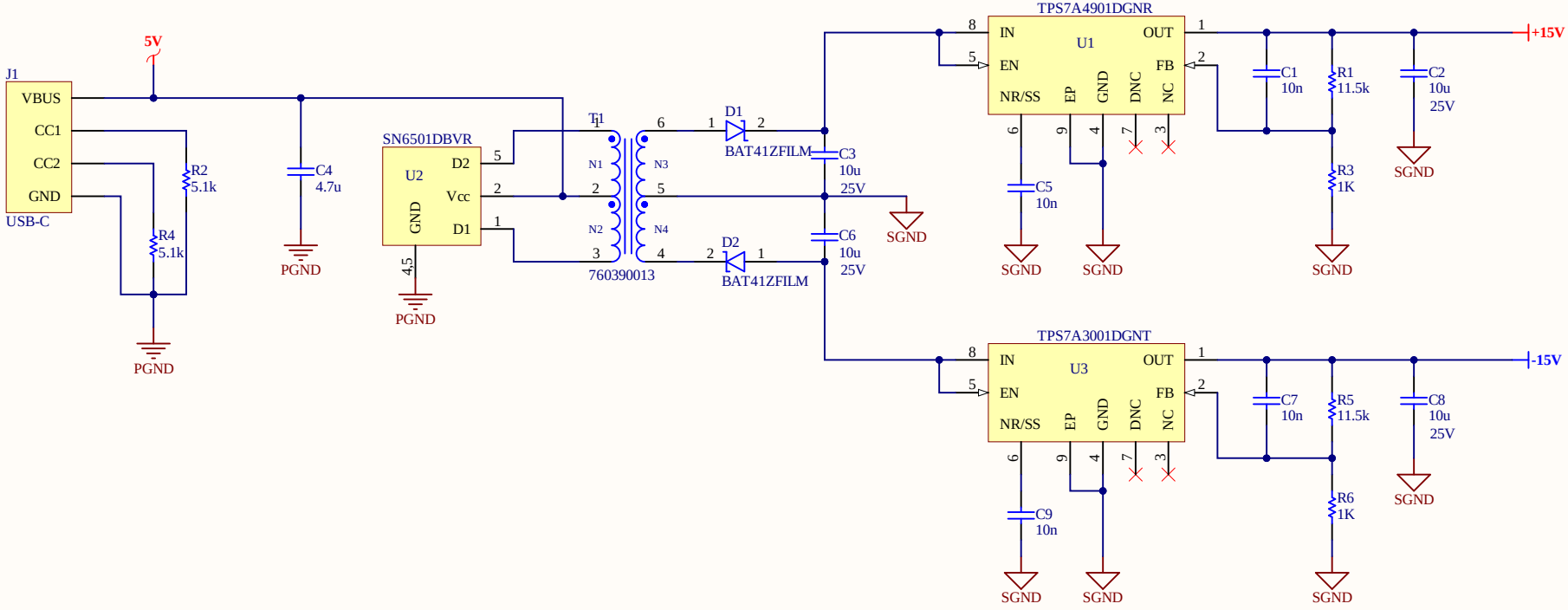


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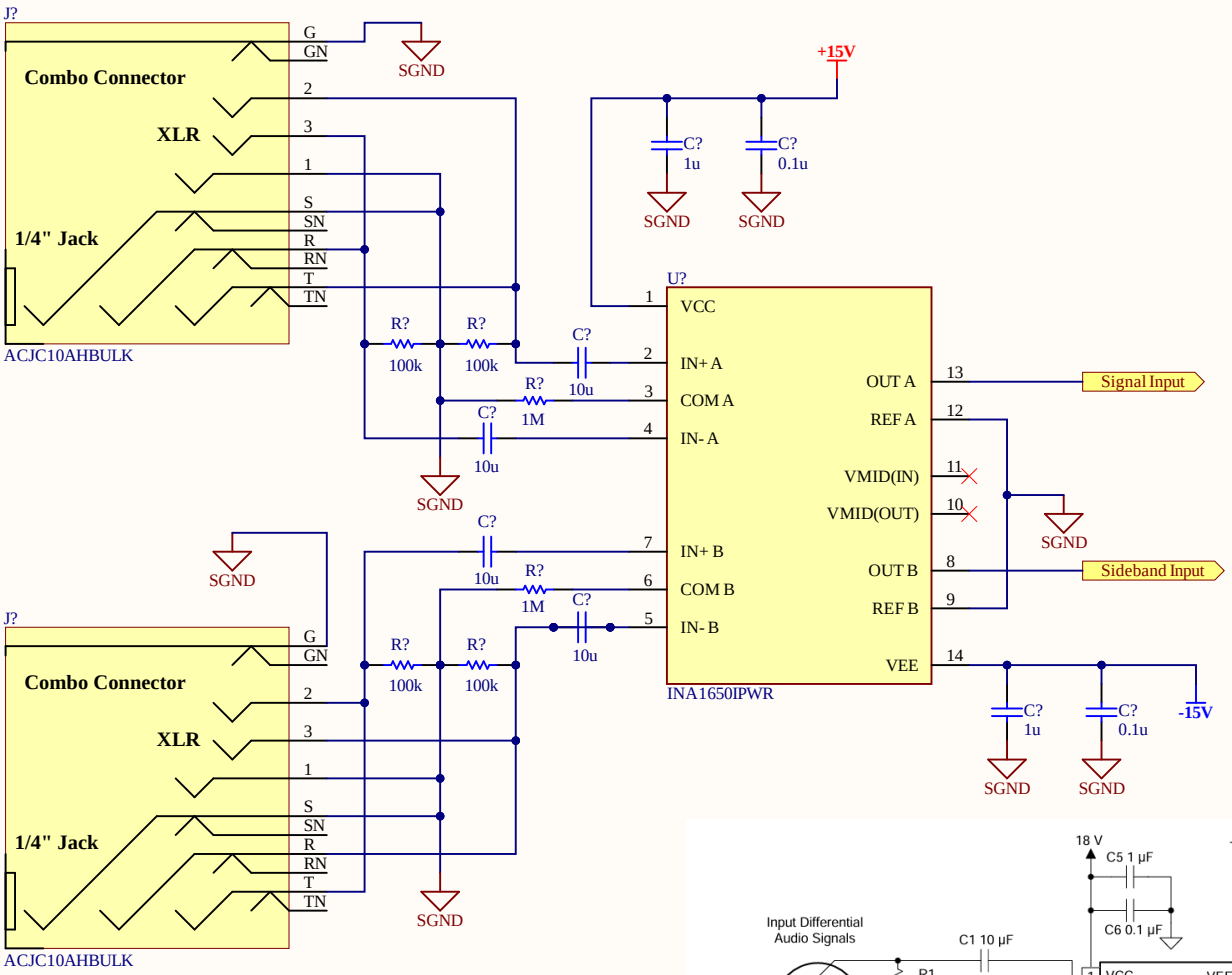


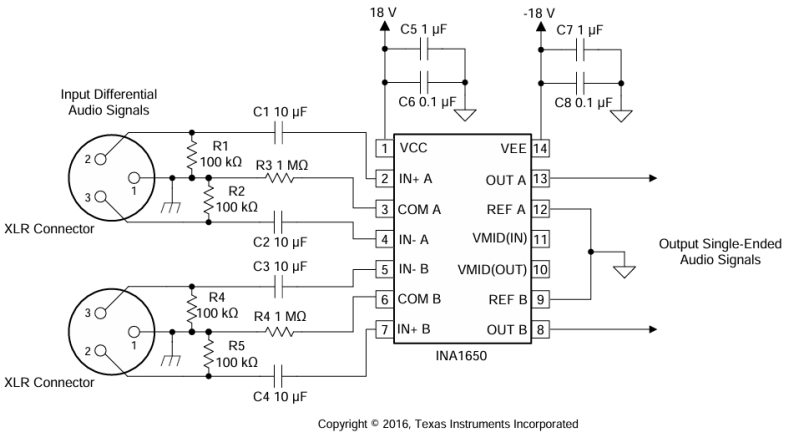
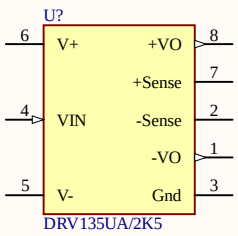




**Figure 51. INA1650 Used as a Line Receiver for Differential Audio Signals in a Split-Supply System**

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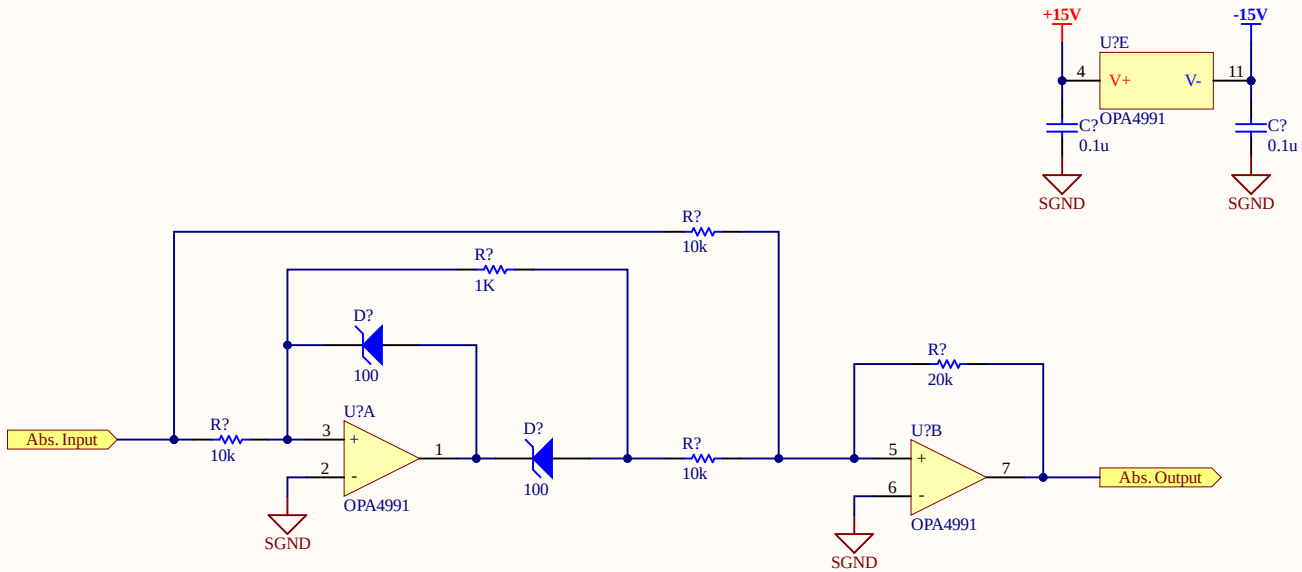


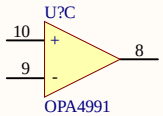


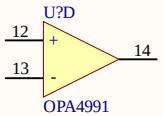


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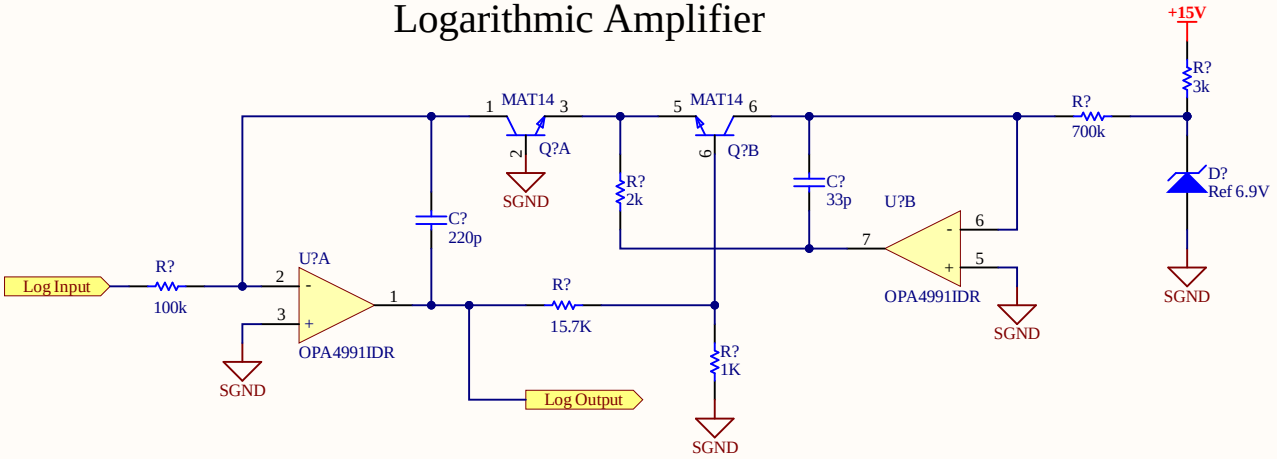
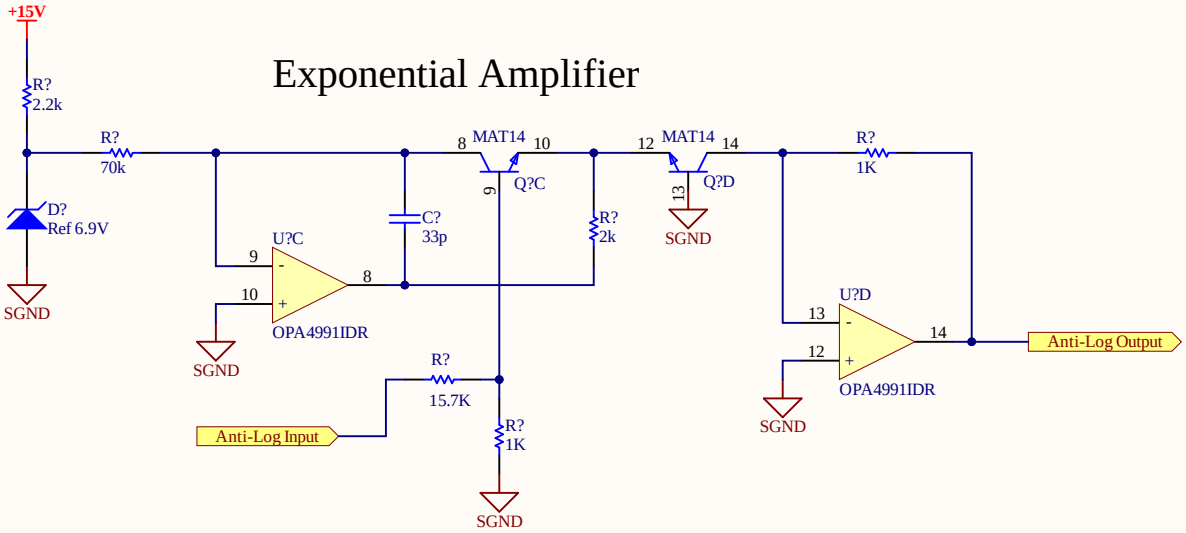
# Logarithmic Amplifier




# Exponential Amplifier

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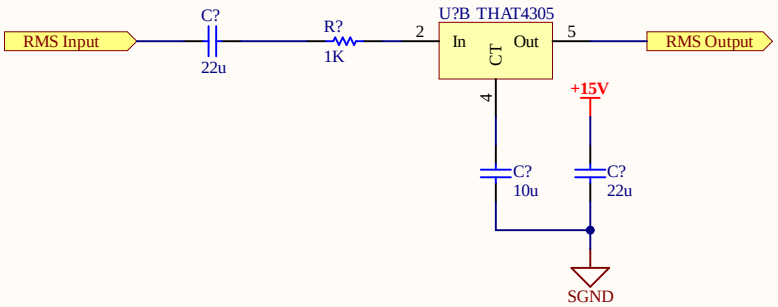
# RMS Detector

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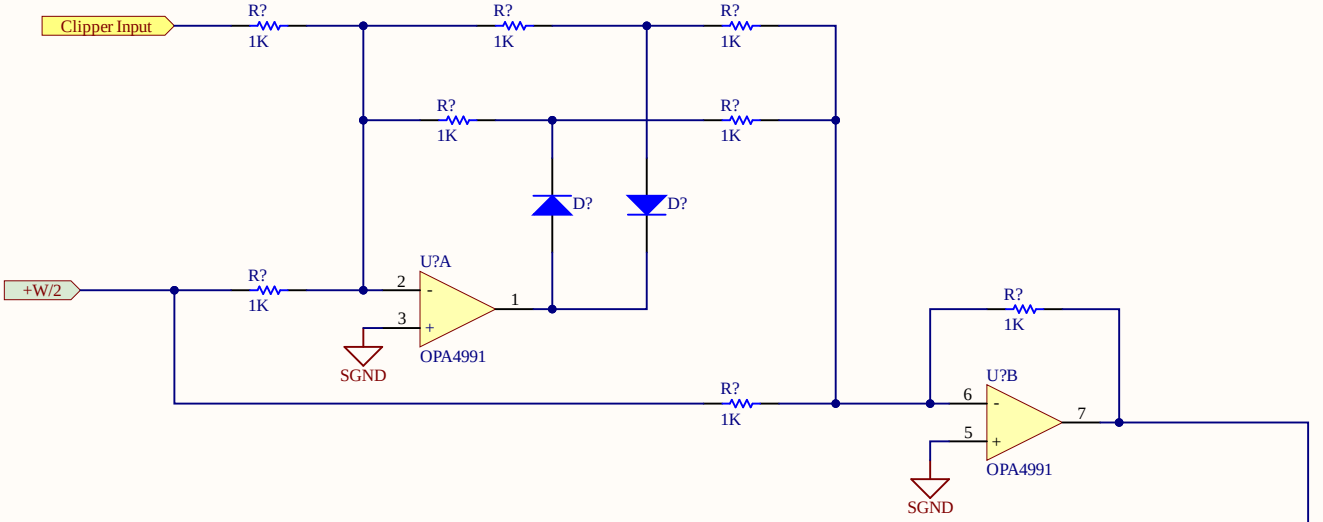
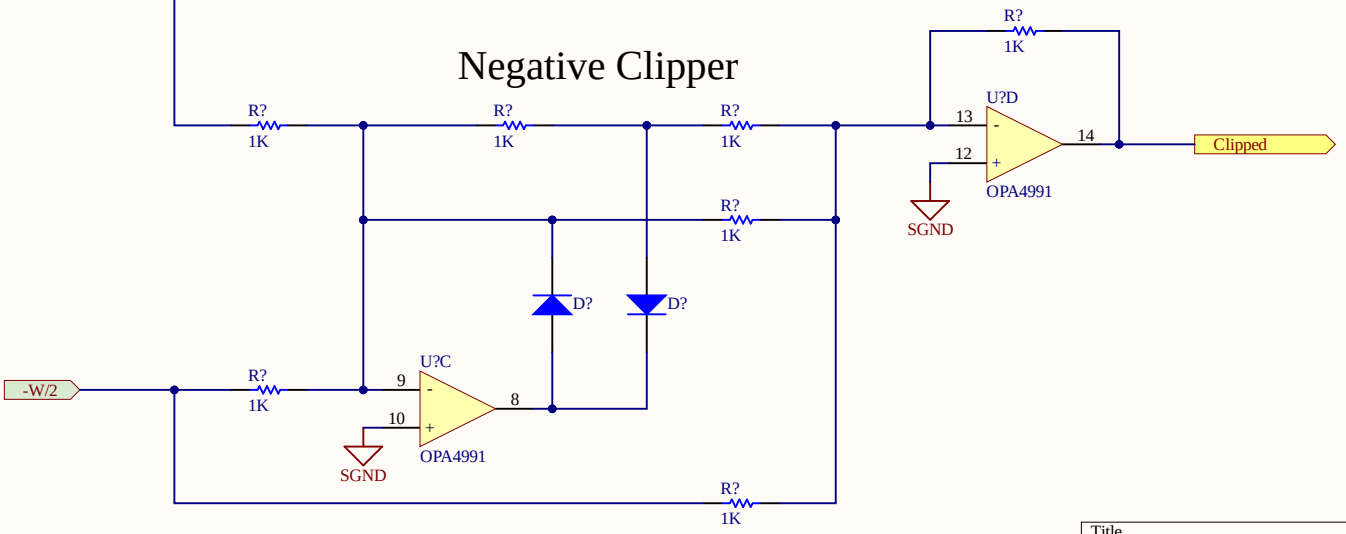
# Positive Clipper




# Negative Clipper

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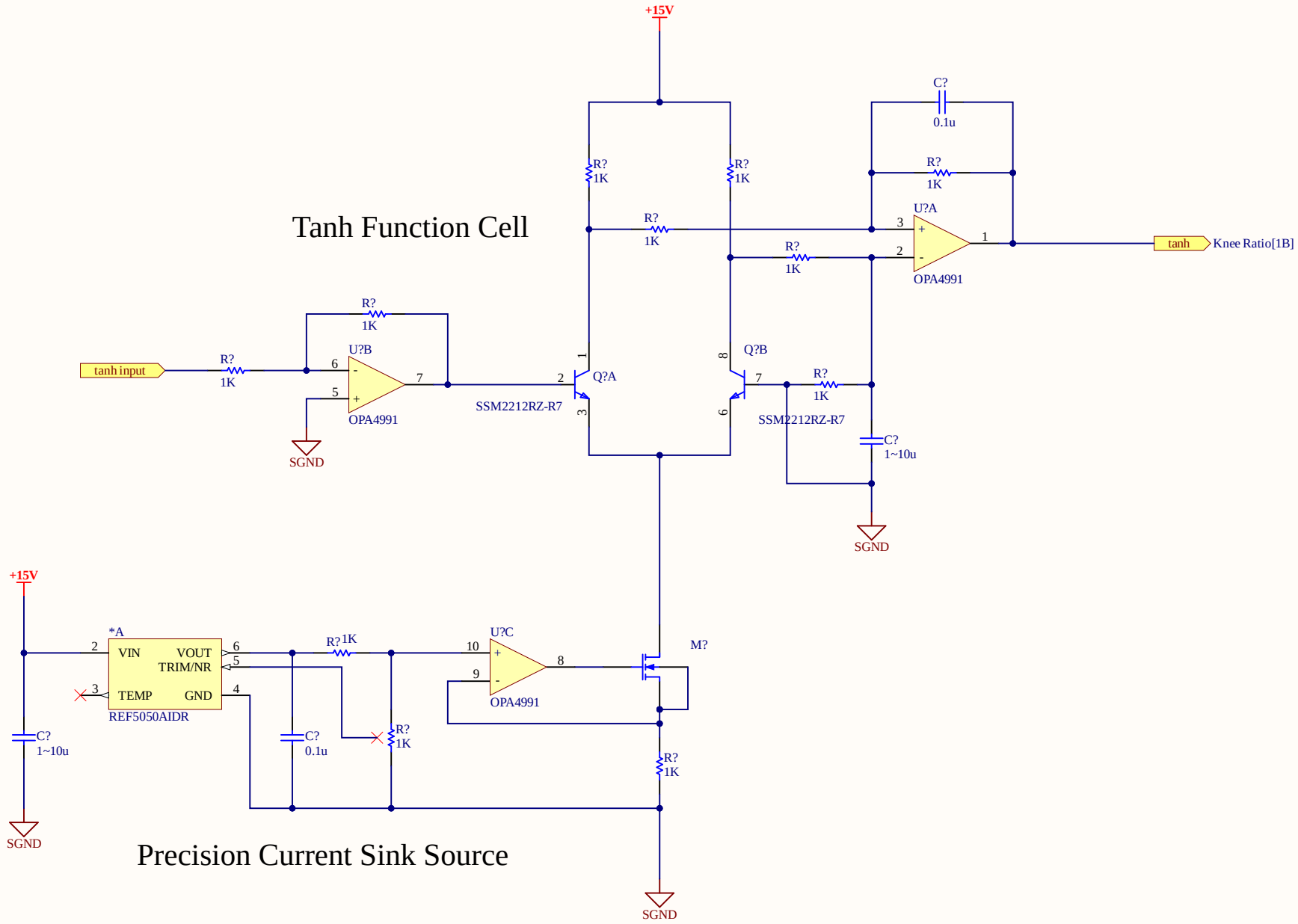


Sink current should be adjusted here so that the output of the tanh cell is normalized to -0.5V<Vout<0.5V

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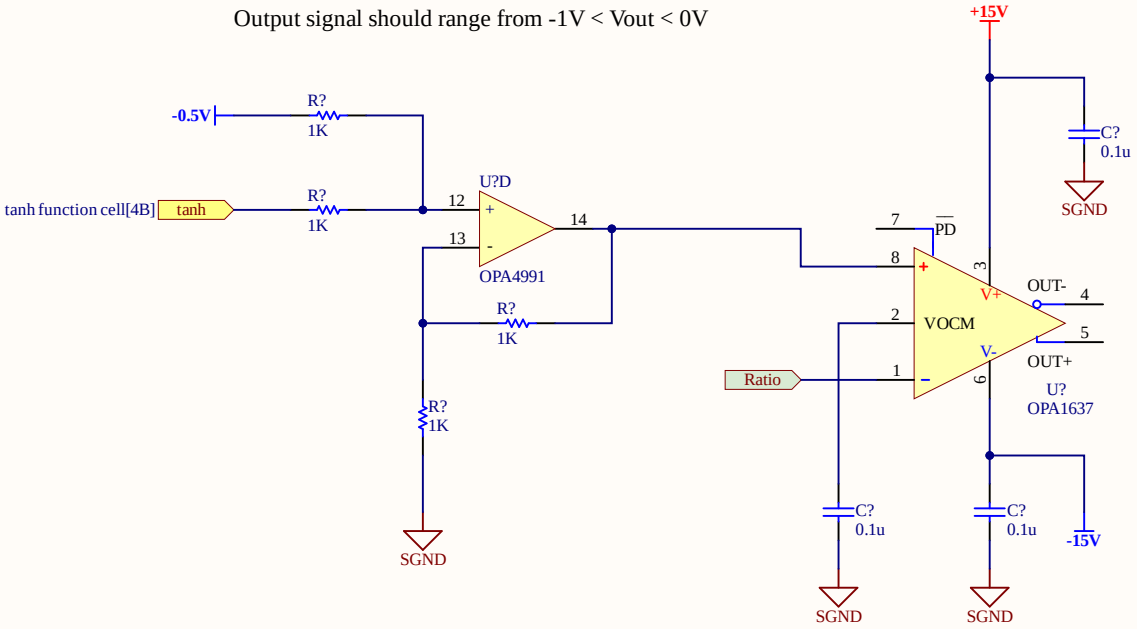
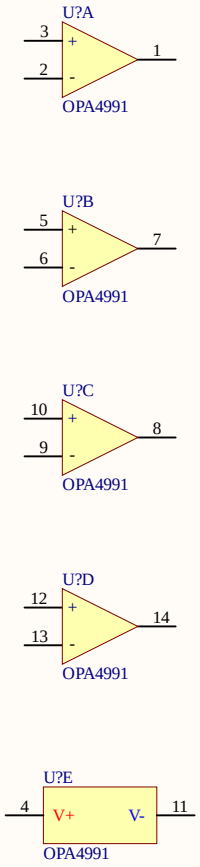
-0.5V offset is applied here

Output signal should range from -1V < Vout < 0V

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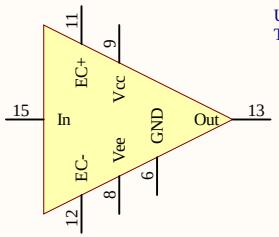


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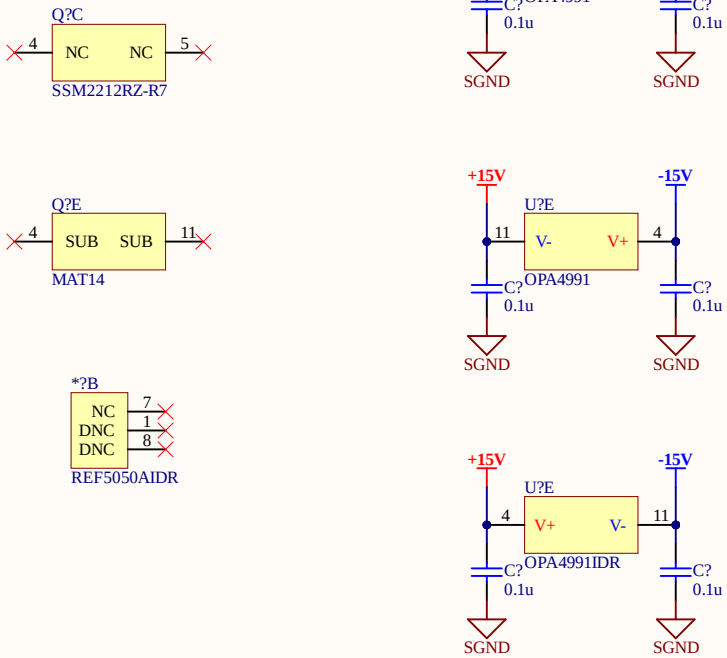


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