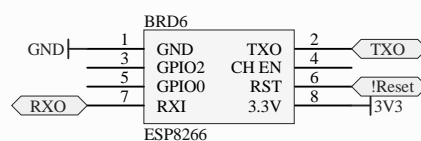
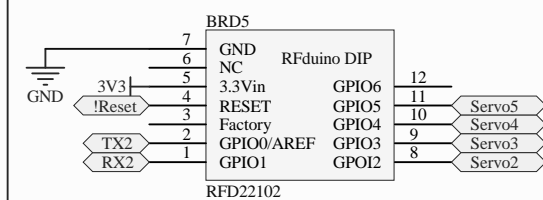
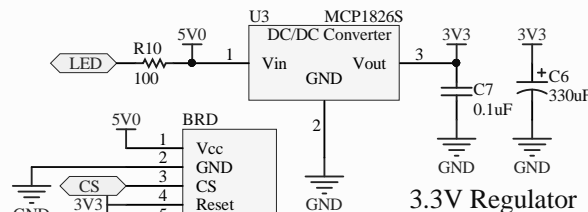
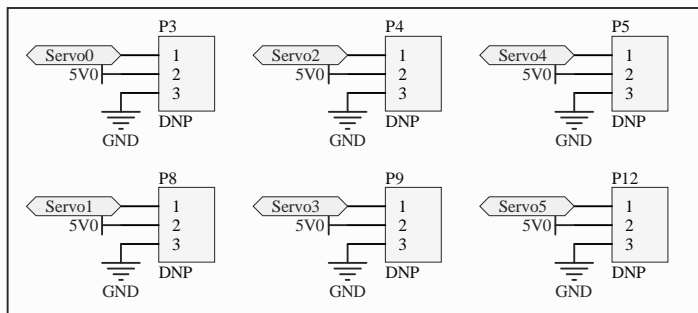


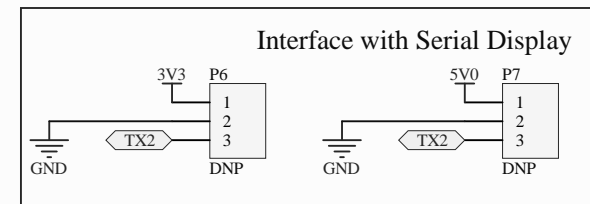
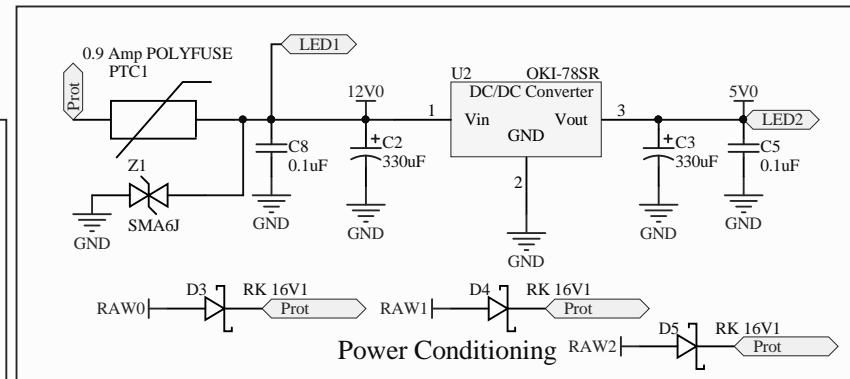
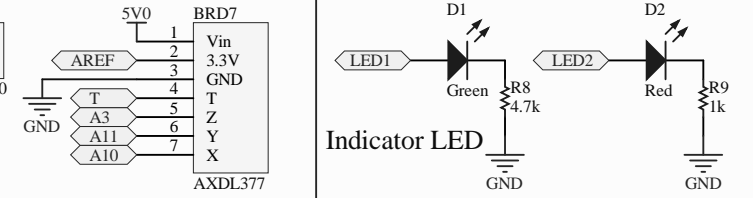
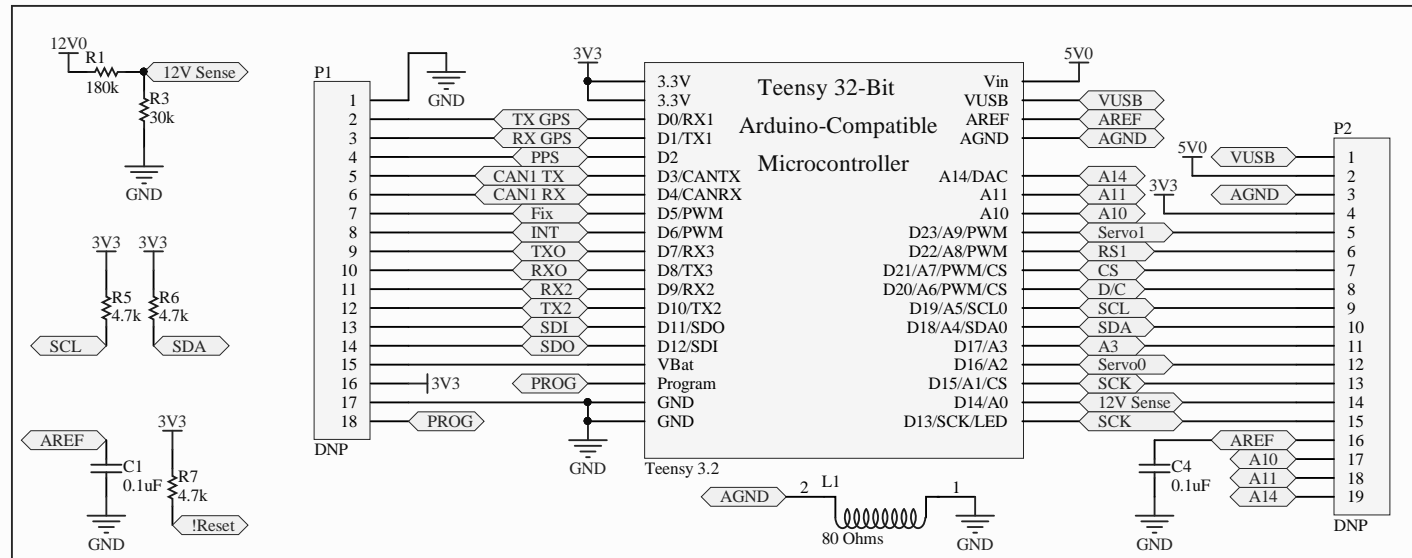
### Sensor Breakout Boards



### Wireless Breakout Boards



DISPLAY IL19341



Title: **Microcontroller with Sensors for Servos**

Project: Teensy Troller.PrjPcb

Size: Letter

Rev: 1

Date: 4/20/2016

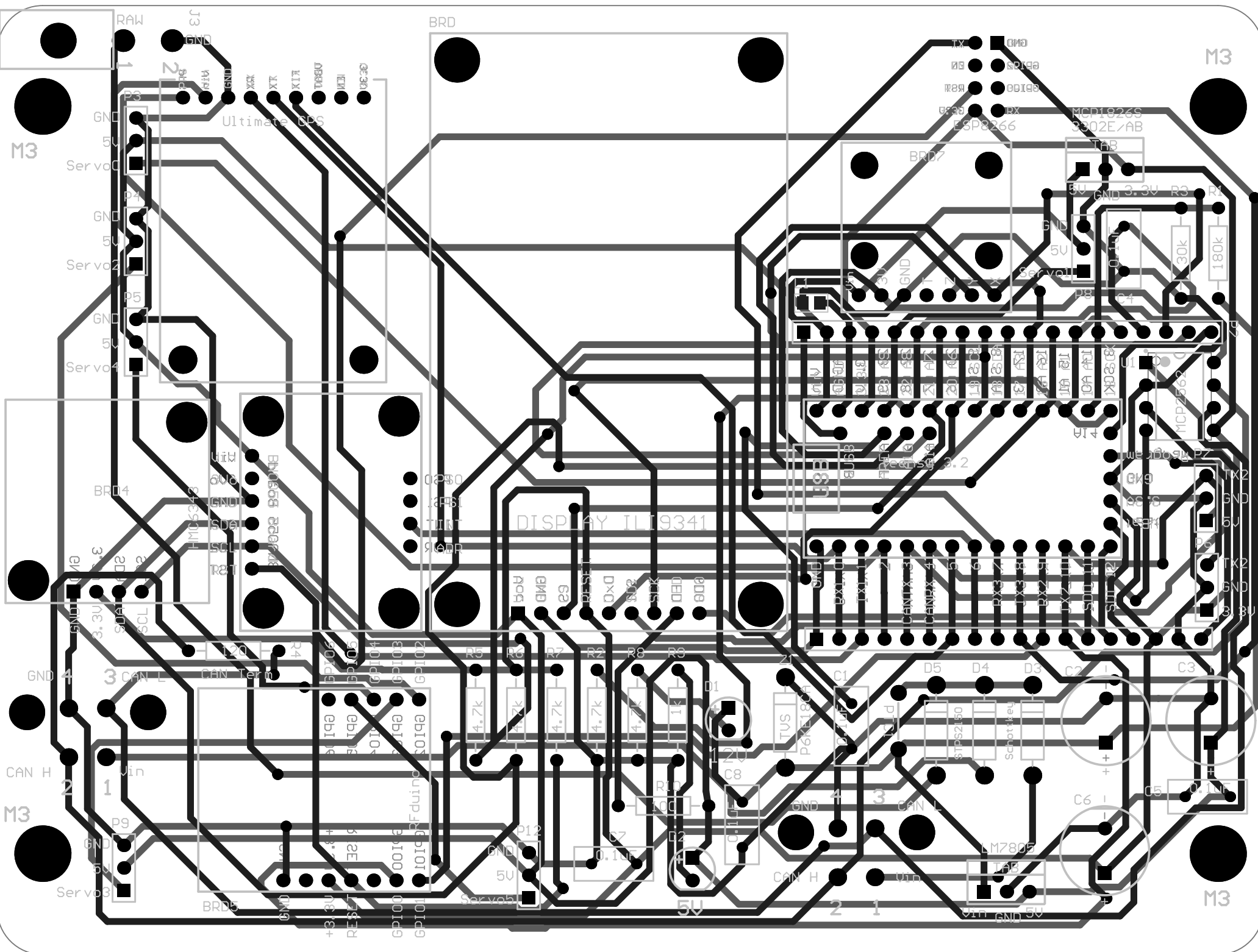
Time: 10:12:28 AM

Sheet 1 of 1

File: C:\Users\jeremy-daily\UTULSA\Dropbox (JHSI)\Research\Teensy Trolling Hardware\Teensy Troller.SchDoc

Prof. Jeremy Daily  
The University of Tulsa  
Mechanical Engineering  
800 S. Tucker Dr  
Tulsa, OK 74104





Comment	Description	Designator	Footprint	LibRef	Quantity
DISPLAY ILI9341	Color 320x240 Display, 2.2 inch, ILI9341 Controller <a href="https://www.pjrc.com/store/display_ili9341.html">https://www.pjrc.com/store/display_ili9341.html</a>	BRD	Display ILI9341	Display	1
Teensy 3.2	32 Bit Arduino- Compatible Microcontroller	BRD1	Teensy	Teensy	1
Adafruit Ultimate GPS	Adafruit Ultimate GPS	BRD2	GPS	GPS - Adafruit	1
BNO055 IMU	Adafruit BNO055 Sensor Breakout Board	BRD3	BNO055 Board	BNO055 Board	1
HMC6343 Compass	SparkFun HMC6343 Breakout SEN-12916	BRD4	HMC6343	HMC6343	1
RFD22102	Bluetooth / 802.15.1 Development Tools RFduino BLE 4.0 DIP (Arduino-Compatible)	BRD5	Simblee RFduino Adapter	Simblee Adapter	1
ESP8266	Sparkfun ESP8266 Module (WRL-13678)	BRD6	ESP8266	ESP8266	1
AXDL377	Adafruit ADXL377 - High-G Triple-Axis Accelerometer (+/-200g Analog Out)	BRD7	AXDL377 Breakout	AXDL377 Breakout	1
0.1uF	CAP CER 0.1UF 50V 10% X7R 0603	C1, C4, C5, C7, C8	RAD-0.2	Cap	5
330uF	CAP ALUM 330UF 20% 50V RADIAL	C2, C3, C6	Elec. Cap 5 x 10mm	SMD Elec	3
Green	LED GREEN DIFFUSED 0805 SMD	D1	5mm Rad LED	LED - Green	1
Red	LED RED DIFFUSED 0805 SMD	D2	5mm Rad LED	LED - SMD	1
RK 16V1	DIODE SCHOTTKY 60V 2A AXIAL	D3, D4, D5	DIODE-0.4	Schottky Diode	3
4 Pos Mini-Fit Jr.	CONN HEADER 4POS 4.2MM VERT TIN	J1, J2	4 POS Vertical MINI-FIT JR	4 Pos Header Vert	2
39-30-1020		J3	2 pos Mini-Fit Jr. R/A Header	2 Pos Header	1
80 Ohms	Ferrite Bead 80ohms 100MHz 5A Monolithic 0805 SMD	L1	0805	Ferrite Bead	1
DNP	Header, 18-Pin	P1	HDR1X18	Header 18	1
DNP	Header, 19-Pin	P2	HDR1X19	Header 19	1
DNP	Header, 3-Pin	P3, P4, P5, P6, P7, P8, P9, P12	HDR1X3	Header 3	8
0.9 Amp POLYFUSE	Resettable Fuses - PPTC 60V POLYFUSE .900A RADIAL LEADS	PTC1	PTC	PTC	1
180k	RES SMD 1K OHM 1% 1/10W 0603	R1	Axial-0.4	Chip Resistor	1
4.7k	RES SMD 4.7K OHM 1% 1/8W 0805, RES SMD 4.7K OHM 1% 1/8W 0805, RES SMD 4.7K OHM 1% 1/8W 0805, RES SMD 4.7K OHM 1% 1/8W 0805, RES SMD 1K OHM 1% 1/10W 0603	R2, R5, R6, R7, R8	Axial-0.4	Chip Resistor	5
30k	RES SMD 1K OHM 1% 1/10W 0603	R3	Axial-0.4	Chip Resistor	1
120	RES SMD 1K OHM 1% 1/10W 0603	R4	Axial-0.4	Chip Resistor	1
1k	RES SMD 1K OHM 1% 1/10W 0603	R9	Axial-0.4	Chip Resistor	1
100	RES SMD 1K OHM 1% 1/10W 0603	R10	Axial-0.4	Chip Resistor	1
MCP2562	High-Speed CAN Transceiver, 8-Pin PDIP, Industrial Temperature	U1	PDIP300-P8	MCP2551-I/P	1
OKI-78SR	5V DC/DC Converter (7805 replacement)	U2	78xx	7805	1
MCP1826S	LDO Voltage Regulators 1A CMOS LDO Vout 3.3V ETR	U3	78xx	7805	1
SMA6J	TVS DIODE 15VWM 24.4	Z1	DIODE-0.4	Zener - Bidirectional	1