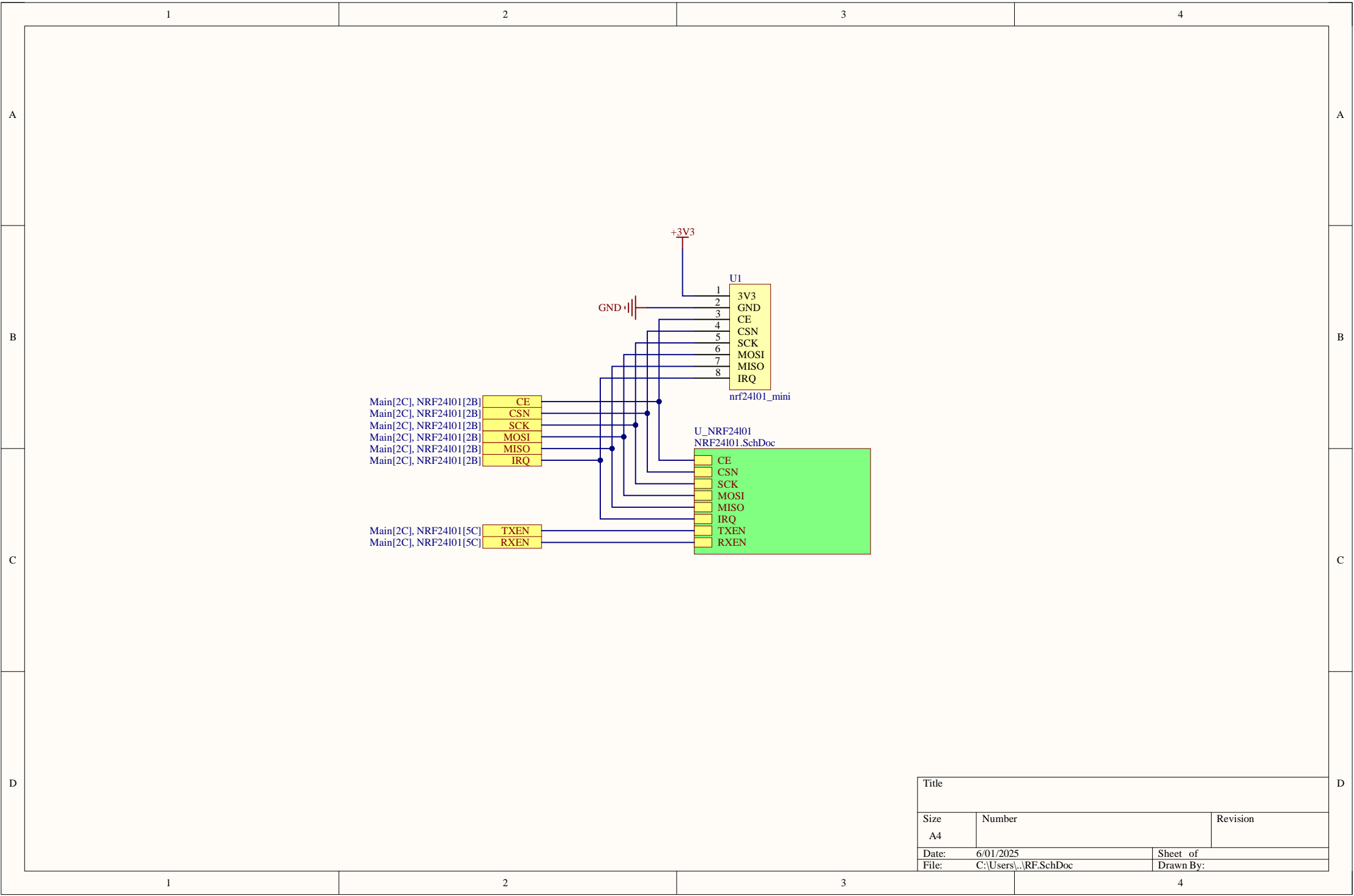
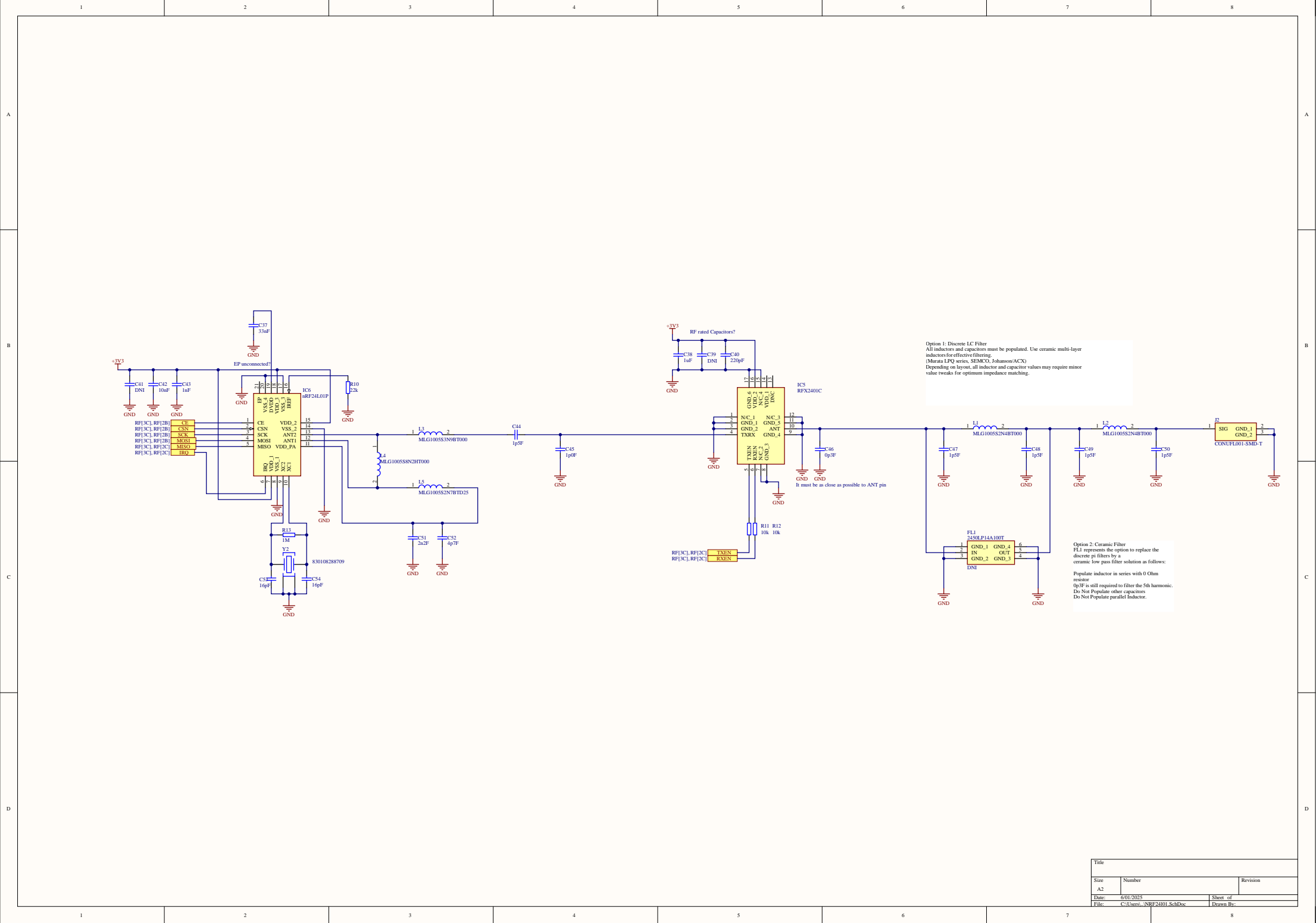


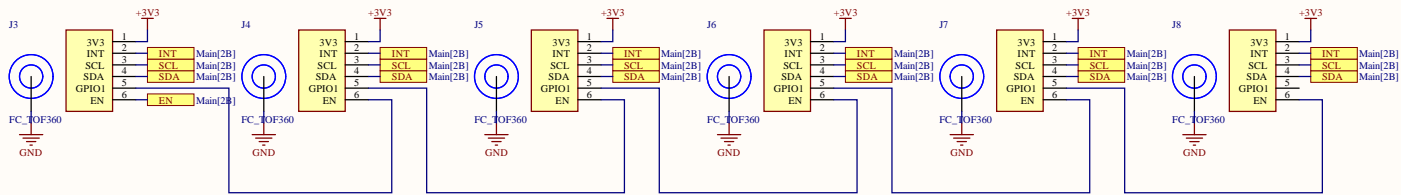
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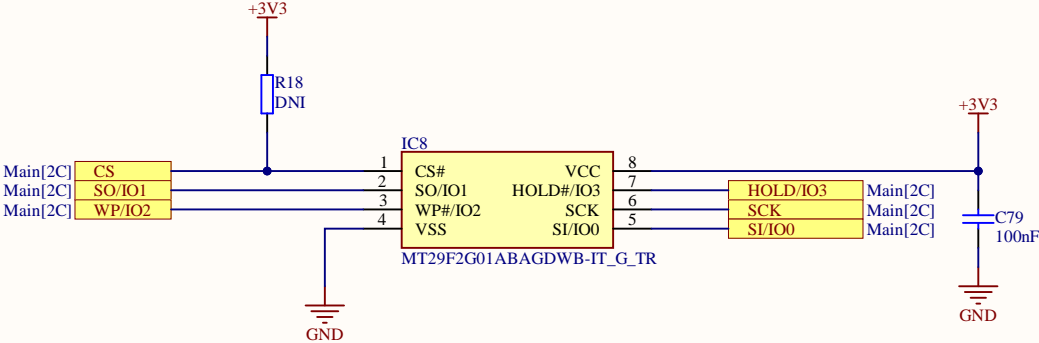
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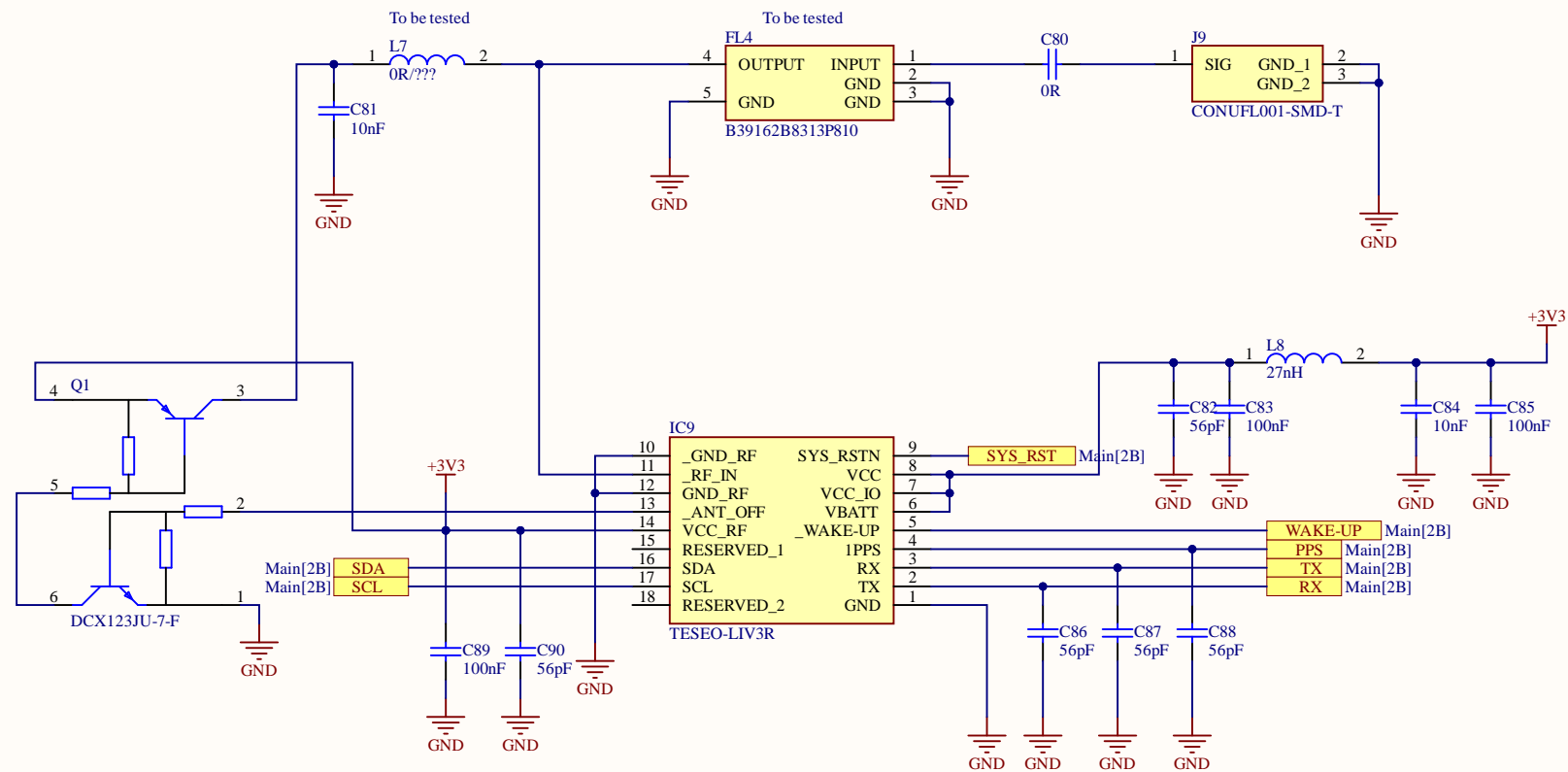
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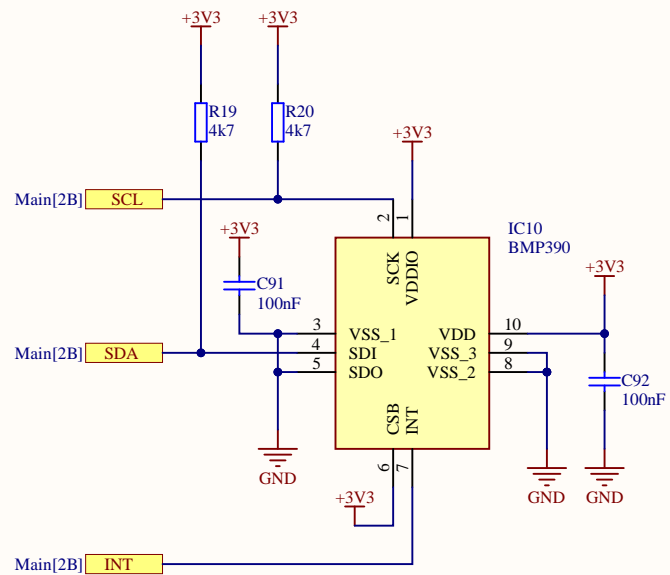


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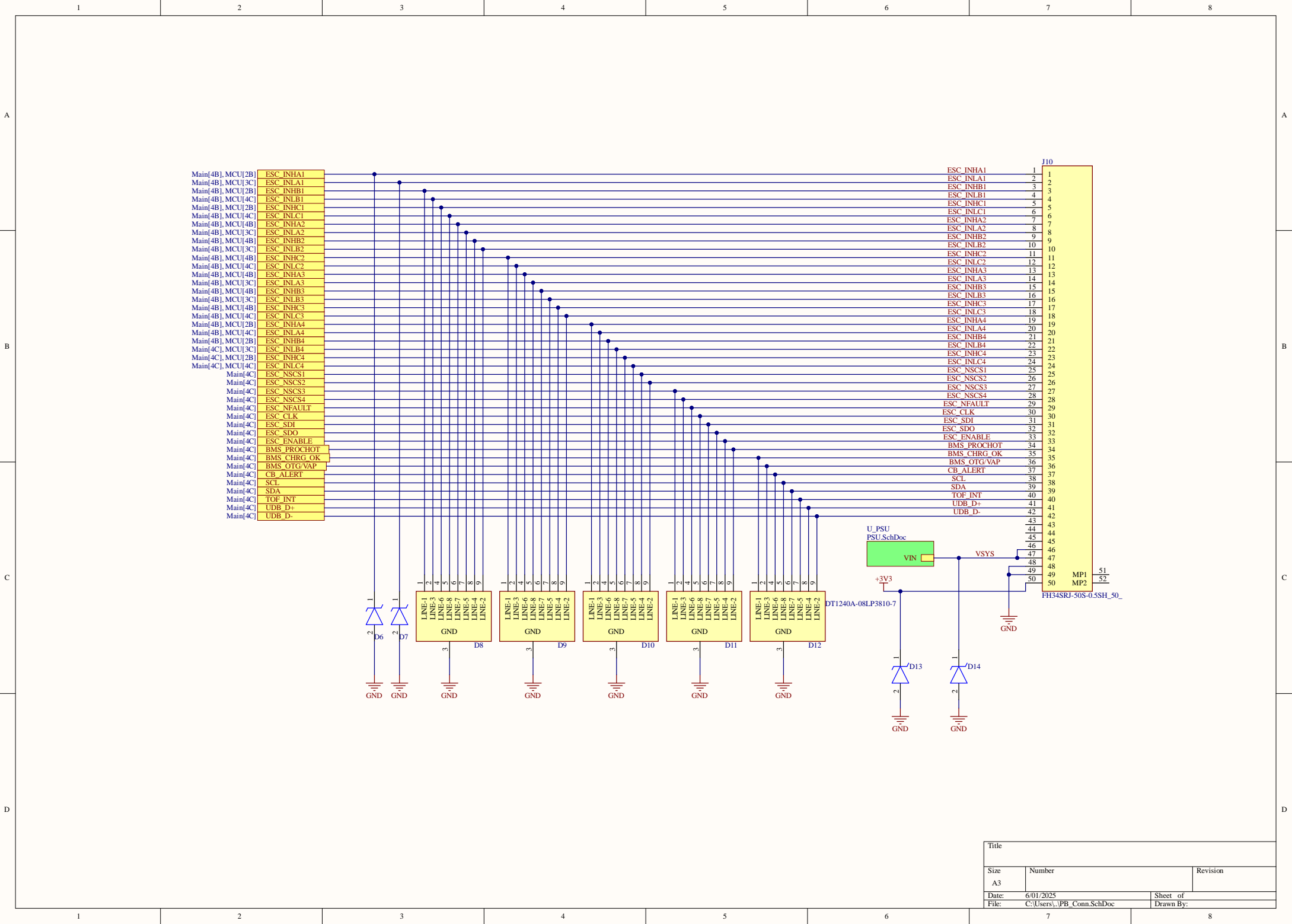
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Size	Number	Revision
A4		
Date:	6/01/2025	Sheet of
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Title		
Size A4	Number	Revision
Date:	6/01/2025	Sheet of
File:	C:\Users\...\Barometer.SchDoc	Drawn By:





Title		
Size	Number	Revision
A3		
Date:	6/01/2025	Sheet of
File:	C:\Users\...\PB_Conn.SchDoc	Drawn By:

A

B

C

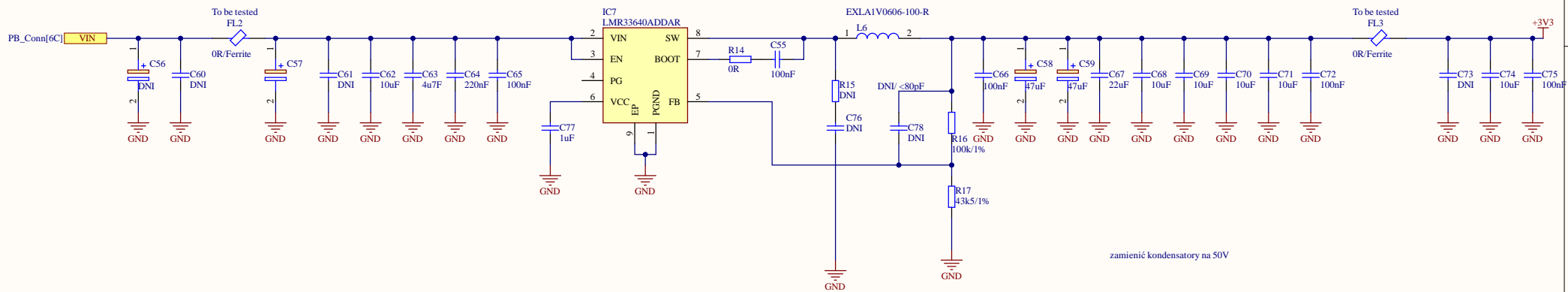
D

A

B

C

D



I<sub>max</sub> = 2A  
dI = 0.3 x I<sub>max</sub> = 0.6A  
dV = 0.01 x V<sub>out</sub> = 0.033  
D = 0.22  
K = 0.3

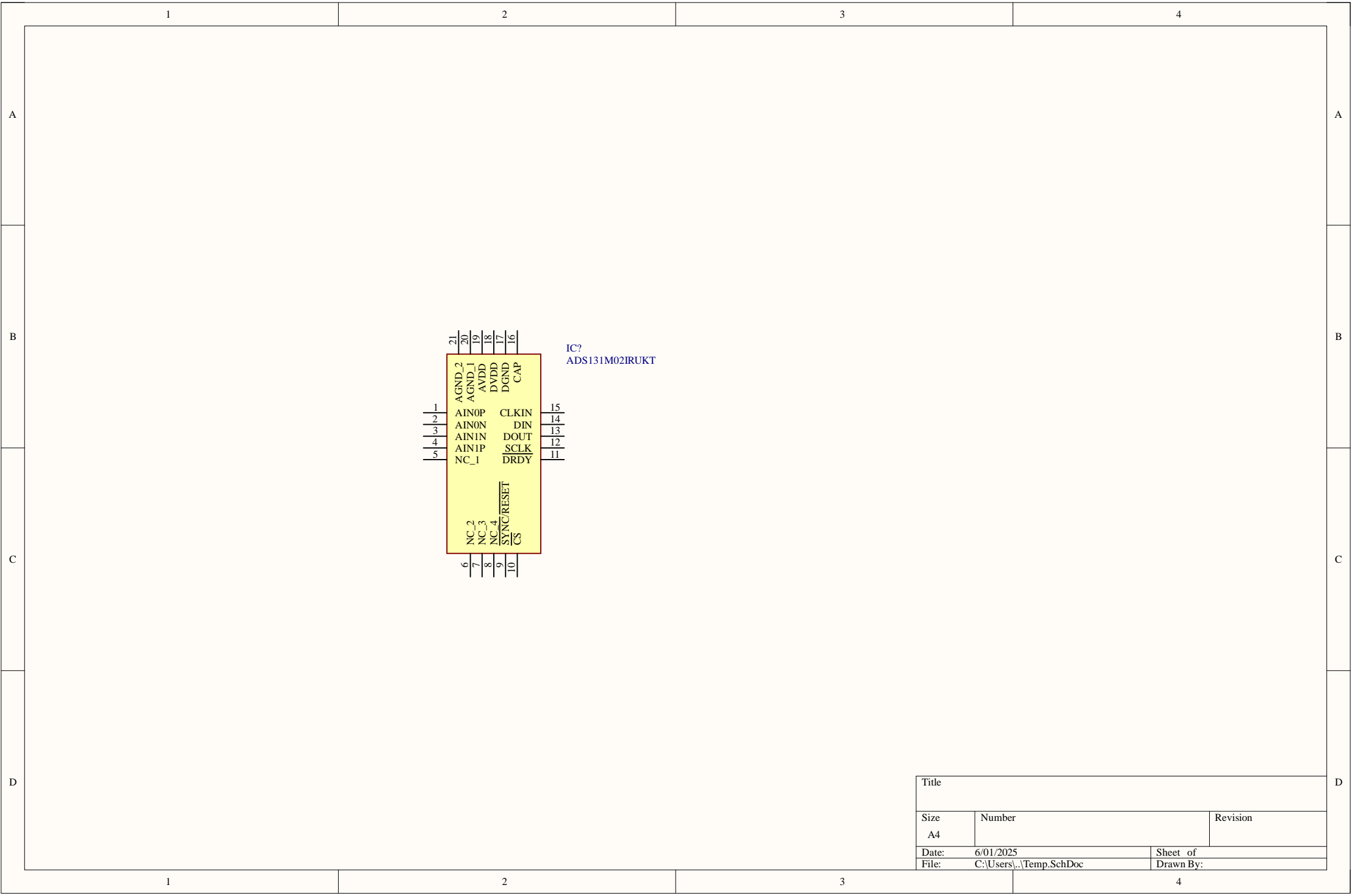
$$C_{OUT} \geq \frac{\Delta I_{OUT}}{f_{SW} \cdot \Delta V_{OUT}} \cdot K \left[ (1-D) \cdot (1+K) + \frac{K^2}{12} \cdot (2-D) \right]$$
$$ESR \leq \frac{(2+K) \cdot \Delta V_{OUT}}{2 \cdot \Delta I_{OUT} \left[ 1+K + \frac{K^2}{12} \left( 1 + \frac{1}{(1-D)} \right) \right]}$$
$$D = \frac{V_{OUT}}{V_{IN}}$$

$$0.6/400 \cdot 10^{-3} \cdot 0.033 \cdot 0.3 \left[ (1-0.22) \cdot (1+0.3) + 0.3^2/12 \cdot (2-0.22) \right] = 155 \mu F$$
$$(2+0.3) \cdot 0.033/2 \cdot 0.6 \left[ 1+0.3+0.3^2/12 \cdot (1+1/(1-0.3)) \right] = 48 m\Omega$$

$$L = \frac{(V_{IN} - V_{OUT})}{f_{SW} \cdot K \cdot I_{OUT \max}} \cdot \frac{V_{OUT}}{V_{IN}}$$

$$15.3/400 \cdot 10^{-3} \cdot 0.3^2 \cdot 3.3/15 = 10.7 \mu H$$

Title		
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IC?

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