

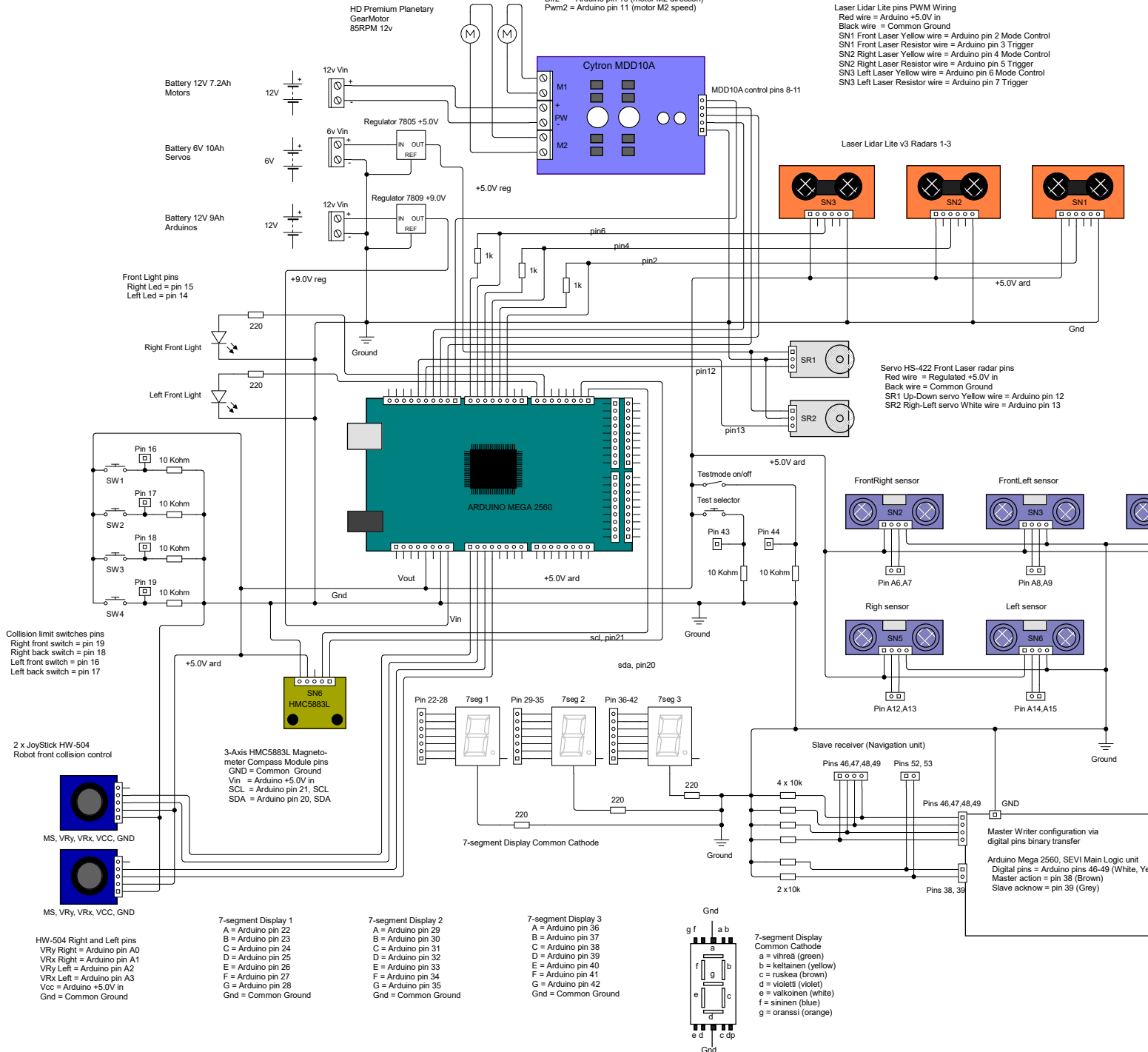
Cytron MDD10A Dual Channel 10A Rev2.0 DC Motor Driver pins
 Dir1 = Arduino pin 8 (motor M1 direction)
 Pwm1 = Arduino pin 9 (motor M1 speed)
 Dir2 = Arduino pin 10 (motor M2 direction)
 Pwm2 = Arduino pin 11 (motor M2 speed)

Laser Lidar Lite 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



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

SW1
 SW2
 SW3
 SW4

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

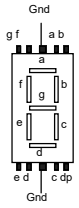
MS, VRy, VRx, VCC, GND

HW-504 Right and Left pins
 VRy Right = Arduino pin A0
 VRy Left = Arduino pin A2
 VRx Left = Arduino pin A3
 Vcc = Arduino +5.0V in
 Gnd = Common Ground

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



7-segment Display
 Common Cathode
 a = vihreä (green)
 b = keltainen (yellow)
 c = ruskea (brown)
 d = violetti (violet)
 e = vaikoinen (white)
 f = sininen (blue)
 g = oranssi (orange)

Slave receiver (Navigation unit)
 Pins 46,47,48,49
 Pins 52, 53

Master Writer configuration via digital pins binary transfer
 Pins 46,47,48,49
 Pins 38, 39

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)