## Lab 5 Part 2

Treble and Bass: Part 2 Layout and Gerber and NC Drill Files

**Brodric Young** 

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ECEN 299

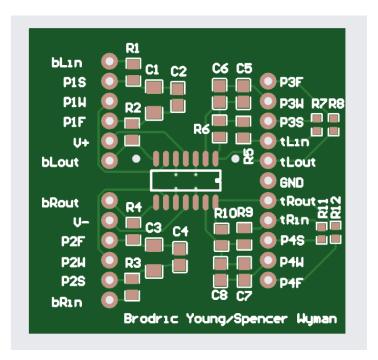


Figure 1, Top Side

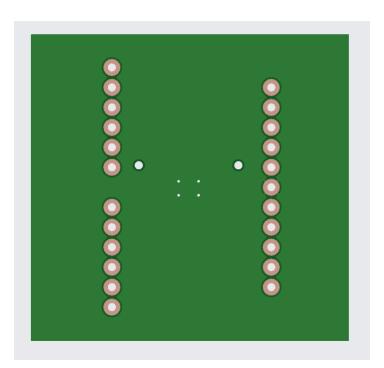


Figure 2, Bottom Side

op Side Total 6	,	6 Parts confirmed						nplete File ∨	♣ Upload BOM/0
Uploaded BOM Data			Review Matched Parts						
Top Designator	Comment	Footprint	Matched Part Detail		Qty	Source	Lib Type	Total Cost	✓ Select ∅
C1,C3	GRM31M5C	C1206	GRM31M5C1H473JA01L C21812 50V 47nF C0G ±5% 1206 Multilayer Ceramic	Q	12	JLCPCB	Extended	\$1.2864 ②	
C2,C4,C6,C8	0805B332K5	C0805	0805B332K500NT C1738 50V 3.3nF X7R ±10% 0805 Multilayer Ceram	Q	30	JLCPCB	Extended	\$0.1710 🕜	
C5,C7	0805B333K5	C0805	0805B333K500NT C1739 50V 33nF X7R ±10% 0805 Multilayer Cerami	Q	10	JLCPCB	Basic	\$0.0740 💮	
R1,R2,R3,R4,R5,R	ARG05FTC40	R0805	ARG05FTC4001N C2828855 125mW Thin Film Resistor 150V ±25ppm/°C	Q	50	JLCPCB	Extended	\$0.3900 ②	<b>▽</b>
R7,R8,R11,R12	0603WAF82	R0603	0603WAF8200T5E	Q	20	JLCPCB	Basic	\$0.0200 @	<b>✓</b>
U1	LM324DT	KBS_SO14_w	LM324DT C71035 Quad 20nA 0.4V/us 1.3MHz SOIC-14 Operat	Q	5	JLCPCB	Basic	\$0.4680 @	

Figure 3, Bill of Materials

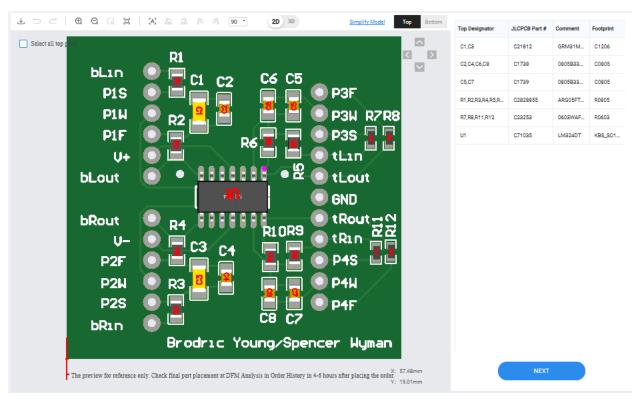


Figure 4, Component Placement Page

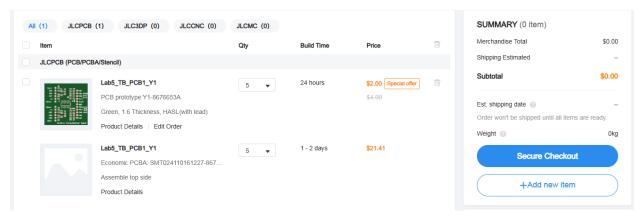


Figure 5, Shopping Cart Page

## Conclusion

This lab went relatively smoothly compared to previous labs. We came up with no errors and had no issues this time. Thanks to the instructions, we were able to move through this lab easily compared to previous labs. With our schematic in place and working how we wanted, creating the PCB layout was simpler. We just had to place all the components, route them together, and adjust the constraints then we could generate files and verify we could upload it to JLC PCB as if we were about to order it. It was relatively simple and thanks to our previous experience and the instructions we were able to handle everything without getting any errors, though it still did take the full class period to complete. I feel much more confident in creating PCB layouts after this lab, especially if I have something to reference for the constraints.