

Cytron MDD10A Dual Channel 10A Rev2.0 DC Motor Driver pins
 Dir1 = Arduino pin 8 (motor M1 direction)
 Pwm1 = Arduino pin 9 (motor M1 speed)
 Dir2 = Arduino pin 10 (motor M2 direction)
 Pwm2 = Arduino pin 11 (motor M2 speed)

Laser Lidar Like pins PWM Wiring
 Red wire = Arduino +5.0V in
 Black wire = Common Ground
 SN1 Front Laser Yellow wire = Arduino pin 2 Mode Control
 SN1 Front Laser Resistor wire = Arduino pin 3 Trigger
 SN2 Right Laser Yellow wire = Arduino pin 4 Mode Control
 SN2 Right Laser Resistor wire = Arduino pin 5 Trigger
 SN3 Left Laser Yellow wire = Arduino pin 6 Mode Control
 SN3 Left Laser Resistor wire = Arduino pin 7 Trigger

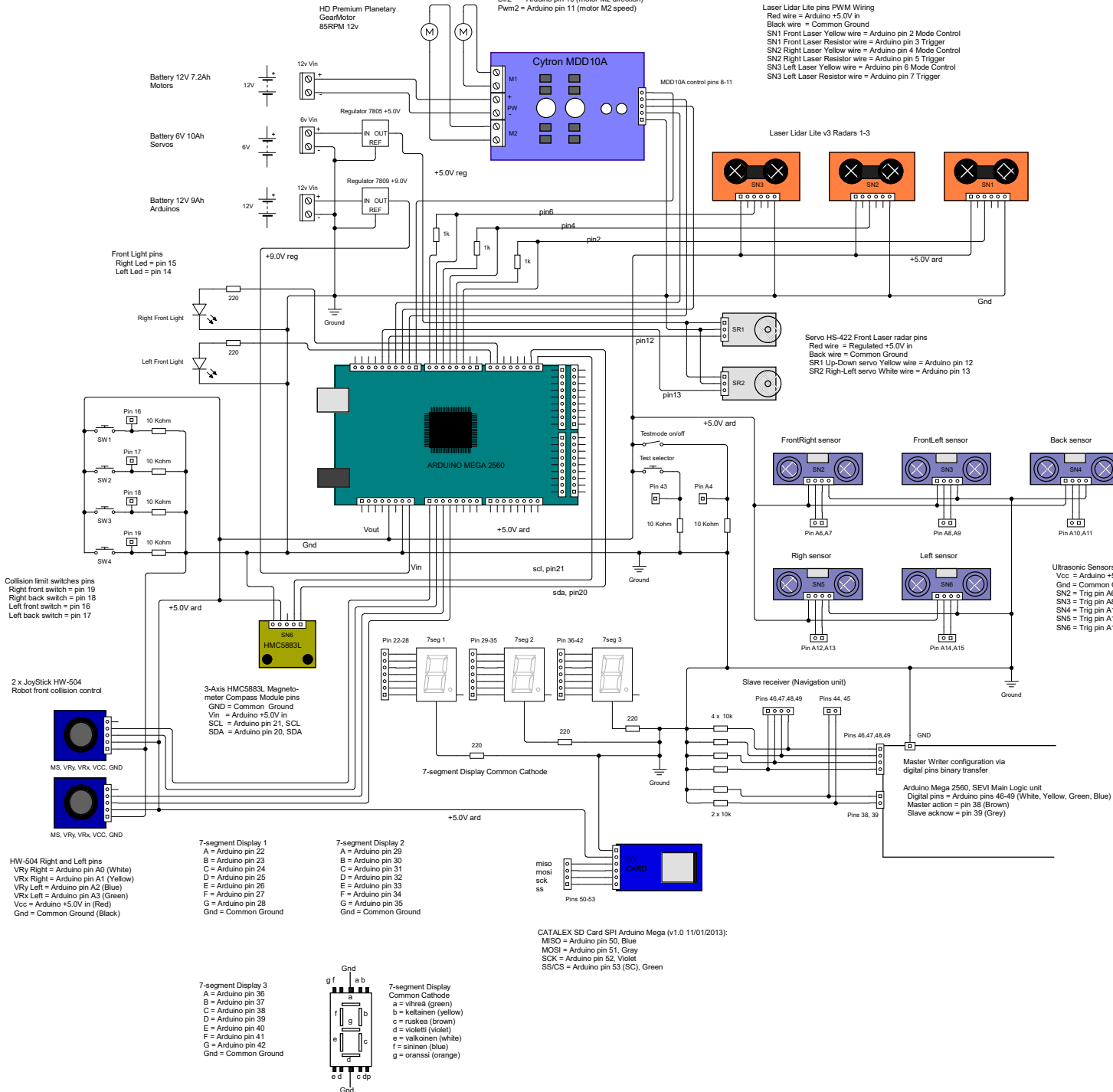
Laser Lidar Lite v3 Radars 1-3

Servo HS-422 Front Laser radar pins
 Red wire = Regulated +5.0V in
 Back wire = Common Ground
 SR1 Up-Down servo Yellow wire = Arduino pin 12
 SR2 Right-Left servo White wire = Arduino pin 13

Ultrasonic Sensors SN1-SN5
 Vcc = Arduino +5.0V in
 Gnd = Common Ground
 SN2 = Trig pin A6, Echo pin A7
 SN3 = Trig pin A8, Echo pin A9
 SN4 = Trig pin A10, Echo pin A11
 SN5 = Trig pin A12, Echo pin A13
 SN6 = Trig pin A14, Echo pin A15

Master Writer configuration via digital pins binary transfer
 Arduino Mega 2560, SEVI Main Logic unit
 Digital pins = Arduino pins 46-49 (White, Yellow, Green, Blue)
 Master action = pin 38 (Brown)
 Slave acknow = pin 39 (Grey)

CATALEX SD Card SPI Arduino Mega (v1.0 11/01/2013):
 MISO = Arduino pin 50, Blue
 MOSI = Arduino pin 51, Gray
 SCK = Arduino pin 52, Violet
 SS/CS = Arduino pin 53 (SC), Green



Battery 12V 7.2Ah Motors
 Battery 6V 10Ah Servos
 Battery 12V 9Ah Arduinos

Front Light pins
 Right Led = pin 15
 Left Led = pin 14

Collision limit switches pins
 Right front switch = pin 19
 Right back switch = pin 18
 Left front switch = pin 16
 Left back switch = pin 17

2 x JoyStick HW-504
 Robot front collision control

3-Axis HMC5883L Magnetometer Compass Module pins
 GND = Common Ground
 Vin = Arduino +5.0V in
 SCL = Arduino pin 21, SDA = Arduino pin 20, SDA

HW-504 Right and Left pins
 VRy Right = Arduino pin A0 (White)
 VRx Right = Arduino pin A1 (Yellow)
 VRy Left = Arduino pin A2 (Blue)
 VRx Left = Arduino pin A3 (Green)
 Vcc = Arduino +5.0V in (Red)
 Gnd = Common Ground (Black)

7-segment Display 1
 A = Arduino pin 22
 B = Arduino pin 23
 C = Arduino pin 24
 D = Arduino pin 25
 E = Arduino pin 26
 F = Arduino pin 27
 G = Arduino pin 28
 Gnd = Common Ground

7-segment Display 2
 A = Arduino pin 29
 B = Arduino pin 30
 C = Arduino pin 31
 D = Arduino pin 32
 E = Arduino pin 33
 F = Arduino pin 34
 G = Arduino pin 35
 Gnd = Common Ground

7-segment Display 3
 A = Arduino pin 36
 B = Arduino pin 37
 C = Arduino pin 38
 D = Arduino pin 39
 E = Arduino pin 40
 F = Arduino pin 41
 G = Arduino pin 42
 Gnd = Common Ground

