

Title		
Microcontroller SchDoc		AtlasRevA.PjPcb
Size	Number	Revision
C		A
Date:	8/19/2015	Sheet 1 of *
File:	C:\Users\j\Microcontroller SchDoc	Drawn By: Ross Harvey

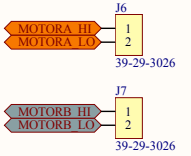
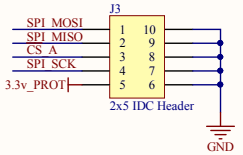
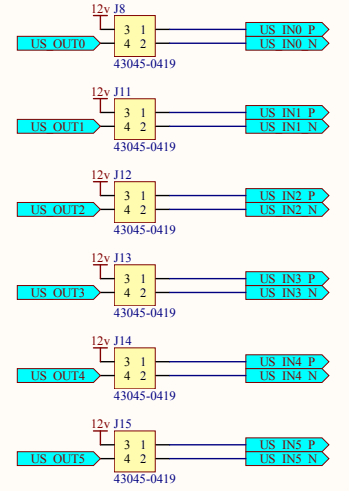
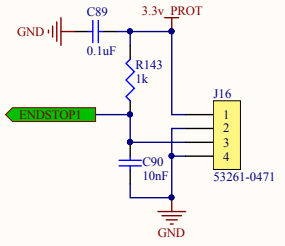
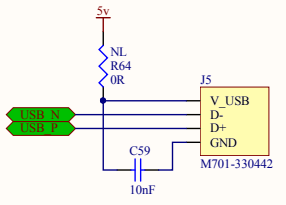
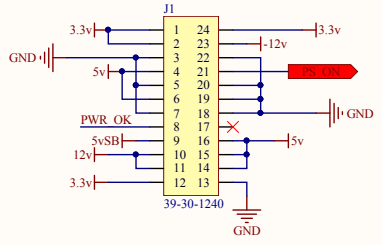




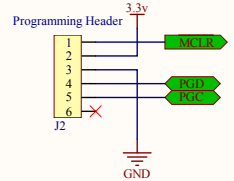
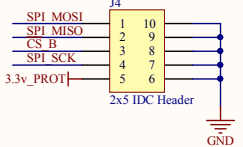
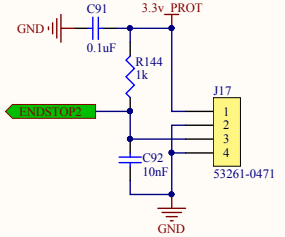
Title		Motor B Driver_SchDoc		AtlasRevA.PrtPcb	
Size	Number			Revision	
C				A	
Date:	8/19/2015			Sheet 3 of 4	
File:	C:\Users\j\Motor B Driver_SchDoc			Drawn By: Ross Harvey	

Port Legend

- Microcontroller
- Inputs
- Connectors
- Motor A Driver
- Motor B Driver
- End Stops
- Power
- Ultrasonics

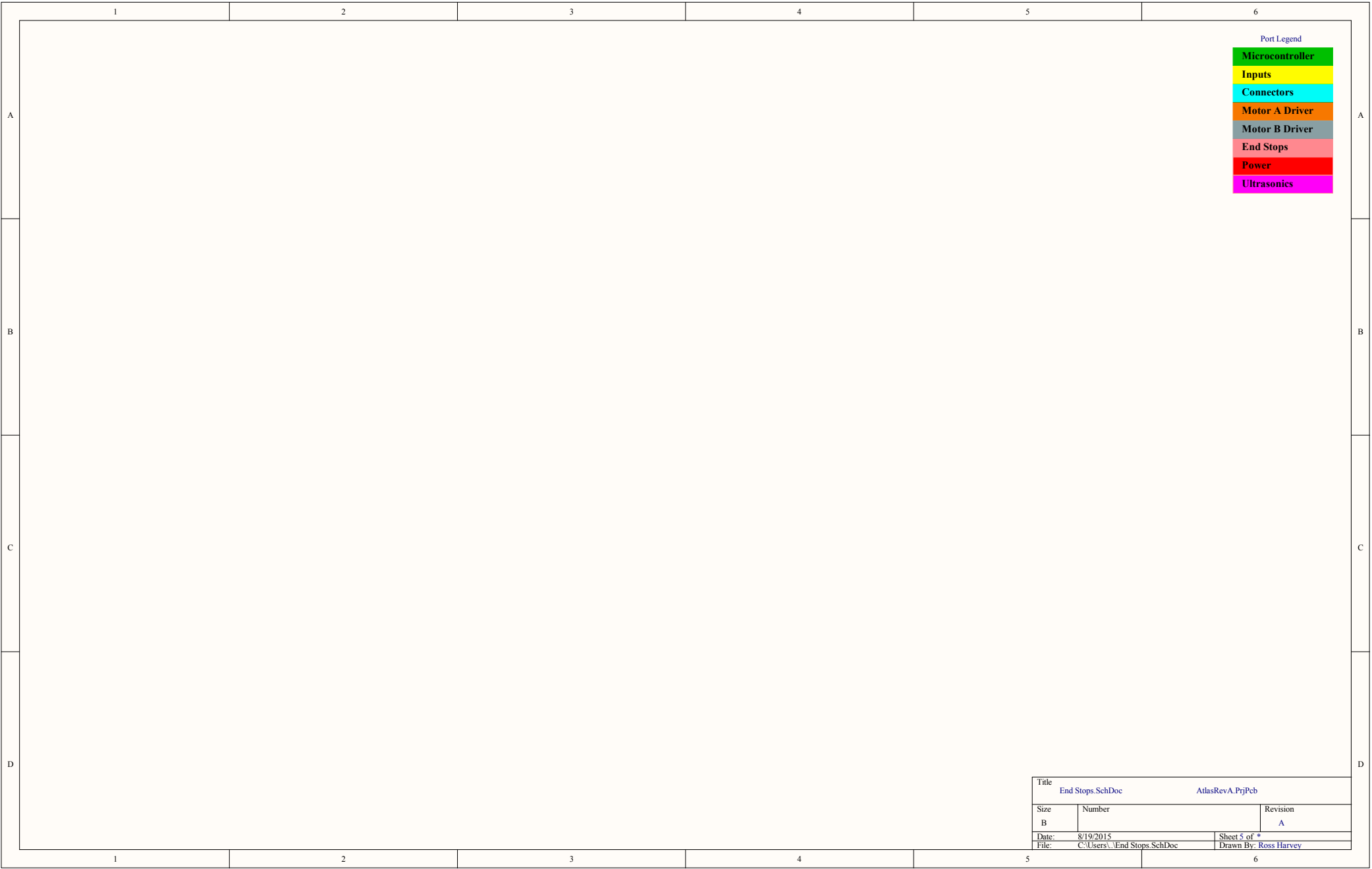


Component Note: Use 10-14 AWG twisted pair for motor power.



Component Note: Use 20-24 AWG twisted pair, shielded cable.

Title		Connectors.SchDoc		AtlasRevA.PrjPcb	
Size	B	Number			Revision
Date:		8/19/2015			Sheet 4 of *
File:		C:\Users\...\Connectors.SchDoc			Drawn By: Ross Harvey



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A

B

C

D

A

B

C

D

1

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3

4

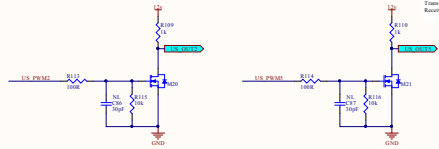
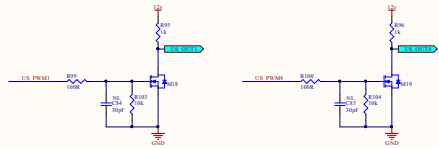
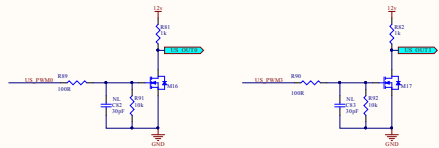
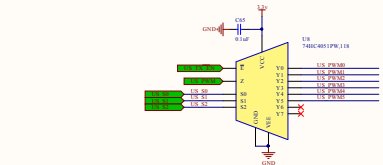
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6



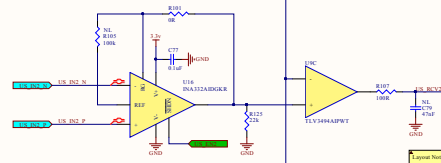
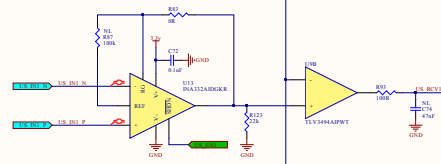
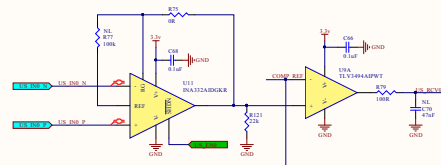
Title		
Power.SchDoc		AtlasRevA.PrfPcb
Size	Number	Revision
A		A
Date:	8/19/2015	Sheet 6 of *
File:	C:\Users\...Power.SchDoc	Drawn By: Ross Harvey

- PartLegend
- Microcontroller
  - Inputs
  - Connectors
  - Motor A Driver
  - Motor B Driver
  - End Stops
  - Encoders

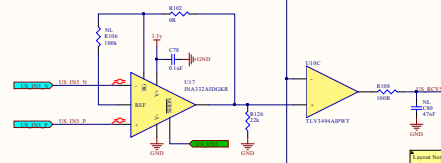
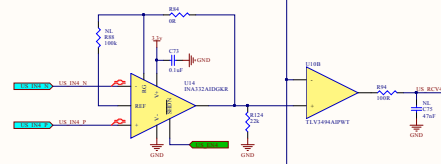
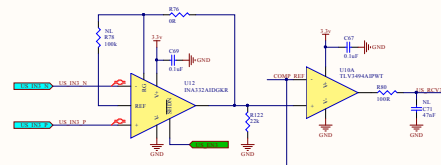
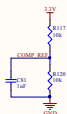


Transistor: MA4054S

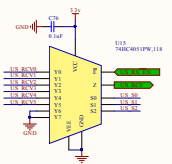
Receiver: MA4054R



Layout Note: Place caps near pins



Layout Note: Place caps near pins



Rev	Number	Revision
1	1.0	Initial
2	1.1	Minor
3	1.2	Major

	1	2	3	4	5	6
A	<div>TO-DO Schematic: GLOBAL: - Add all ports Connectors: - Check ATX Pinout End Stops: - Find end stops - Complete schematic Power: - Possibly add current monitoring on all rails Ultrasonics: - Review schematic Board Layout: - Complete layout</div>		<div>TO-DO Testing: Bluetooth to bluetooth connection Test dual current monitoring (Motor drivers) Check receiver amplitude (Ultrasonics) Set receiver gain (Ultrasonics) Determine if we can transmit and receive simultaneously (Ultrasonics) Test Inst Amp (Ultrasonics)</div>			
B						
C						
D						
	1	2	3	4	5	6

Title		
Size B	Number	Revision
Date:	8/19/2015	Sheet of
File:	C:\Users\...\Project Overview.SchDoe	Drawn By: