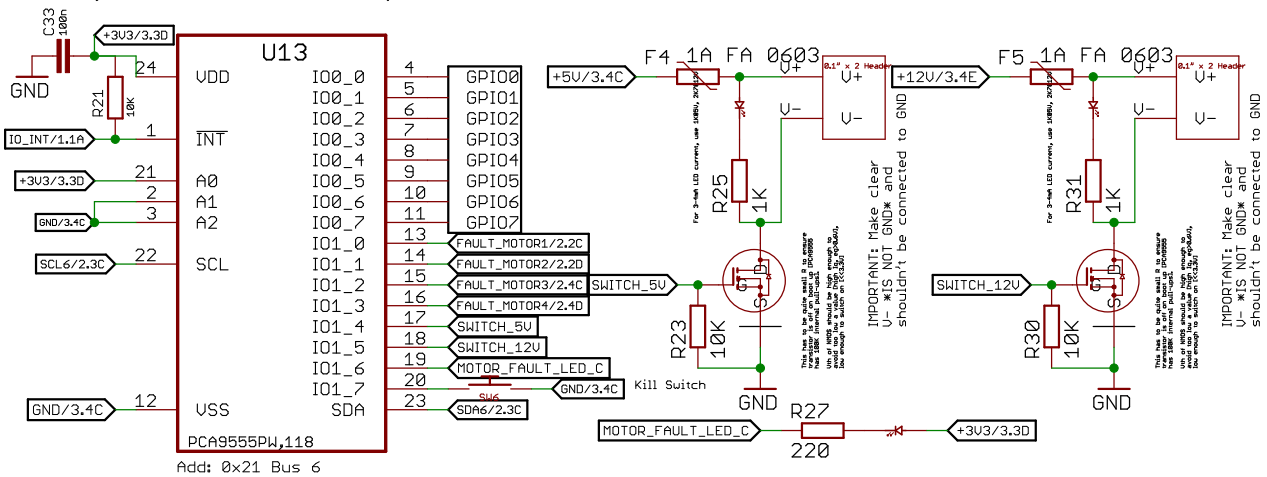
Arduino & RPi SPI Connectors



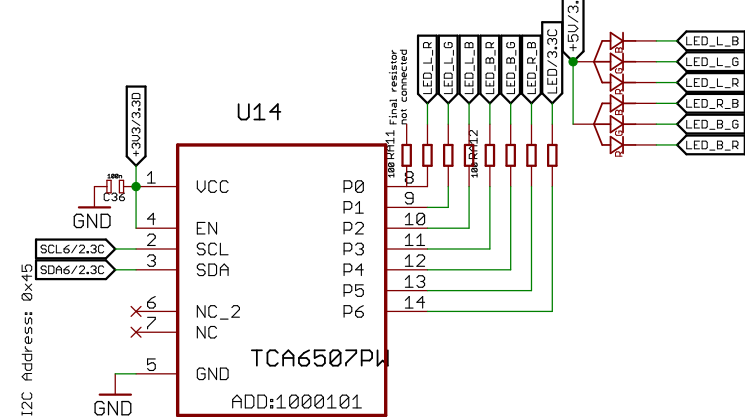
Digital Servo Serial Interface



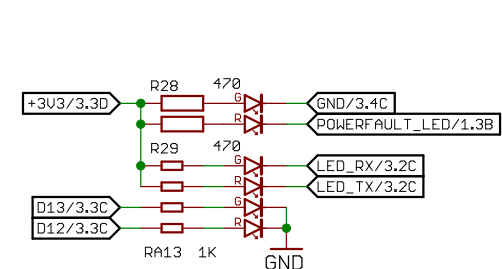
GPIO, Switched Outputs and Motor Fault Detection



RGB LED Driver + LEDs



Status LEDs



I2C Addresses

SW GPIO	0100000	0x20	Bus 6
HW GPIO	0100001	0x21	Bus 6
OLED	0111100	0x3C	Bus 5
PWM	1000000	0x40	Bus 4
RGB LED	1000101	0x45	Bus 6
ADC	1001000	0x48	Bus 6
MOTOR 1	1100000	0x60	Bus 6
MOTOR 2	1100001	0x61	Bus 6
MOTOR 3	1100010	0x62	Bus 6
MOTOR 4	1100011	0x63	Bus 6
I2C Switch	1110000	0x70	MASTER

YRL Sensor Addresses

VEML6040 Colour	0010000	(0x10)
VL53L0X TOF	0101001	(0x29)
EEPROM	1010000	(0x50)
VCNL4040 IR	1100000	(0x60)
LED All Call	1101000	(0x68)
GridEYE [YRL019]	1101001	(0x69)
LED Driver YRL013	1101001	(0x69)
LED Driver YRL019	1101010	(0x6A)
LED Reset	1101011	(0x6B)
Env.Bar. [YRL019]	1110111	(0x77)

IMU

