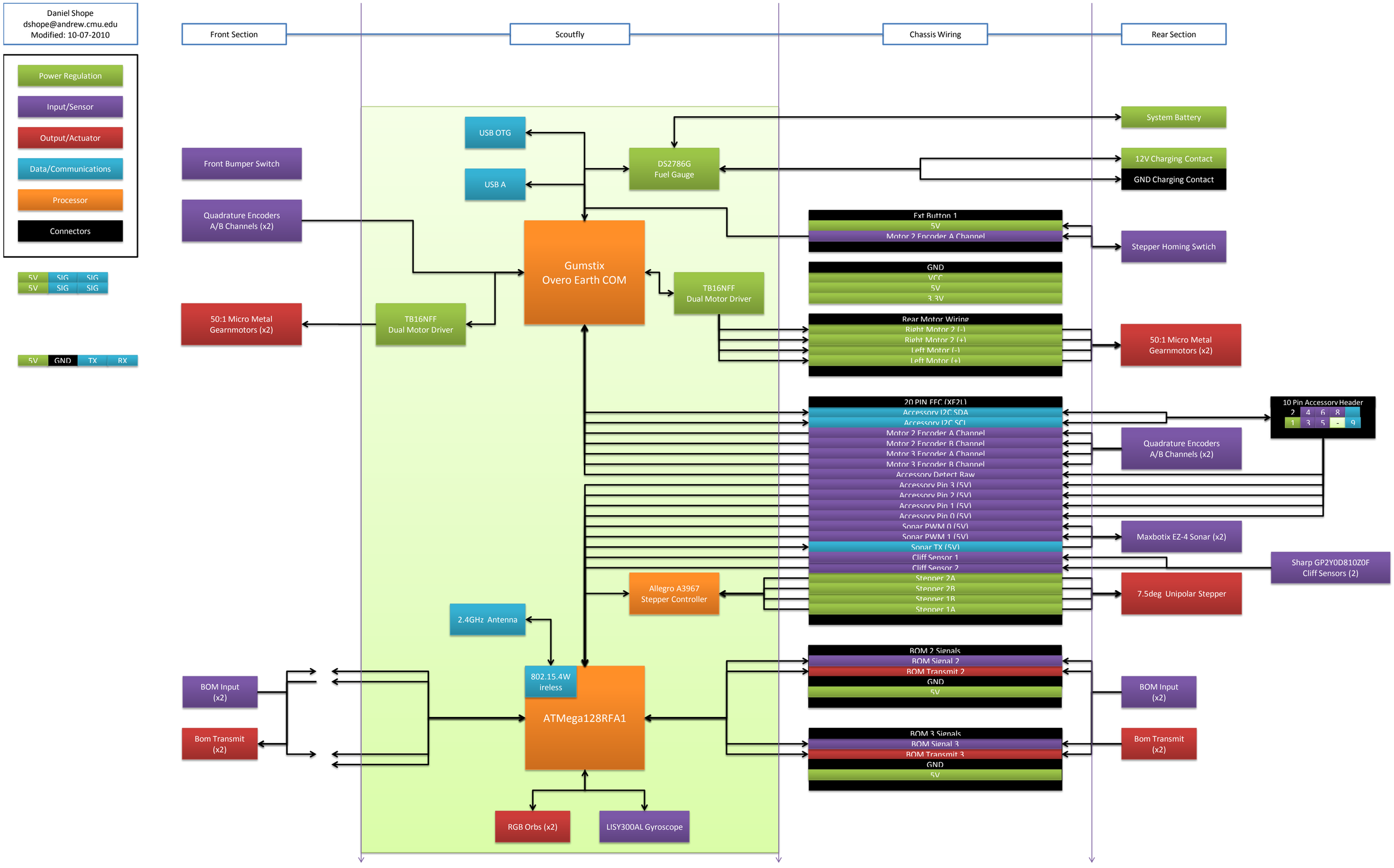
Daniel Shope
dshope@andrew.cmu.edu
Modified: 10-07-2010
Power Regulation
Input/Sensor
Output/Actuator
Data/Communications
Processor
Connectors
5V SIG SIG
5V SIG SIG
5V GND TX RX
Front Section
Scoutfly
Chassis Wiring
Rear Section
Front Bumper Switch
Quadrature Encoders A/B Channels (x2)
50:1 Micro Metal Gearnmotors (x2)
TB16NFF Dual Motor Driver
USB OTG
USB A
DS2786G Fuel Gauge
Gumstix Overo Earth COM
TB16NFF Dual Motor Driver
2.4GHz Antenna
Allegro A3967 Stepper Controller
802.15.4W ireless
ATMega128RFA1
RGB Orbs (x2)
LISY300AL Gyroscope
BOM Input (x2)
Bom Transmit (x2)
System Battery
12V Charging Contact
GND Charging Contact
Ext Button 1
5V
Motor 2 Encoder A Channel
Stepper Homing Swtich
GND
VCC
5V
3.3V
Rear Motor Wiring
Right Motor 2 (-)
Right Motor 2 (+)
Left Motor (-)
Left Motor (+)
50:1 Micro Metal Gearnmotors (x2)
20 PIN FFC (XF2L)
Accessory I2C SDA
Accessory I2C SCL
Motor 2 Encoder A Channel
Motor 2 Encoder B Channel
Motor 3 Encoder A Channel
Motor 3 Encoder B Channel
Accessory Detect Raw
Accessory Pin 3 (5V)
Accessory Pin 2 (5V)
Accessory Pin 1 (5V)
Accessory Pin 0 (5V)
Sonar PWM 0 (5V)
Sonar PWM 1 (5V)
Sonar TX (5V)
Cliff Sensor 1
Cliff Sensor 2
Stepper 2A
Stepper 2B
Stepper 1B
Stepper 1A
10 Pin Accessory Header
2 4 6 8
1 3 5 - 9
Quadrature Encoders A/B Channels (x2)
Maxbotix EZ-4 Sonar (x2)
Sharp GP2Y0D810Z0F Cliff Sensors (2)
7.5deg Unipolar Stepper
BOM 2 Signals
BOM Signal 2
BOM Transmit 2
GND
5V
BOM 3 Signals
BOM Signal 3
BOM Transmit 3
GND
5V
BOM Input (x2)
Bom Transmit (x2)