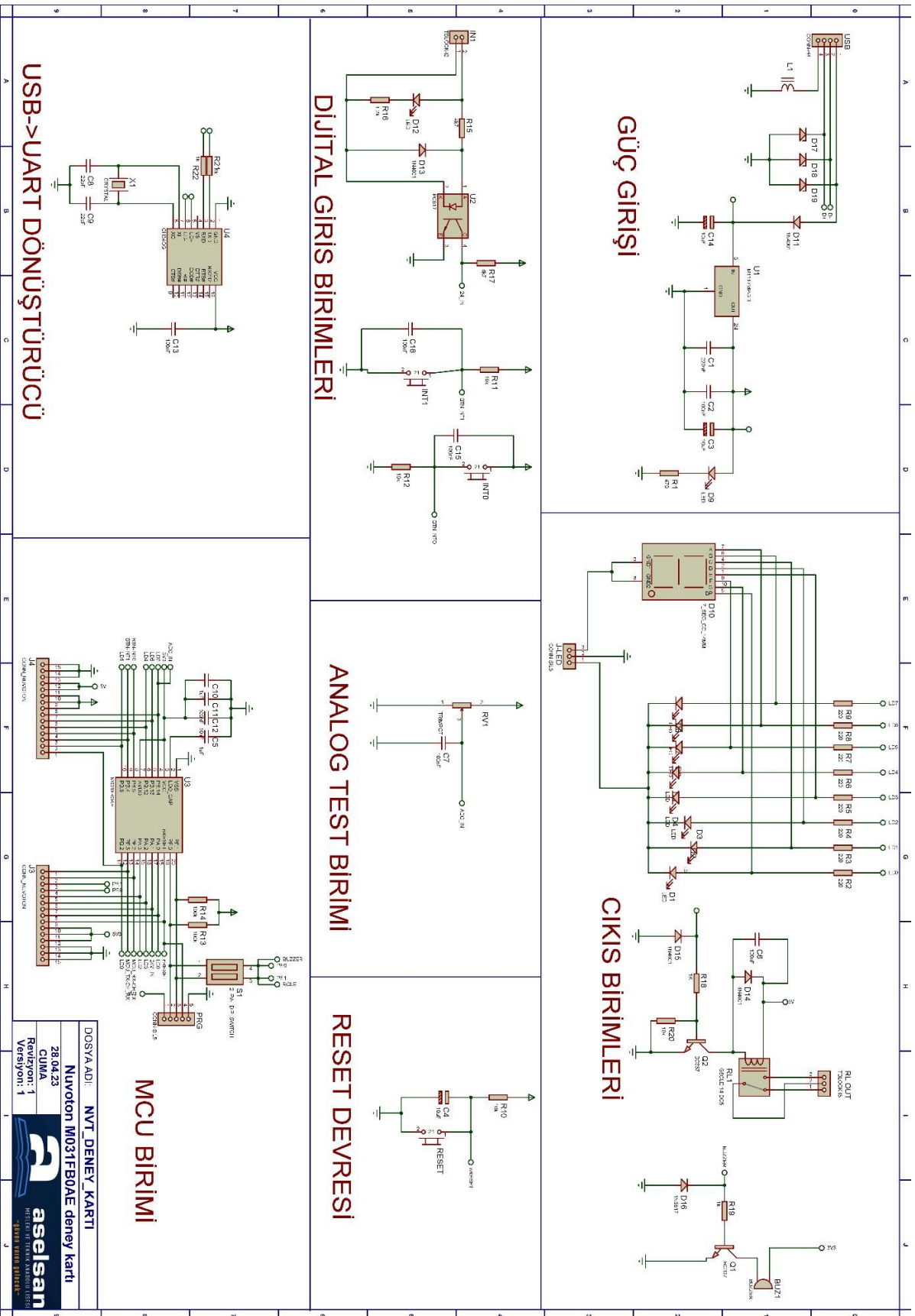




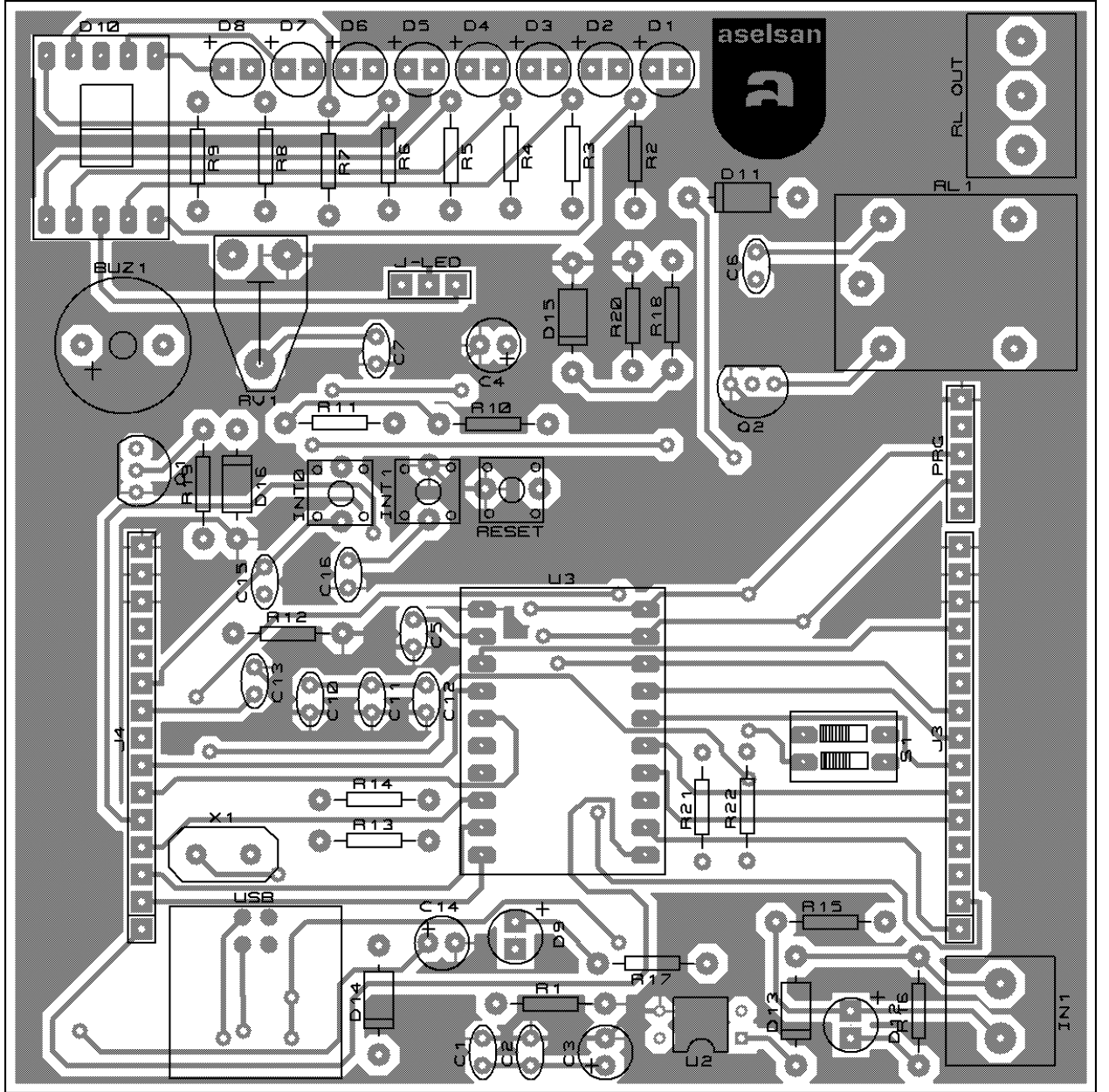
NUVOTON DENEY KARTI  
BİLGİLENDİRME  
DOKÜMANI  
**M031FB0AE**

Bu belge M031B0AE deney kartının  
bilgilendirme dokümanını, kart şemasını ve  
karta ait görüntüler içermektedir.

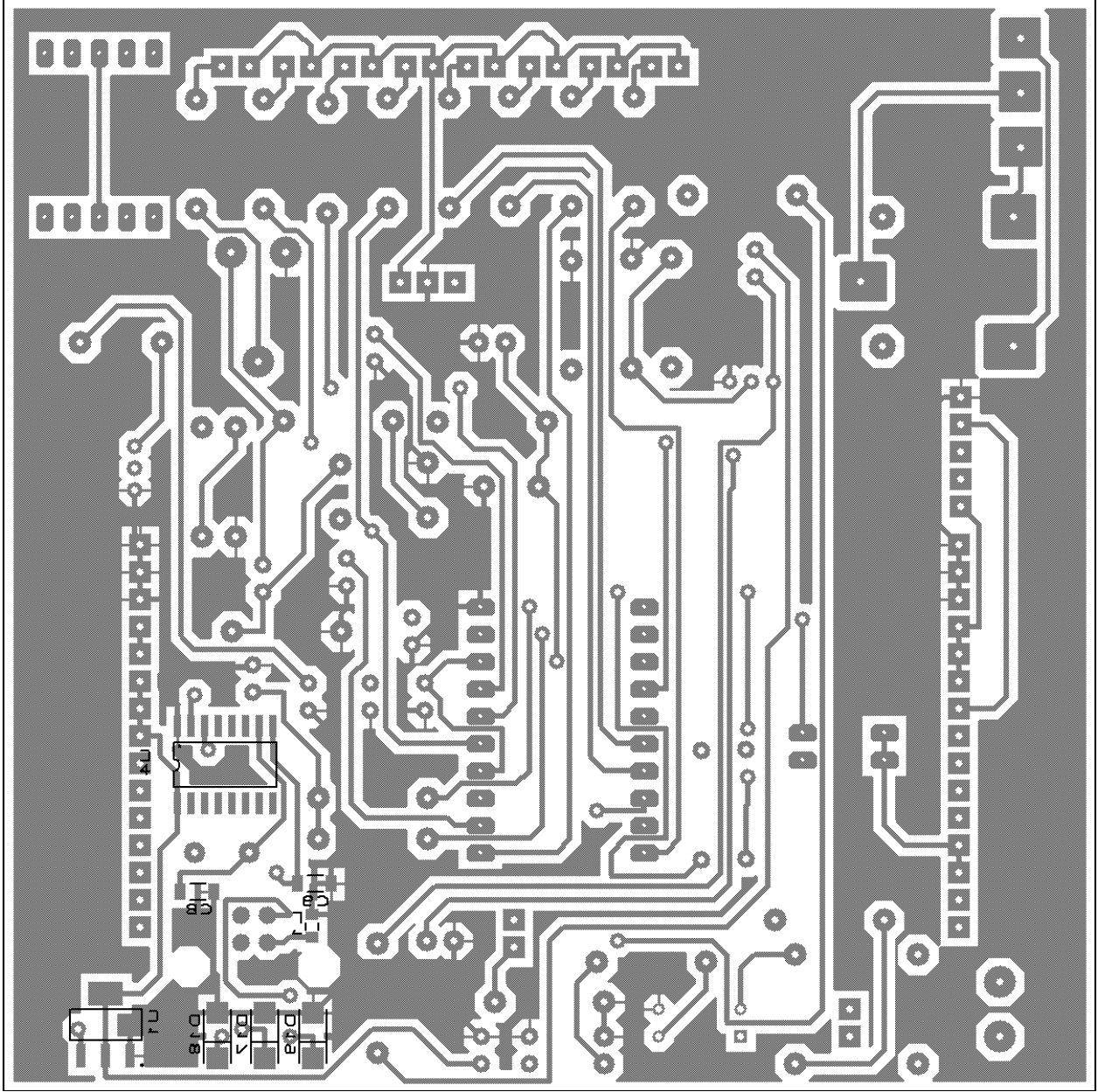
**Tuna Şeşen 11/B 66**







**NUVOTON DENEY KARTININ ÜST KATMAN YERLEŞİM PLANI**



**NUVOTON DENEY KARTININ ALT KATMAN  
YERLEŞİM PLANI**

## Bill Of Materials for tunapro1

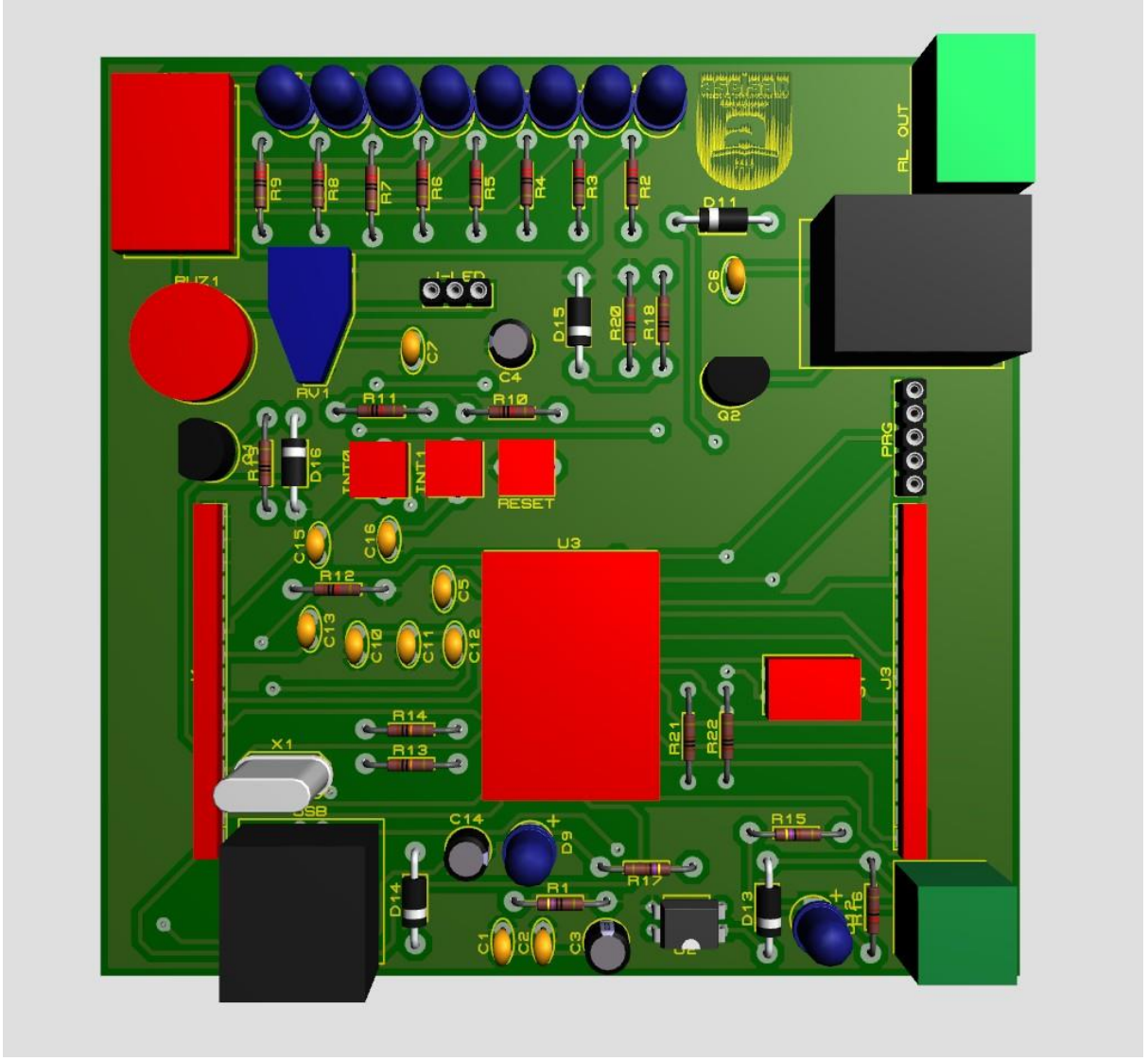
**Design Title** tunapro1  
**Author**  
**Document Number**  
**Revision**  
**Design Created** 25 Nisan 2023 Salı  
**Design Last Modified** 25 Nisan 2023 Salı  
**Total Parts In Design** 79

0 Modules				
Quantity	References	Value	Stock Code	Unit Cost
Sub-totals:				₺0,00
16 Capacitors				
Quantity	References	Value	Stock Code	Unit Cost
1	C1	220nF		
7	C2,C6-C7,C11,C13,C15-C16	100nF		
3	C3-C4,C14	10uF		
2	C5,C10	1uF		
2	C8-C9	22pF		
1	C12	10nF		
Sub-totals:				₺0,00
22 Resistors				
Quantity	References	Value	Stock Code	Unit Cost
1	R1	470		
8	R2-R9	220		
4	R10-R12,R20	10k		
2	R13-R14	100k		
2	R15,R17	4k7		
1	R16	1.2k		
1	R18	1K		
3	R19,R21-R22	1k		
Sub-totals:				₺0,00
4 Integrated Circuits				
Quantity	References	Value	Stock Code	Unit Cost
1	U1	LM1117MP-3,3		
1	U2	PC817		
1	U3	M031FB0AE		
1	U4	CH340G		
Sub-totals:				₺0,00
2 Transistors				
Quantity	References	Value	Stock Code	Unit Cost
2	Q1-Q2	BC337		
Sub-totals:				₺0,00
19 Diodes				
Quantity	References	Value	Stock Code	Unit Cost
9	D1,D3-D9,D12	LED		
1	D2	D2		
1	D10	7_SEG_CC_14MM		
4	D11,D13-D15	1N4001		
1	D16	1N5817		
3	D17-D19			
Sub-totals:				₺0,00
16 Miscellaneous				
Quantity	References	Value	Stock Code	Unit Cost
1	BUZ1	BUZZER		
1	IN1	TBLOCK-I2		
4	INT0-INT1,L1,RESET			
2	J3-J4	CONN_NUVOTON		
1	J-LED	CONN-SIL3		
1	PRG	CONN-SIL5		
1	RL1	G5CLE-14-DC5		
1	RL OUT	TBLOCK-I3		
1	RV1	TRIMPOT		
1	S1	2_PIN_DIP_SWITCH		
1	USB	CONN-H4		
1	X1	CRYSTAL	RES038	
Sub-totals:				₺0,00
Totals:				₺0,00

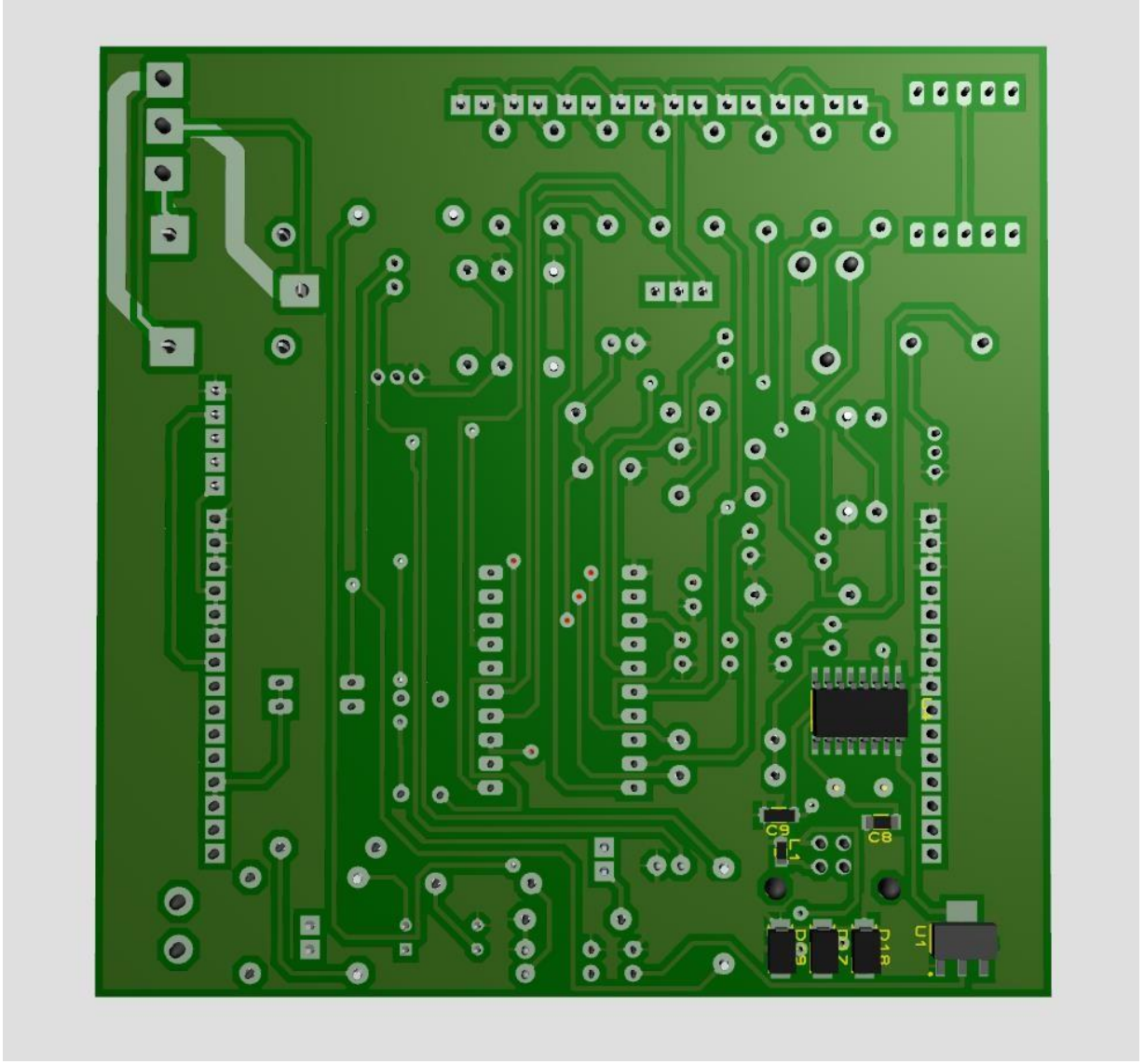
8 Mayıs 2023 Pazartesi 22:40:21

## NUVOTON DENEY KARTI MALZEME LİSTESİ





**NUVOTON DENEY KARTININ 3D ÜST KATMAN  
GÖRÜNÜMÜ**



**NUVOTON DENEY KARTININ 3D ALT KATMAN  
GÖRÜNÜMÜ**