

Date → 24th March 2021

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19BCE0032

Lap no 6

PCB Design of Voltage Regulator

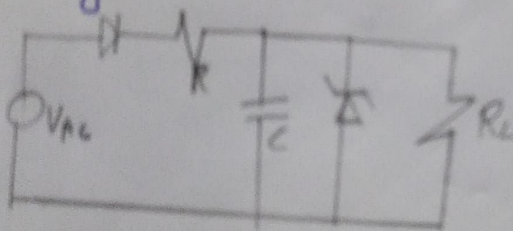
Aim → To design a voltage regulator in DesignSpark 7.0.

Apparatus required →	Quantity	Specification
1) Voltage source (V_{AC})	1	Voltage AC source (B1ac)
2) Diode	1	2N0000 (DesignSpark)
3) Resistor	2	DesignSpark
4) Capacitor	1	DesignSpark
5) Zener diode	1	DesignSpark
6) Ground	1	DesignSpark

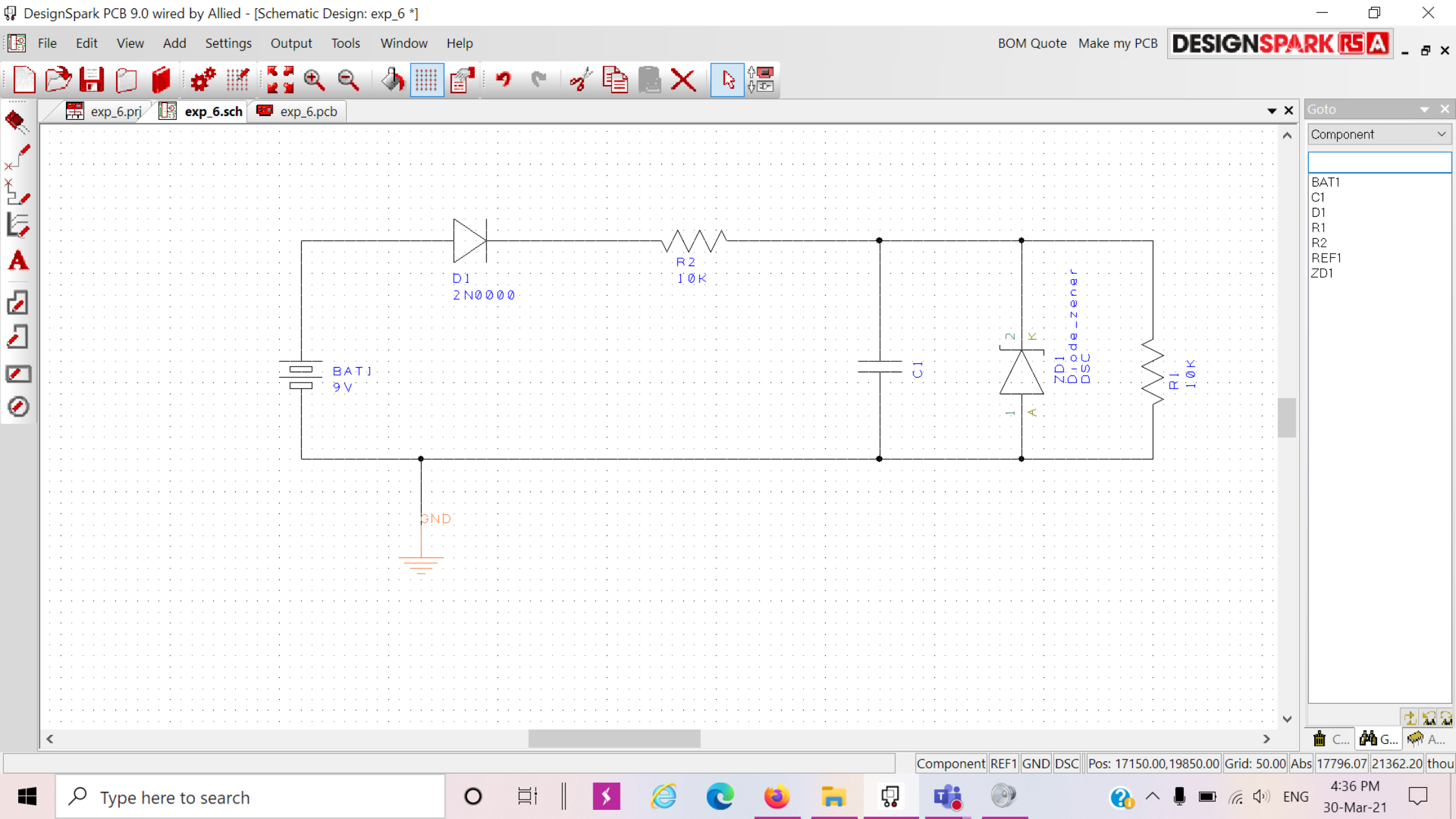
Description → Here, we just design the schematic design.

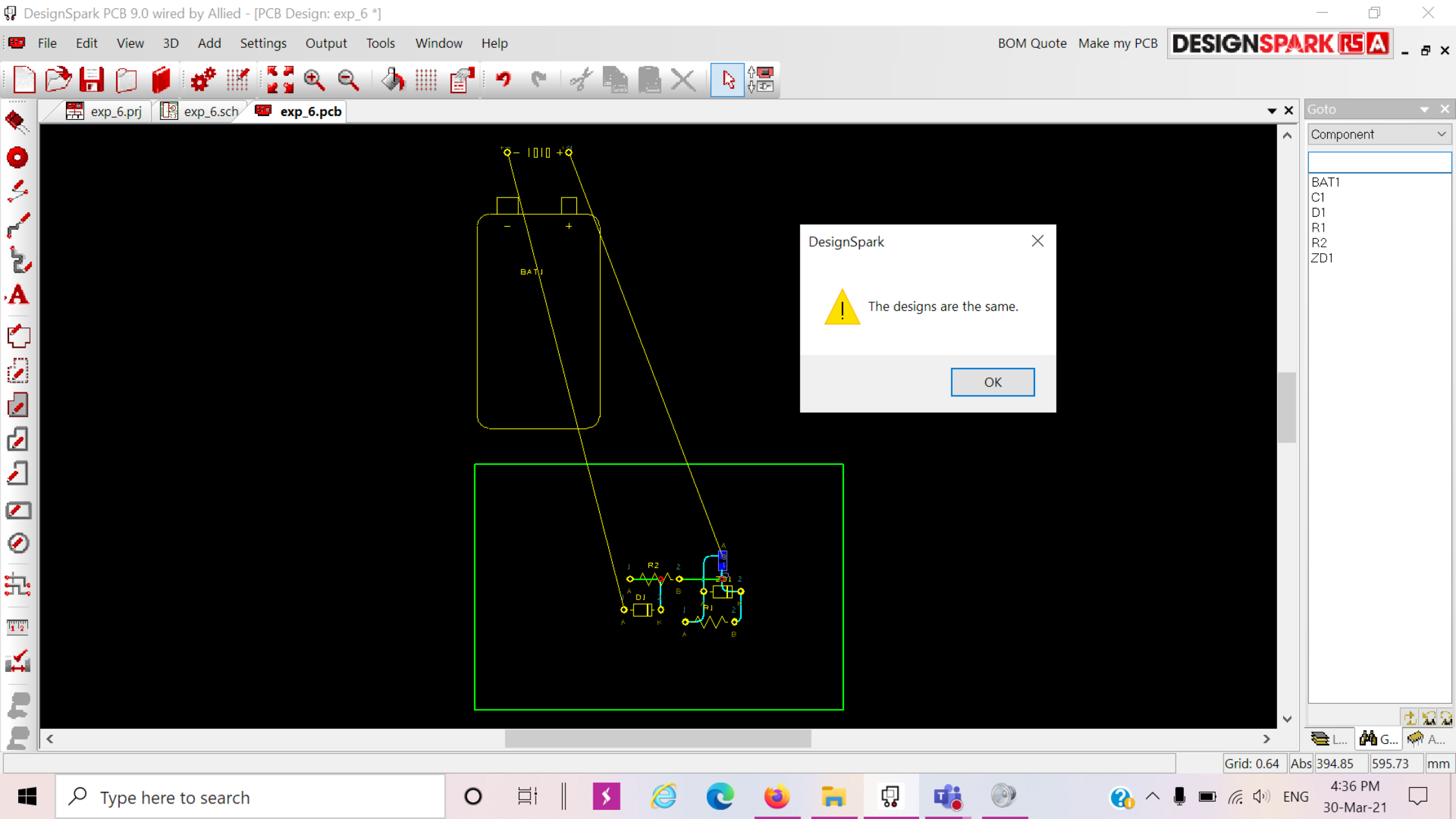
Afterwards we transfer it to PCB. We afterwards place the components using spacing, and finally, do routing.

Schematic design →



Result → Both the design and schematic diagram have been made and verified.





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Styles: Conditional Formatting, Format as Table, Cell Styles

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A1 X ✓ fx Report Written:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
2	Design Path: C:\Users\adima\Desktop\vit\winter semester 2020\automated test lab\exp_6.pcb																		
3	Design Title:																		
4	Created:	#####																	
5	Last Saved	#####																	
6	Editing Time: 26 min																		
7	Units:	mm (precision 2)																	
8																			
9	Bill of Materials generated with DesignSpark PCB - www.DesignSpark.com/pcb																		
10	-----																		
11																			
12																			
13	Ref Name	Qty	Component	Value	Package	Manufacturer	MPN	RS Part Number	Other Part	Description									
14	BAT1	1	Battery	9V	MISC					Battery									
15	C1	1	Capacitor		805					Capacitor									
16	D1	1	Diode	2N0000	DSC					Diode									
17	ZD1	1	Diode_zener	1N5359	DSC					Zener Diode									
18	R1	1	Resistor	10K	DSC					Resistor (USA type)									
19	R2	1	Resistor	10K	DSC					Resistor (USA type)									
20																			
21																			

exp_6 (Bill Of Materials)



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4:37 PM
30-Mar-21

exp_6 (PCB - Design Status Report) - Notepad

File Edit Format View Help

Design Status Report

Report Written: Tuesday, March 30, 2021
Design Path: C:\Users\adima\Desktop\vit\winter se
Design Title:
Created: 30-Mar-21 4:10:27 PM
Last Saved: 30-Mar-21 4:11:01 PM
Editing Time: 27 min
Units: mm (precision 2)

Board Area

exp_6 (PCB - Design Rule Check Report) - Notepad

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Design Rule Check Report

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Error Markers currently in design
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No errors found

End Of Report.

exp_6 (PCB - Dangling Connections Report) - Notepad

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Dangling Connections Report

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Component Heights Report

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Last Saved: 30-Mar-21 4:11:01 PM
Editing Time: 26 min
Units: mm (precision 2)

Name Height Side

C1	-	Bottom
BAT1	-	Top
D1	-	Top
R1	-	Top
R2	-	Top
ZD1	-	Top