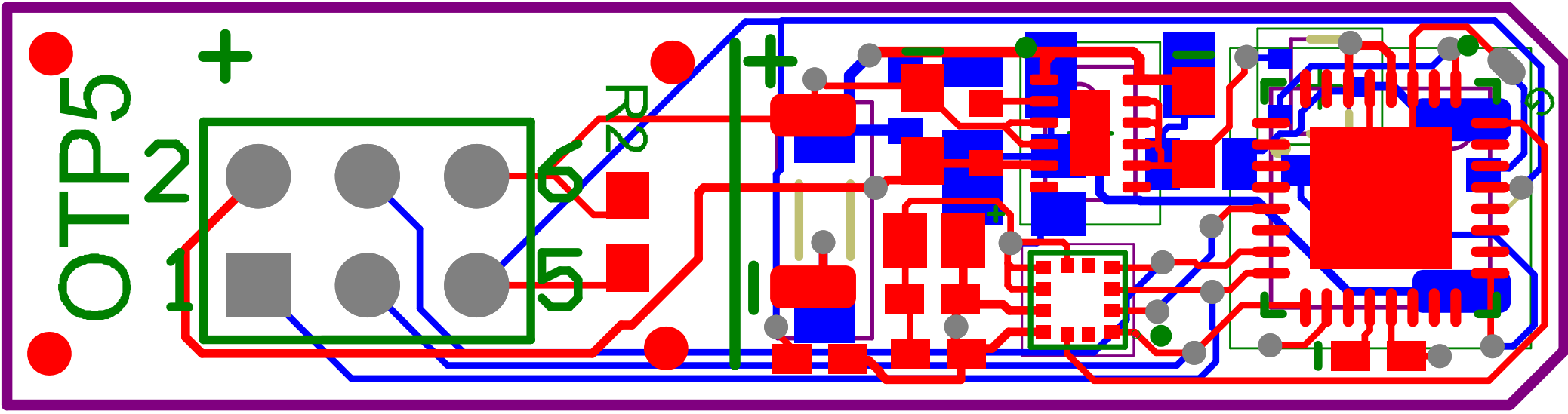


177 kHz piezo has 6850 pF capacitance.  
Use 127 uH inductor

Title OTP5: OpenTag Ping			
Size Letter	Number Loggerhead Instruments		Revision 1.0
Date:	12/10/2022		Sheet of 1
File:	C:\w\OTP\Altium\OTP5\OTP5.SchDoc		Drawn By: D. Mann



Comment	Description	Designator	Footprint	LibRef	Quantity
C0603	Ceramic Chip Capacitor - Standard	C1, C2	0603	C0603	2
0.1uF	Ceramic Chip Capacitor - Standard	C3	0402	C0402	1
100nF	Ceramic Chip Capacitor - Standard	C4, C6	0402	C0402	2
10uF		C5	Tant0805	Tant0805	1
47uF		C7	Tant0805	Tant0805	1
LED_0603		D1	Diode0603	LED_0603	1
Shottky		D3	DFLS130	DFLS130	1
100uH		L1	Inductor_NLV32T	Inductor_NLV32T	1
2.2uH		L2	Inductor KLZ1608AHR	Inductor KLZ1608	1
47uH		L3	Inductor KLZ1608AHR	Inductor KLZ1608	1
27uH		L4	Inductor MLZ2012M220WT000	Inductor MLZ2012M220WT000	1
PIEZO		P1, P2	PIEZO	PIEZO	2
AVR SPI	Header, 3-Pin, Dual row	P3	HDR2X3	Header 3X2	1
PMF250XN,115	N-Channel Trench MOSFET, 30 V, 0.9 A, -55 to 150 degC, 3-Pin SOT323, Tape and Reel	Q1	NXP-SOT323_N	PMF250XN,115	1
10k	Precision Thick Film Chip Resistor, 10 Ohm to 1M Ohm Range, 1% and 0.5% Tolerance, 0402 Size, 0.063 W	R1	2-0402	ERJ2RB	1
omit	Precision Thick Film Chip Resistor, 10 Ohm to 1M Ohm Range, 1% and 0.5% Tolerance, 0603 Size, 0.063 W	R2	3-0603	ERJ3RK	1
330	Precision Thick Film Chip Resistor, 10 Ohm to 1M Ohm Range, 1% and 0.5% Tolerance, 0402 Size, 0.063 W	R3	2-0402	ERJ2RB	1
Reed_MK24		S1	Reed MK24-B-3	Reed_MK24	1
ATmega8-16AC	8-Bit AVR Microcontroller with 8K Bytes of In-System Programmable Flash Memory	U1	32M1-A_M	ATmega8-16AC	1
TPS62740		U2	TPS6274x	TPS6274x	1
LIS2DS12		U3	LGA-12	LIS2DS12	1