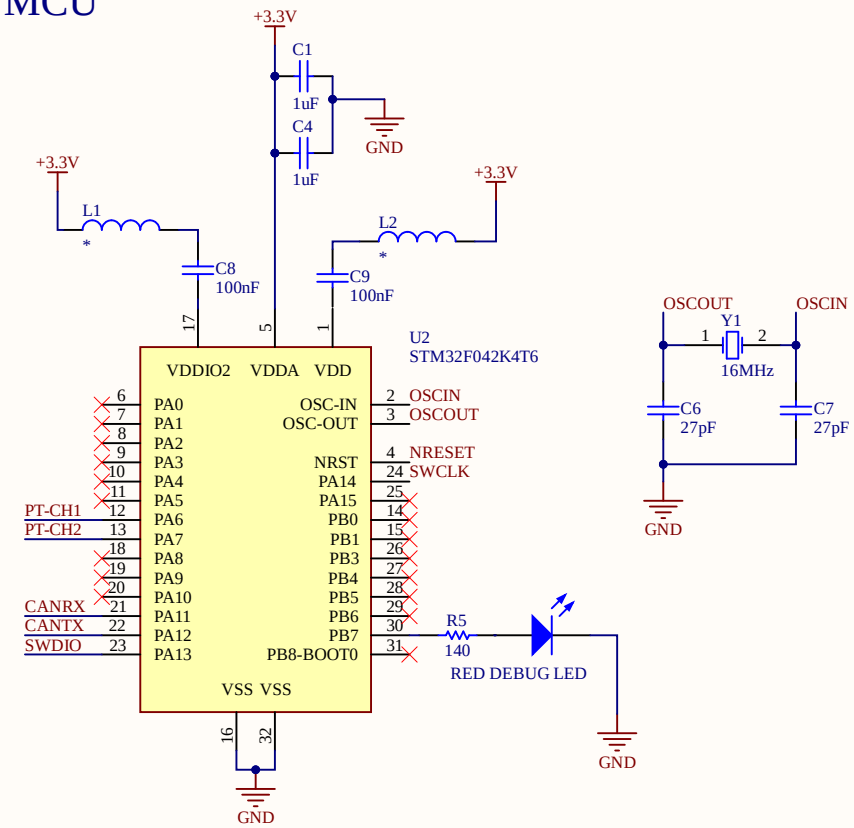
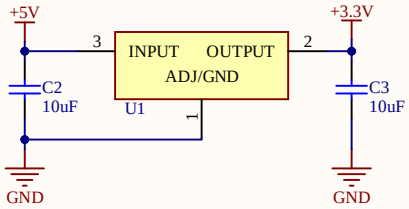
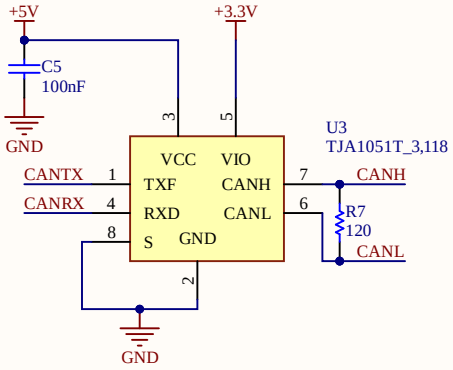
MCU

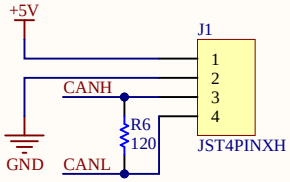


LDO (5V->3.3V)

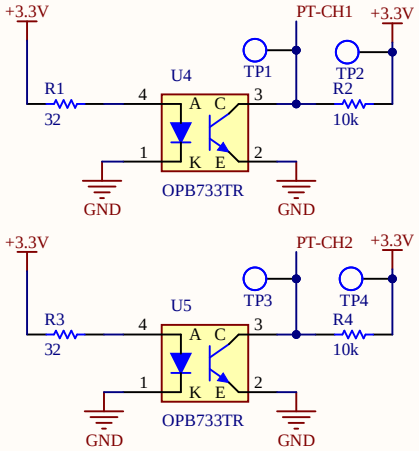


CAN Transceiver

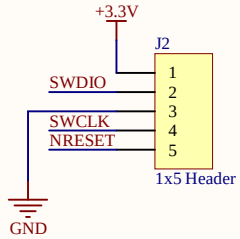




Phototransistor



Connector



Title:	***Yamper: Optical Ring Encoder Board***	
Size: A4	Author: Allen Zhang and Jennifer Chen	
Date: 2021-06-16	Revision: 01	Sheet 1 of 1
File: Yamper.SchDoc		

WATERLOOP

Comment	Description	Designator	Footprint	LibRef	Quantity
Capacitor - Nonpolarized	Nonpolarized Capacitor	C1, C2, C3, C4, C5, C6, C7, C8, C9	0603 - Capacitor	Capacitor - Nonpolarized	9
JST4PINXH	1x4 Pin Header	J1	HDR1X4	1x4 Header	1
1x5 Header	1x5 Pin Header	J2	HDR1X5	1x5 Header	1
Inductor	Inductor	L1, L2	MSS1210 - INDUCTOR	Inductor	2
Resistor	Resistor	R1, R2, R3, R4, R5, R6, R7	0603 - Resistor	Resistor	7
LED	Light Emitting Diode	RED DEBUG LED		LED	1
TLV1117-33IDCYR	Linear Voltage Regulator IC 3.3V 800MA SOT223-4	U1	TLV1117	TLV1117-33IDCYR	1
STM32F042K4T6	Microcontroller	U2	QFP80P900X900X160-32N	STM32F042K4T6	1
TJA1051T_3,118	CAN Transceiver IC 4.5V-5.5V 250ns	U3	TJA1051T/3,118	TJA1051T_3,118	1
OPB733TR	Phototransistor	U4, U5		OPB733TR	2
Oscillator	Crystal Oscillator	Y1	2-SMD NO LEAD CRSYSTAL	Oscillator	1