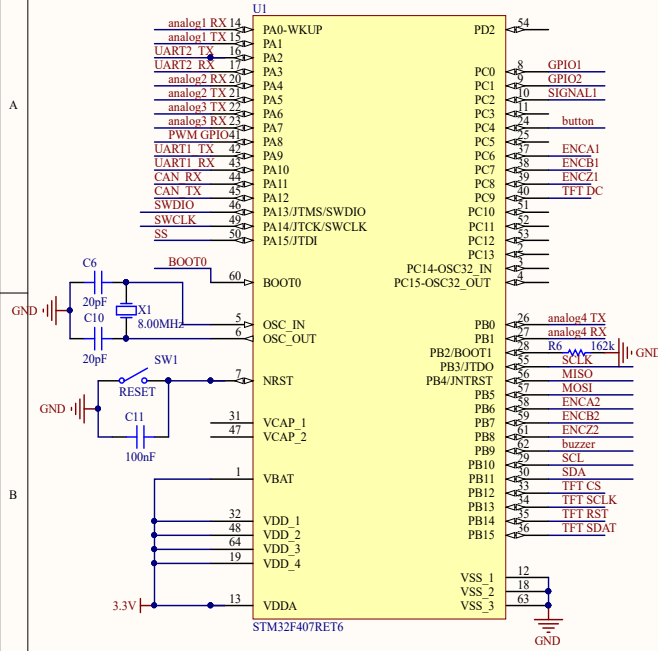
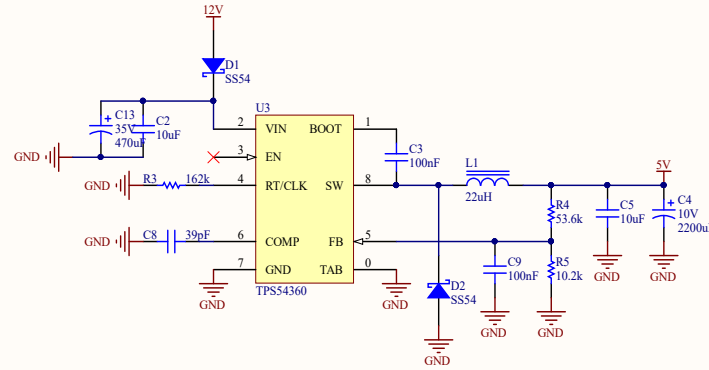


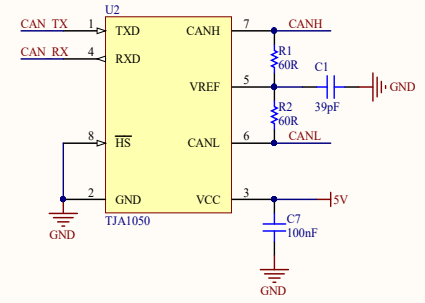
# MCU



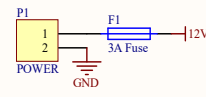
# 12 to 5V REGULATOR



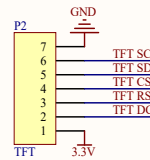
# CAN



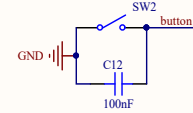
# POWER



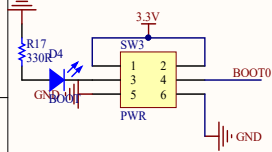
# TFT



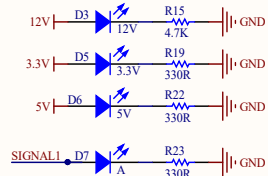
# Button



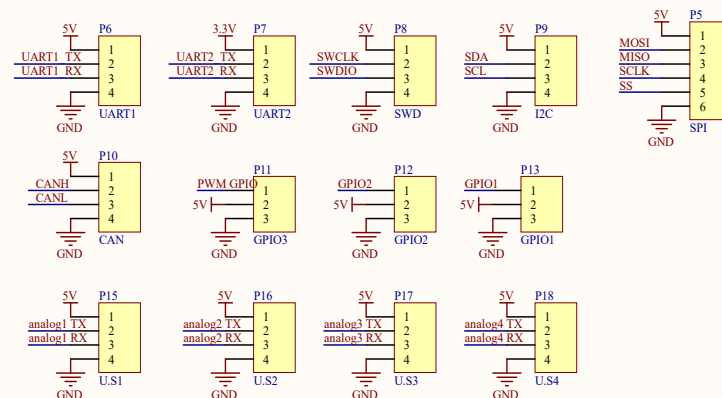
# BOOT



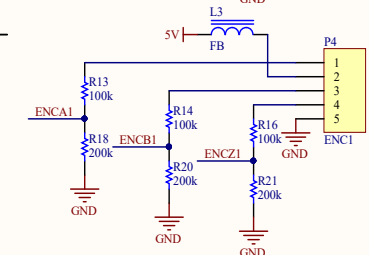
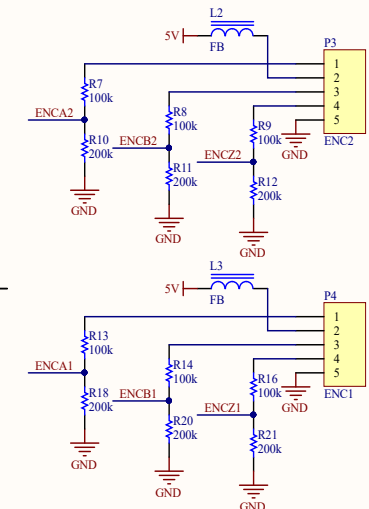
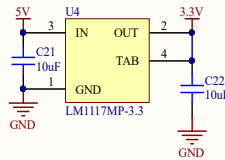
# INDICATORS



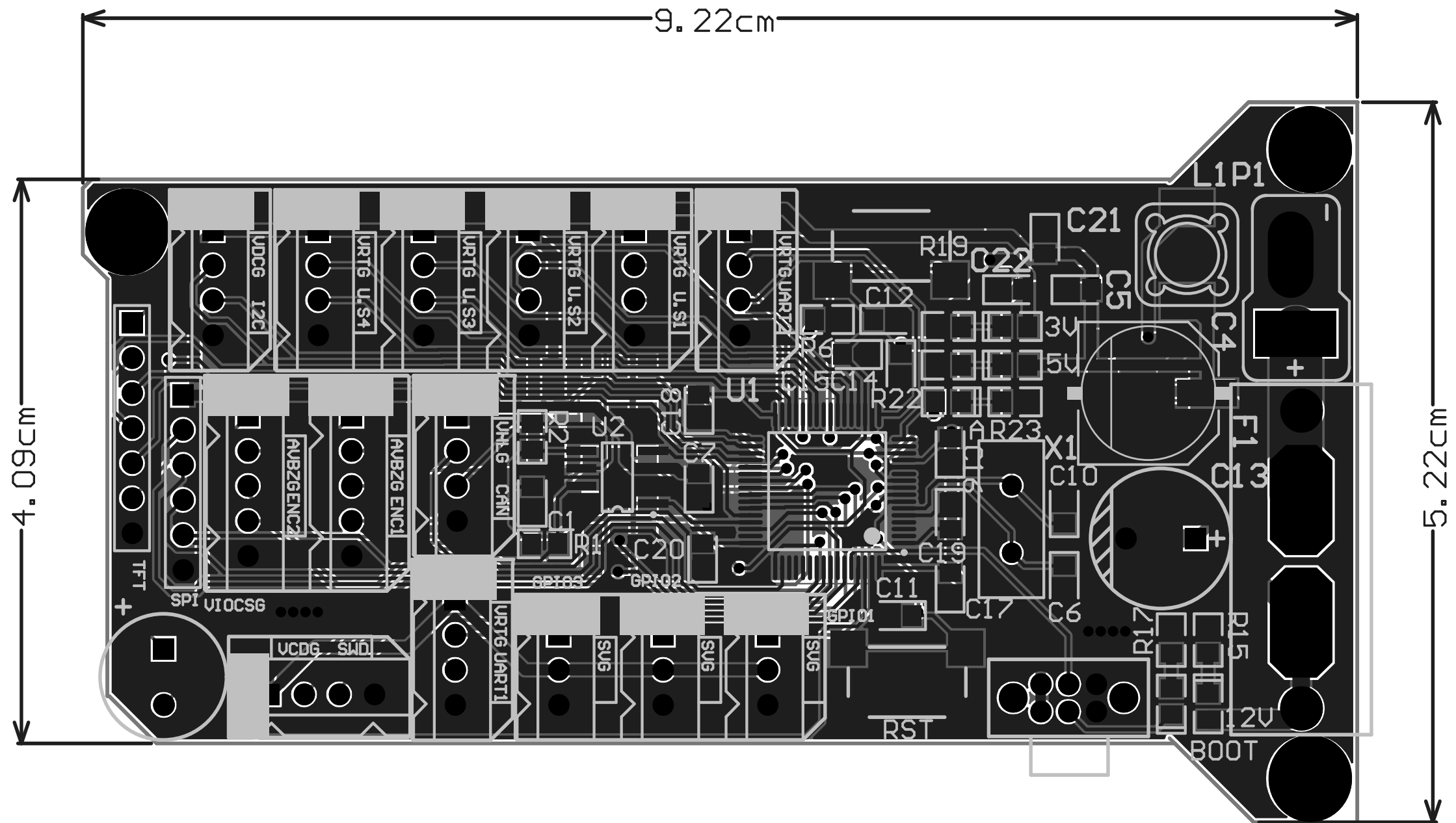
# PORTS



# REGULATOR



Title				ECO Main Board V1.0			
Size		Number			Revision		
A3					GORE		
Date:		11/4/2016		Sheet of		10	
File:		H:\ECO_Main_boardV1.0..ECO_Main_boardV1.0_SchDoc					



Comment	Description	Designator	Footprint	LibRef	Quantity
39pF	Capacitor (Semiconductor SIM Model)	C1, C8	CC2012-0805	Cap Semi	2
10uF	Capacitor (Semiconductor SIM Model)	C2, C5, C21, C22	CC2012-0805	Cap Semi	4
100nF	Capacitor (Semiconductor SIM Model)	C3, C7, C9, C11, C12, C15, C16, C17, C18, C19, C20	CC2012-0805	Cap Semi	11
2200uF	Polarized Capacitor (Axial)	C4	SV-G	Cap Pol SMD	1
20pF	Capacitor (Semiconductor SIM Model)	C6, C10	CC2012-0805	Cap Semi	2
470uF	Polarized Capacitor (Radial)	C13	CAP10x12	Cap Pol DIP	1
2.2uF	Capacitor (Semiconductor SIM Model)	C14	CC2012-0805	Cap Semi	1
SS54	Schottky Diode	D1, D2	SMA	D Schottky	2
12V	Typical RED GaAs LED	D3	D0805	LED	1
BOOT	Typical RED GaAs LED	D4	D0805	LED	1
3.3V	Typical RED GaAs LED	D5	D0805	LED	1
5V	Typical RED GaAs LED	D6	D0805	LED	1
A	Typical RED GaAs LED	D7	D0805	LED	1
3A Fuse	Fuse	F1	FUSE SOCKET	Fuse	1
22uH	Inductor	L1	CDRH74	Inductor	1
FB	Inductor	L2, L3	CL3225-1210	Inductor	2
POWER	Header, 2-Pin	P1	T-CONNECTOR(M)	Header 2	1
TFT	Header, 6-Pin	P2	HDR1X7	Header 7	1
ENC2	Header, 5-Pin	P3	lockedHDR-5	Header 5	1
ENC1	Header, 5-Pin	P4	lockedHDR-5	Header 5	1
SPI	Header, 6-Pin	P5	HDR1X6	Header 6	1
UART1	Header, 4-Pin	P6	LOCKEDHDR-4	Header 4	1
UART2	Header, 4-Pin	P7	LOCKEDHDR-4	Header 4	1
SWD	Header, 4-Pin	P8	LOCKEDHDR-4	Header 4	1
I2C	Header, 4-Pin	P9	LOCKEDHDR-4	Header 4	1
CAN	Header, 4-Pin	P10	LOCKEDHDR-4	Header 4	1
GPIO3	Header, 3-Pin	P11	LOCKEDHDR-3	Header 3	1
GPIO2	Header, 3-Pin	P12	LOCKEDHDR-3	Header 3	1
GPIO1	Header, 3-Pin	P13	LOCKEDHDR-3	Header 3	1
Buzzer		P14	BUZ-9.0	Buzzer	1
U.S1	Header, 4-Pin	P15	LOCKEDHDR-4	Header 4	1
U.S2	Header, 4-Pin	P16	LOCKEDHDR-4	Header 4	1
U.S3	Header, 4-Pin	P17	LOCKEDHDR-4	Header 4	1
U.S4	Header, 4-Pin	P18	LOCKEDHDR-4	Header 4	1
BC847B	NPN	Q1	SOT-23	BC847B	1
60R	Semiconductor Resistor	R1, R2	CR2012-0805	Res Semi	2
162k	Semiconductor Resistor	R3, R6	CR2012-0805	Res Semi	2
53.6k	Semiconductor Resistor	R4	CR2012-0805	Res Semi	1
10.2k	Semiconductor Resistor	R5	CR2012-0805	Res Semi	1
100k	Semiconductor Resistor	R7, R8, R9, R13, R14, R16	CR2012-0805	Res Semi	6
200k	Semiconductor Resistor	R10, R11, R12, R18, R20, R21	CR2012-0805	Res Semi	6
4.7K	Semiconductor Resistor	R15	CR2012-0805	Res Semi	1
330R	Semiconductor Resistor	R17, R19, R22, R23	CR2012-0805	Res Semi	4
33R	Semiconductor Resistor	R24	CR2012-0805	Res Semi	1
10k	Semiconductor Resistor	R25	CR2012-0805	Res Semi	1
RESET	Single-Pole, Single-Throw Switch	SW1	PUSH SWITCH	SW-SPST	1
	Single-Pole, Single-Throw Switch	SW2	PUSH SWITCH	SW-SPST	1
PWR	Header, 3-Pin, Dual row	SW3	POWER SWITCH	Header 3X2	1
STM32F407RET6	STM32 ARM-based 32-bit MCU with 64 Kbytes Flash, 100-pin LQFP, Industrial Temperature	U1	LQFP64_N	STM32F407RET6	1
TJA1050	5V to 12V Charge Pump	U2	SOP-8	TJA1050	1
TPS54360	60 V, 3.5 A , Step Down DC-DC Converter with Eco-Mode	U3	PDSO-8	TPS54360	1
LM1117MP-3.3	800mA Low-Dropout Linear Regulator	U4	MP04A_N	LM1117MP-3.3	1
8.00MHz	Crystal Oscillator	X1	BCY-W2/E4.7	XTAL	1