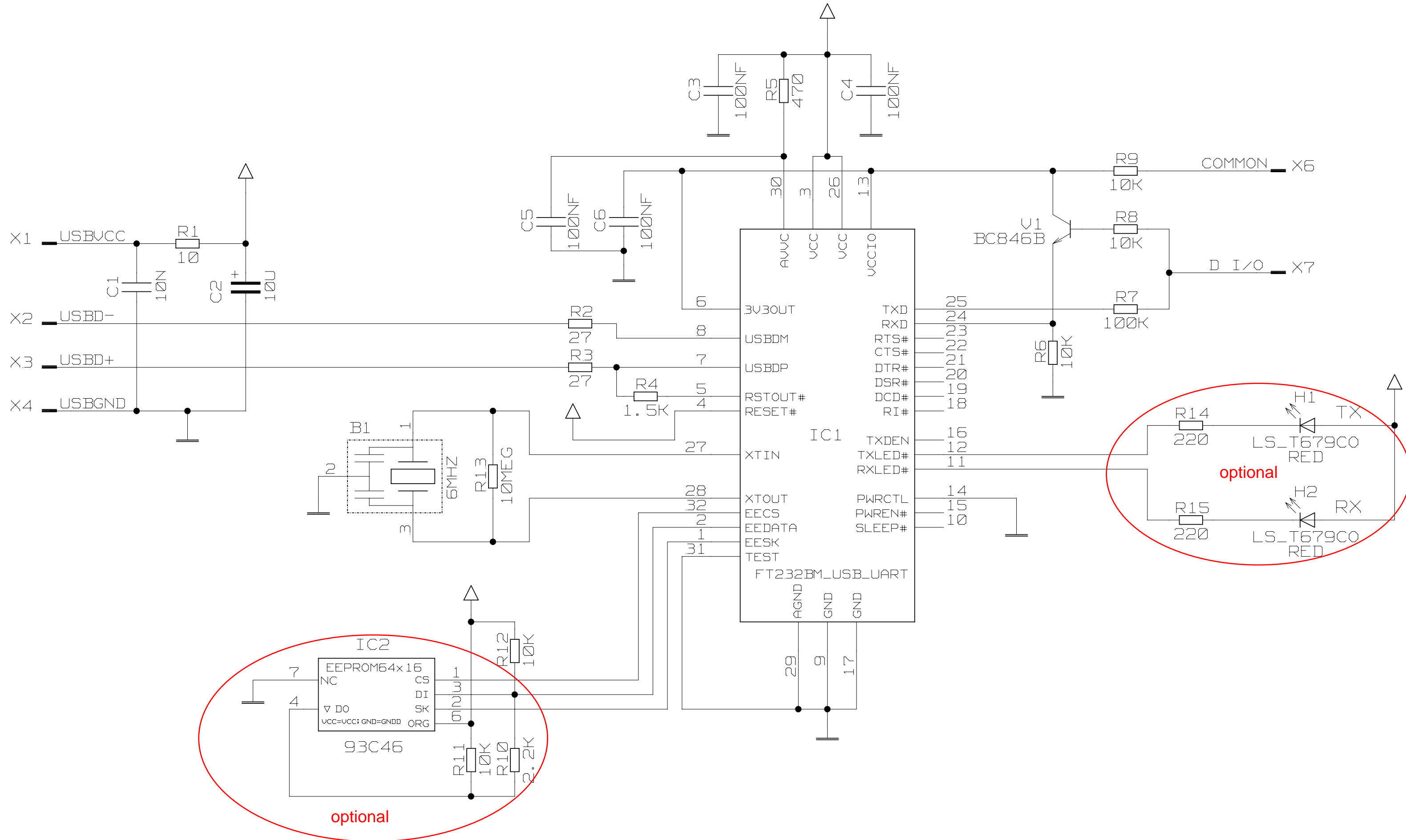
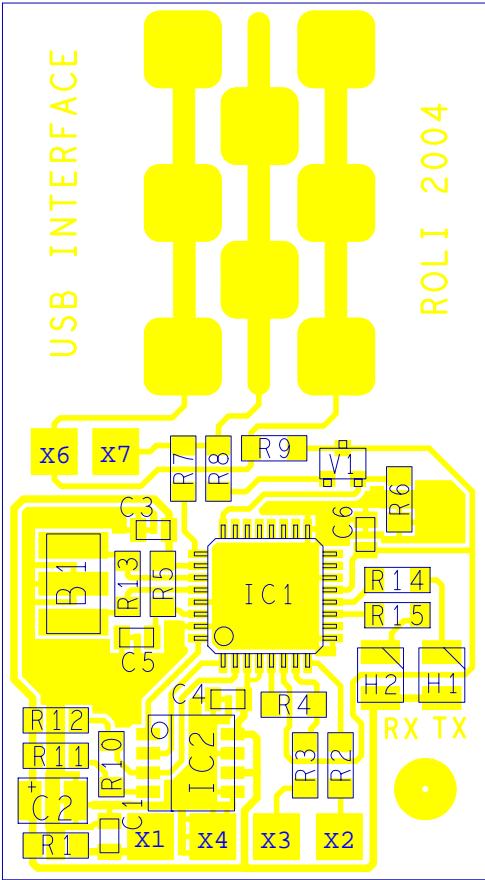


USB Interface

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USB Interface, assembly



4:1 Scale

USB Interface, bill of materials

Ref.	Value	Remark
<i>Resistors, size 0207 (MiniMelf), metal film, 1%, 0.25W</i>		
R1	10R	
R2	27R	
R3	27R	
R4	1.5k	
R5	470R	
R6	10k	
R7	100k	
R8	10k	
R9	10k	
R10	2.2k	optional
R11	10k	optional
R12	10k	use R12 if R10 and R11 are omitted
R13	10M	
R14	220R	optional
R15	220R	optional
<i>Capacitors, size 0805, ceramic multilayer, X7R, 10%</i>		
C1	10n	
C2	100n	
C3	100n	
C4	100n	
C5	100n	
C6	100n	
<i>Capacitor, size "A" (3.2mm x 1.6mm) Tantalum electrolytic, 20%, 6.3V</i>		
C2	10u	
<i>Ceramic resonator, 3-pin, integrated C's, size 7.5mm x 3.5mm</i>		
B1	6MHz	
<i>Transistor npn, SOT23</i>		
V1	BC846B	
<i>LED, PLCC2 package</i>		
H1	red	optional
H2	red	optional
<i>Integrated circuit, USB-UART bridge, QFP32 package</i>		
IC1	FT232BM	see www.ftdichip.com
<i>Integrated circuit, EEPROM, I2C interface, SO-8 package</i>		
IC2	93C46	optional