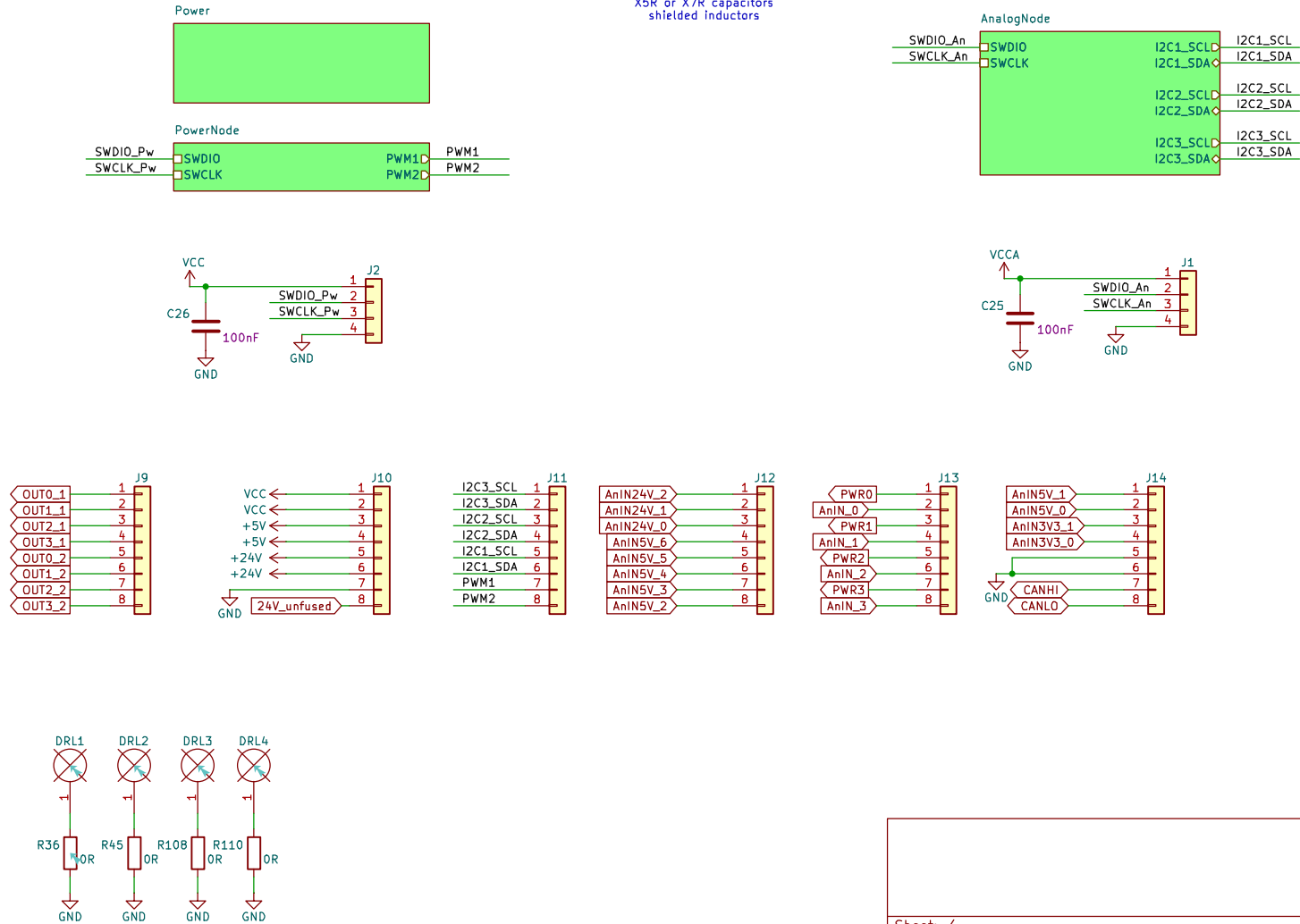


Recommendations:  
.1% resistors on analog signal lines  
X5R or X7R capacitors  
shielded inductors



Sheet: /  
File: Nodes.kicad\_sch

**Title: Main**

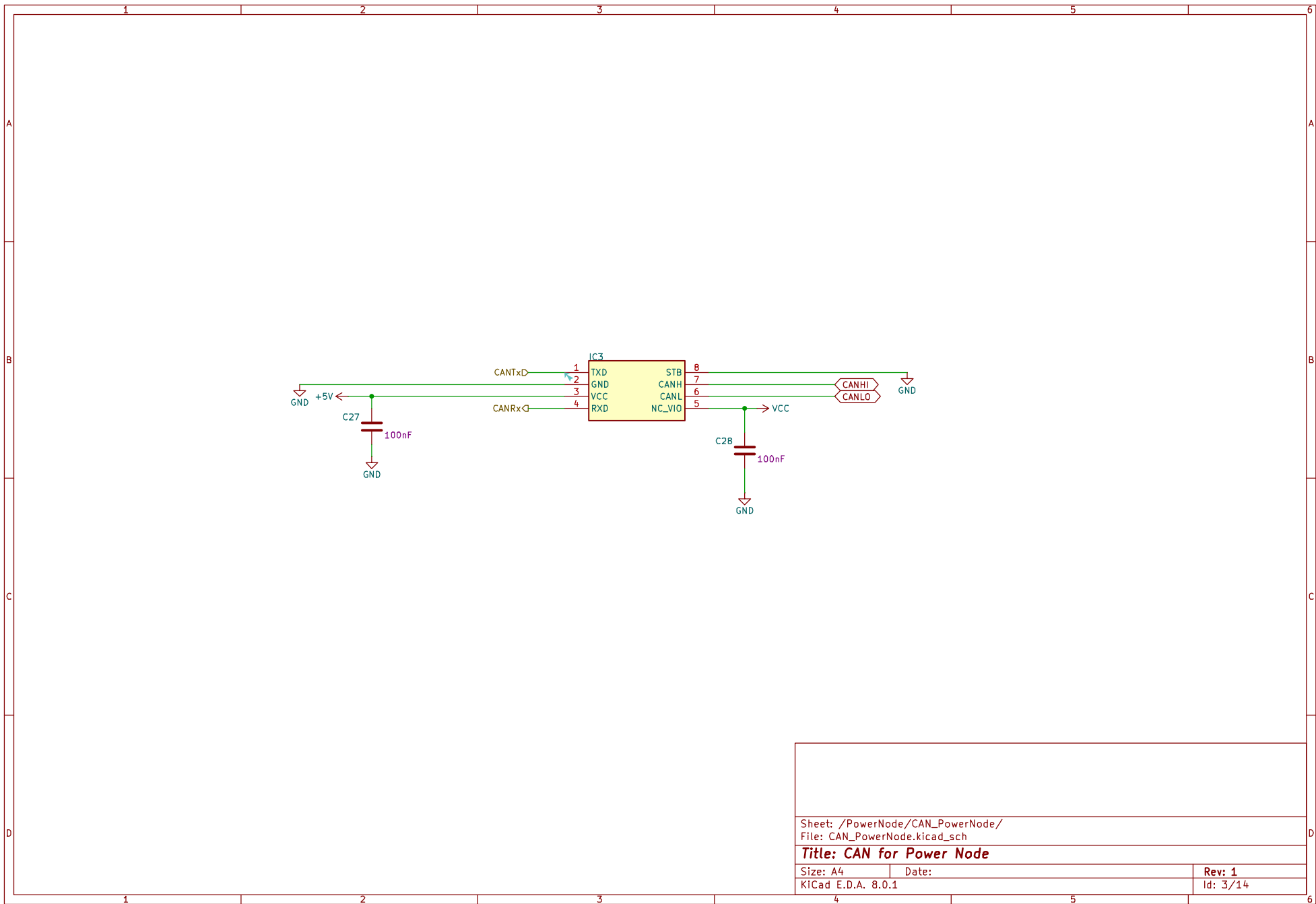
Size: A4  
KiCad E.D.A. 8.0.1

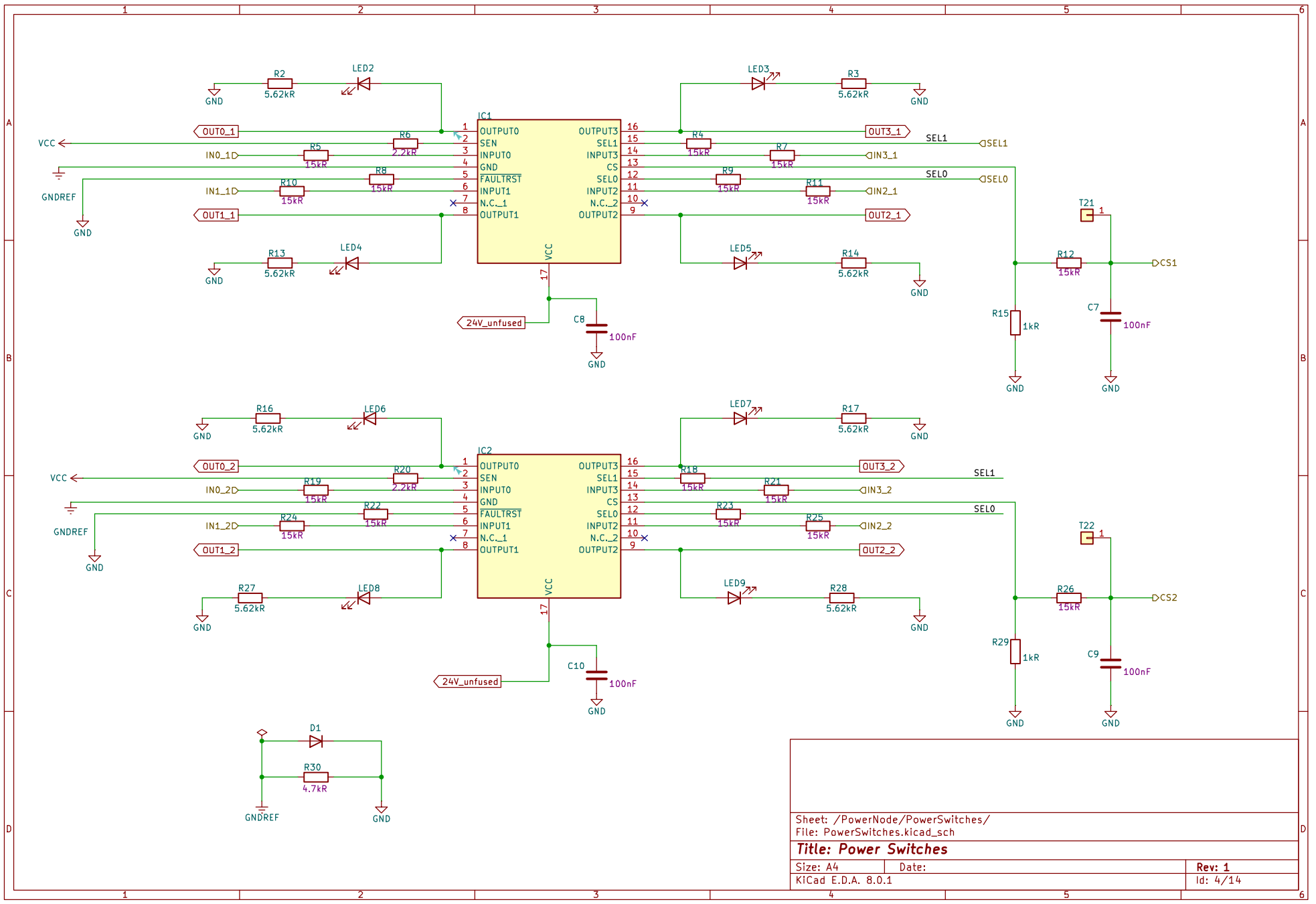
Date:

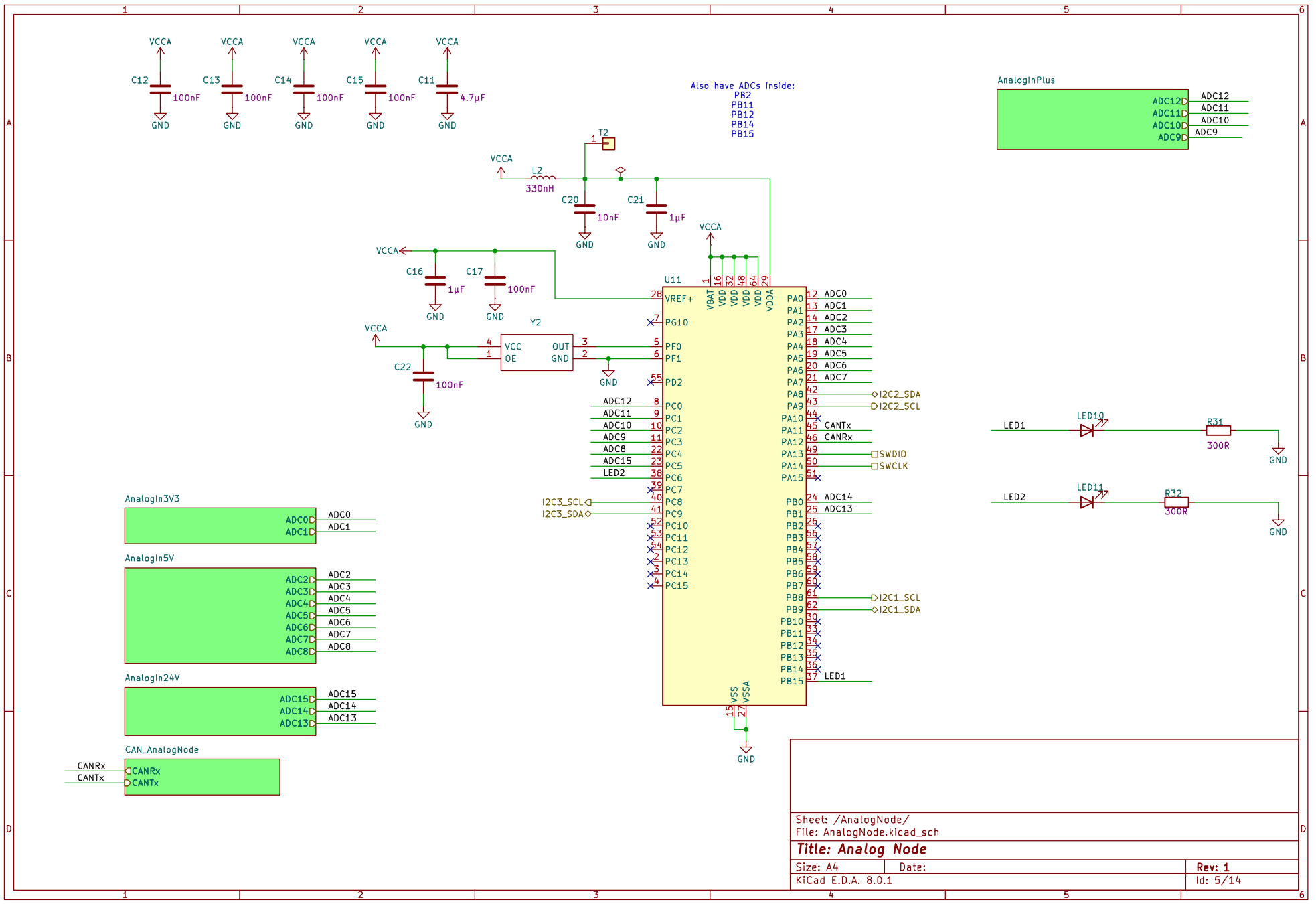
Rev:

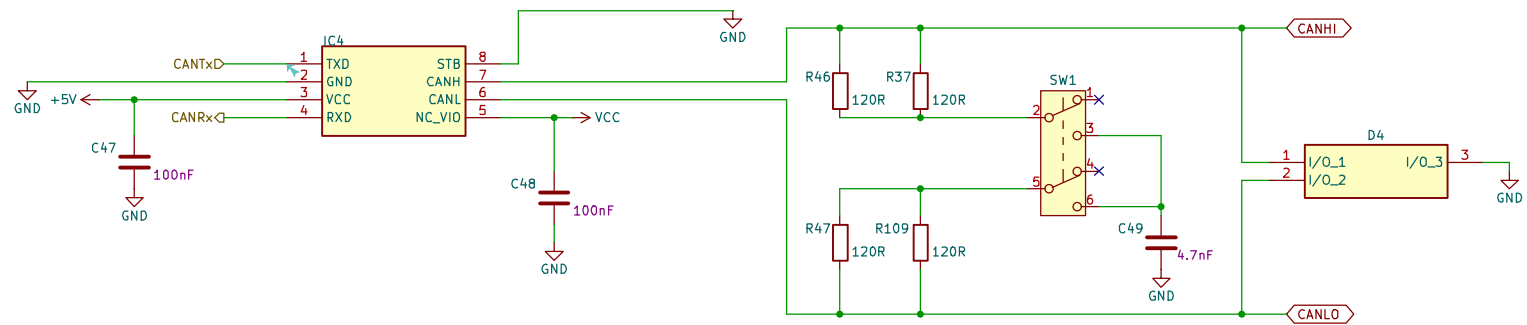
Id: 1/14











Sheet: /AnalogNode/CAN\_AnalogNode/  
File: CAN\_AnalogNode.kicad\_sch

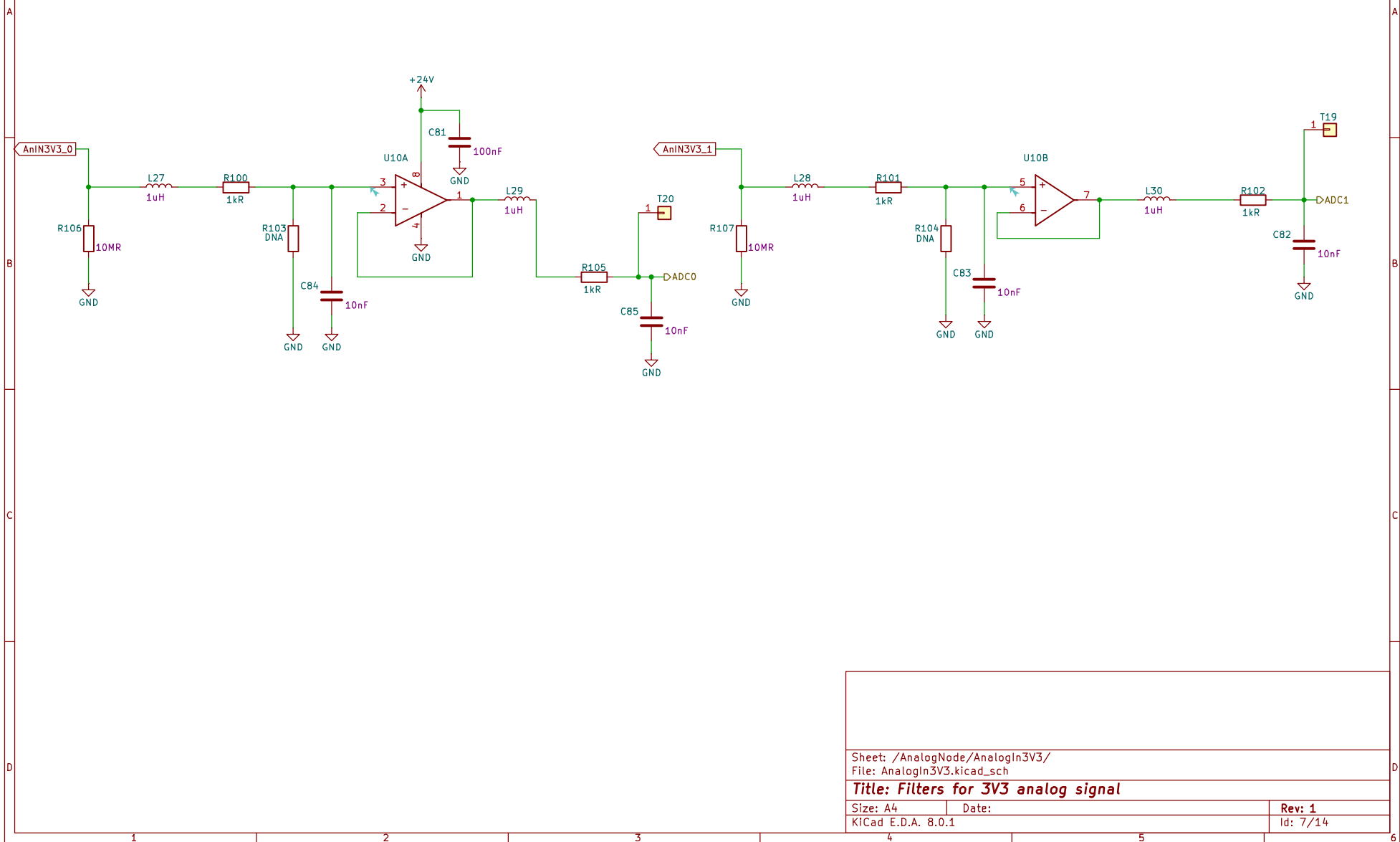
# **Title: CAN for Analog Node**

Size: A4  
KiCad E.D.A. 8.0.1

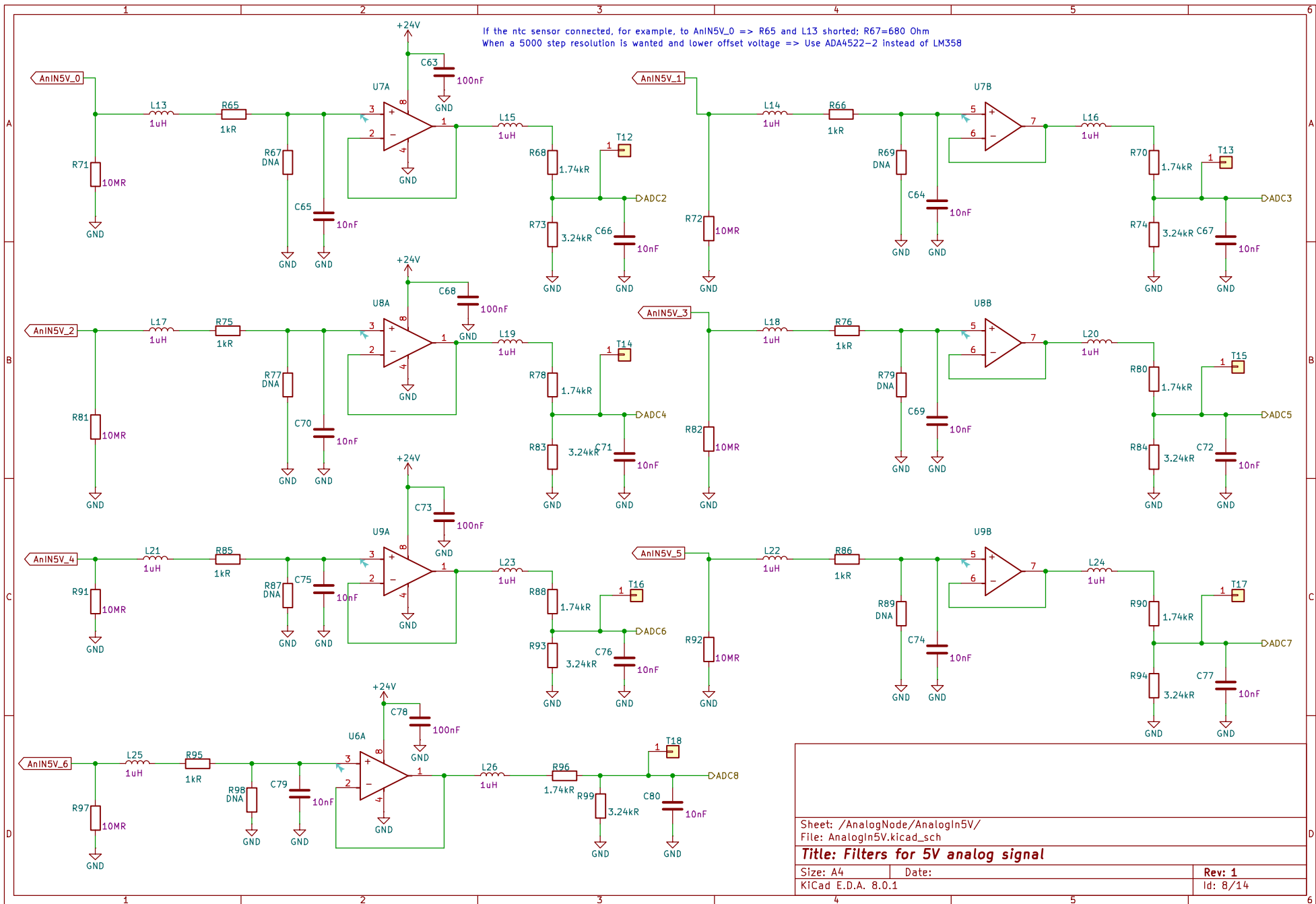
Date:

Rev: 1  
Id: 6/14

If the ntc sensor connected, for example, to AnIN3V3\_0 => R100 and L27 shorted; R103=680 Ohm  
 When a 5000 step resolution is wanted and lower offset voltage => Use ADA4522-2 instead of LM358



Sheet: /AnalogNode/AnalogIn3V3/		
File: AnalogIn3V3.kicad_sch		
<b>Title: Filters for 3V3 analog signal</b>		
Size: A4	Date:	Rev: 1
KiCad E.D.A. 8.0.1		Id: 7/14



Sheet: /AnalogNode/AnalogIn5V/  
File: AnalogIn5V.kicad\_sch

**Title: Filters for 5V analog signal**

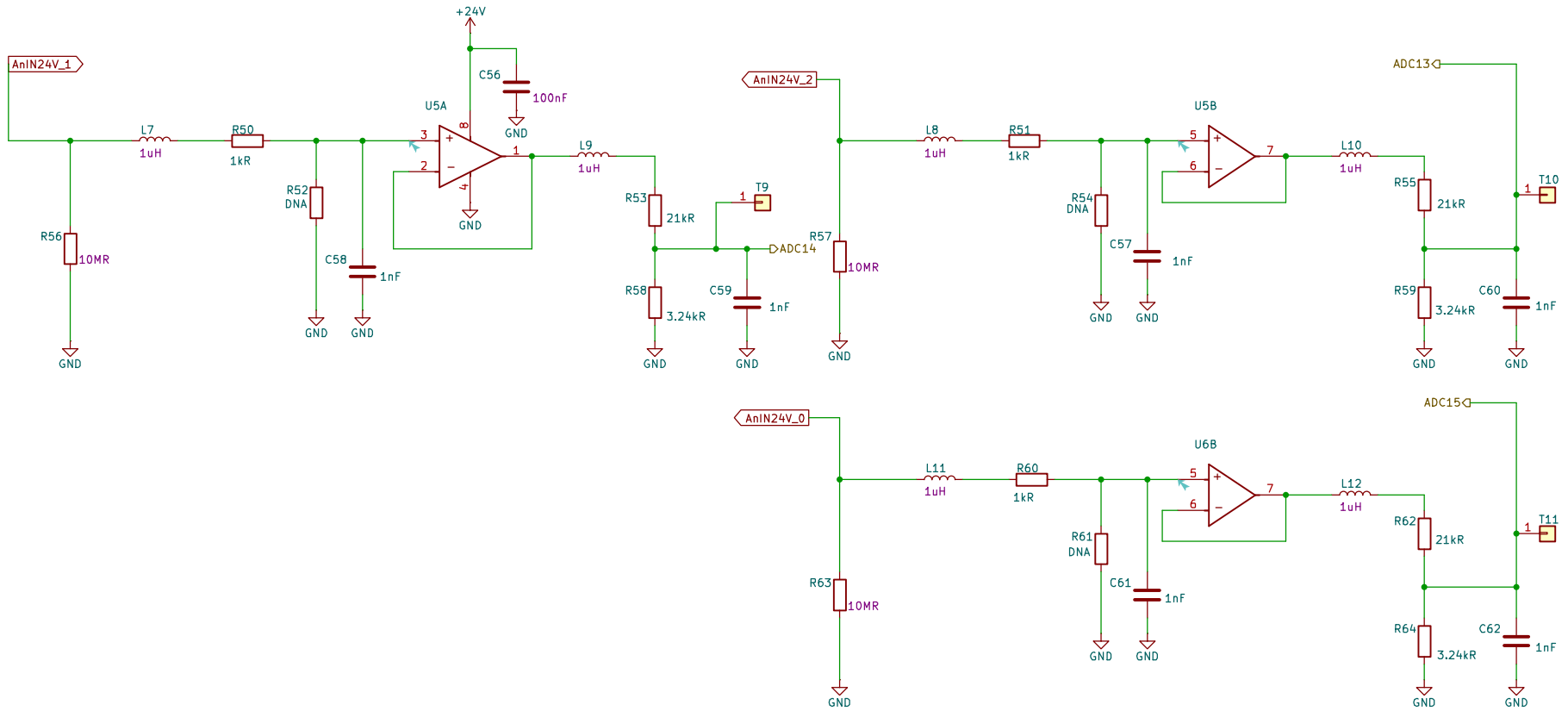
Size: A4  
KiCad E.D.A. 8.0.1

Date:

Rev: 1  
Id: 8/14



If the ntc sensor connected, for example, to AnIN24V\_0 => R50 and L7 shorted; R52=680 Ohm  
When a 5000 step resolution is wanted and lower offset voltage => Use ADA4522-2 instead of LM358



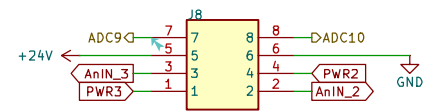
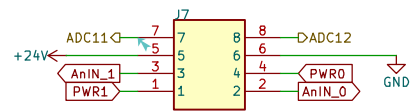
Sheet: /AnalogNode/AnalogIn24V/  
File: AnalogIn24V.kicad\_sch

**Title: Filters for 24V analog signal**

Size: A4  
KiCad E.D.A. 8.0.1

Date:

Rev: 1  
Id: 9/14



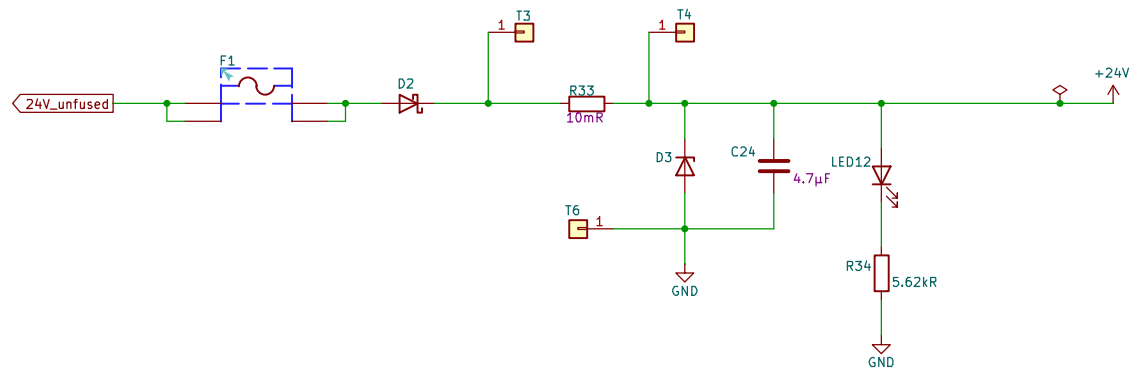
Sheet: /AnalogNode/AnalogInPlus/  
File: AnalogInPlus.kicad\_sch

**Title: Additional Connections for Filters**

Size: A4  
KiCad E.D.A. 8.0.1

Date:

Rev: 1  
Id: 10/14



Power3V3



Power5V



Power3V3\_An



Sheet: /Power/  
File: Power.kicad\_sch

**Title: Power**

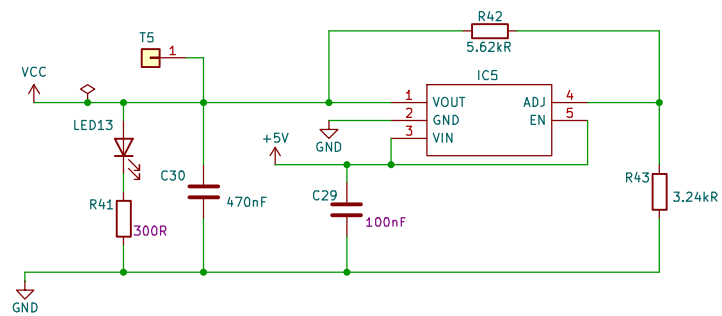
Size: A4  
KiCad E.D.A. 8.0.1

Date:

Rev: 1

Id: 11/14

The circuit below is for an adjustable version (ST730MR).  
 It is recommended to use a fixed voltage regulator (ST730M33R).  
 In order for the circuit to be suitable for a fixed regulator, remove R42 and R43.  
 $V_{out}=1.2*(1+R42/R43)$



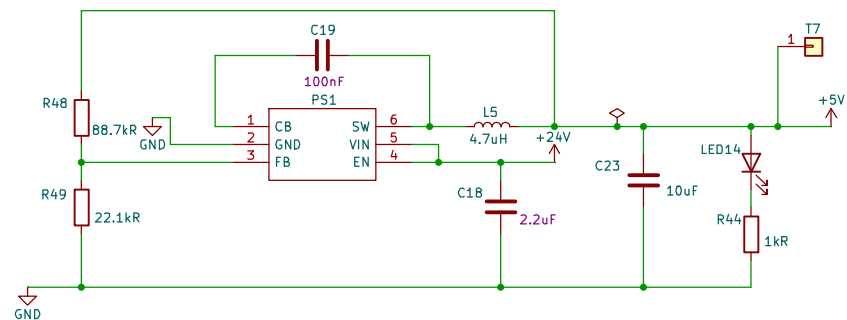
Sheet: /Power/Power3V3/  
 File: Power3V3.kicad\_sch

**Title: Power 3V3**

Size: A4 Date:  
 KiCad E.D.A. 8.0.1

**Rev: 1**  
 Id: 12/14

The circuit below is for an adjustable version (LMR50410YFQDBVRQ1).  
 It is recommended to use a fixed voltage regulator (LMR50410Y5FQDBVRQ1).  
 In order for the circuit to be suitable for a fixed regulator, it is necessary to connect the FB pin to the SW pin directly, so for this remove R49, and solder a jumper in place of R48.



Sheet: /Power/Power5V/  
 File: Power5V.kicad\_sch

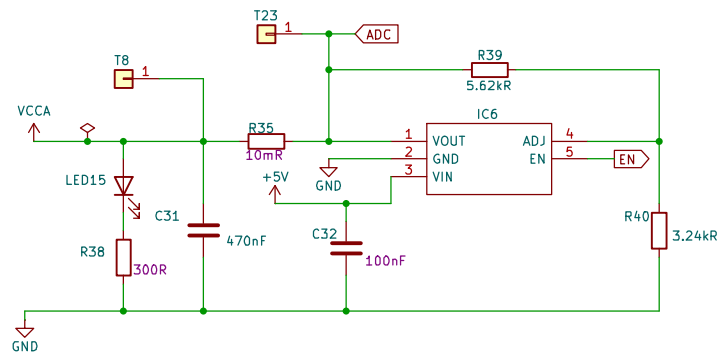
**Title: Power 5V**

Size: A4  
 KiCad E.D.A. 8.0.1

Date:

Rev: 1  
 Id: 13/14

The circuit below is for an adjustable version (ST730MR).  
 It is recommended to use a fixed voltage regulator (ST730M33R).  
 In order for the circuit to be suitable for a fixed regulator, remove R39 and R40.  
 $V_{out} = 1.2 \times (1 + R39/R40)$



Sheet: /Power/Power3V3\_An/  
 File: Power3V3\_An.kicad\_sch

**Title: Power 3V3 Analog**

Size: A4  
 KiCad E.D.A. 8.0.1

Date:

Rev: 1

Id: 14/14