

Sheet: /Codec/
File: codec.kicad_sch

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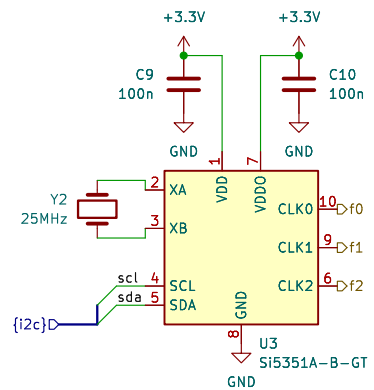
Size: A4

Date:

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Rev:

Id: 2/13



Sheet: /Programmable Clock Generator/
File: clock_gen.kicad_sch

Title:

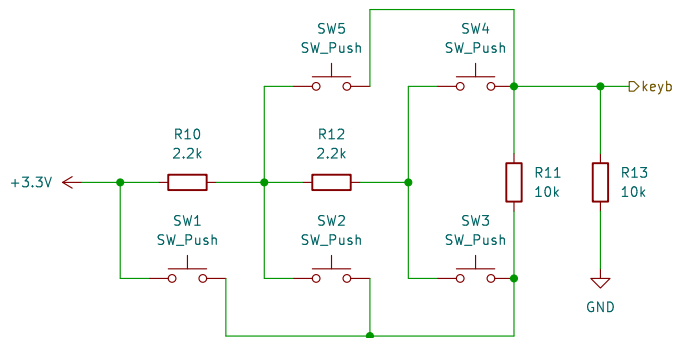
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Date:

KiCad E.D.A. kicad 7.0.9+dfsg-1

Rev:

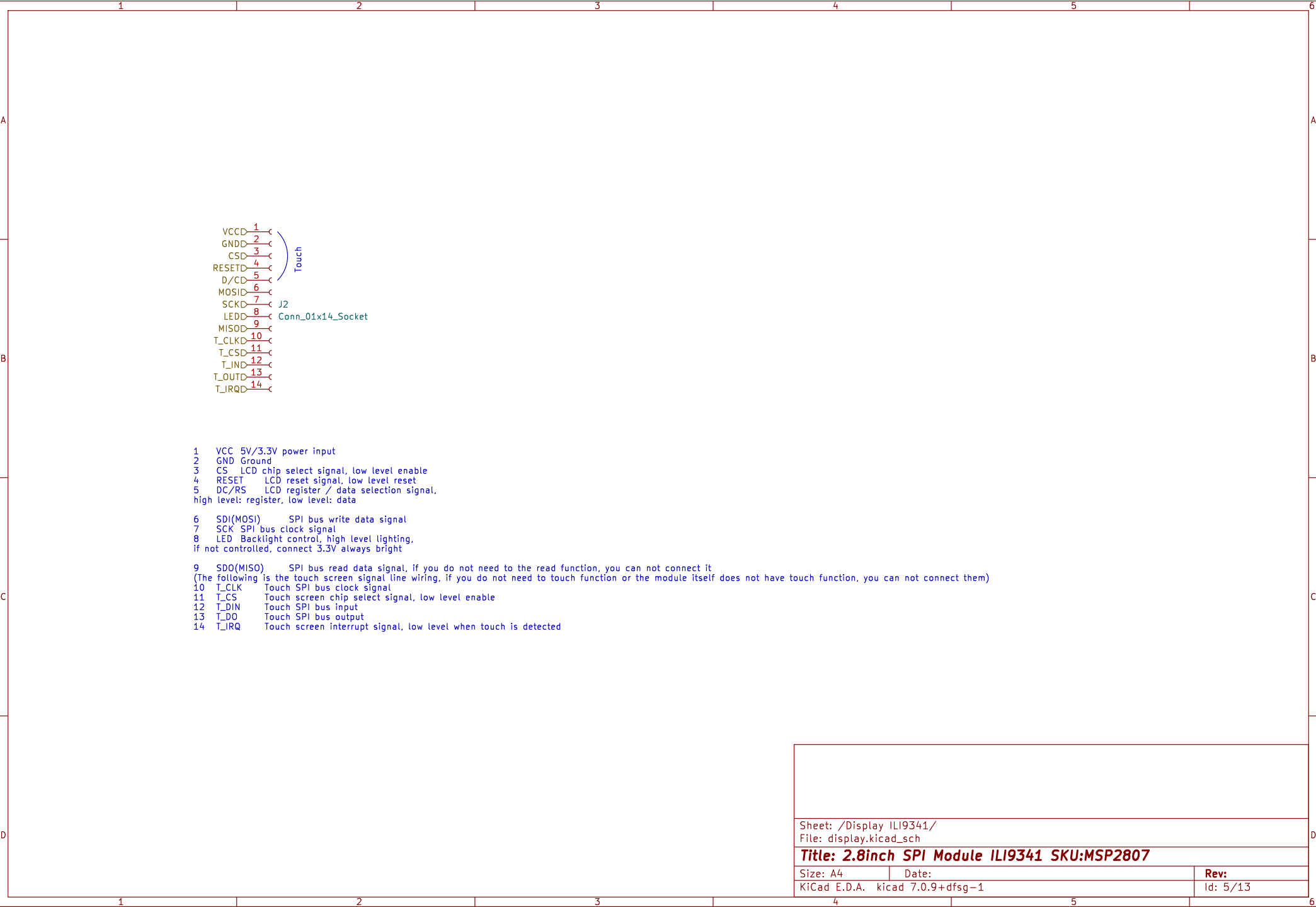
Id: 3/13

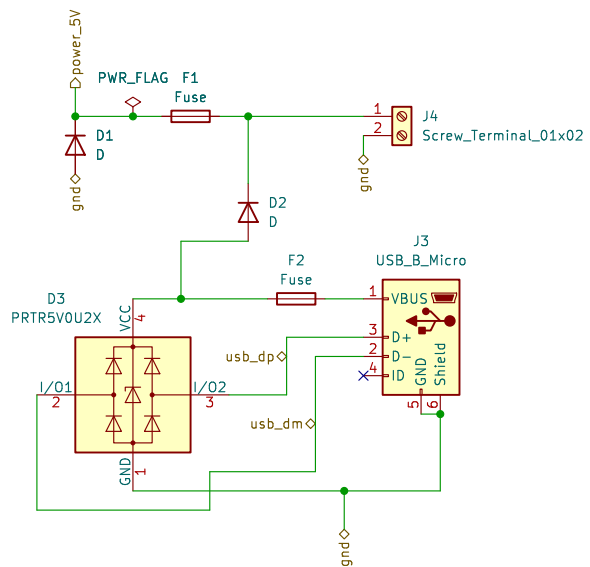


Sheet: /Keyboard/
File: keyboard.kicad_sch

Title:

Size: A4	Date:	Rev:
KiCad E.D.A. kicad 7.0.9+dfsg-1		Id: 4/13





Sheet: /Power supply/
File: power.kicad_sch

Title:

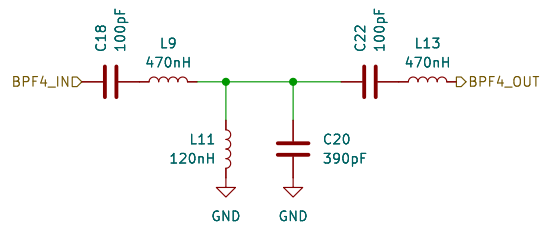
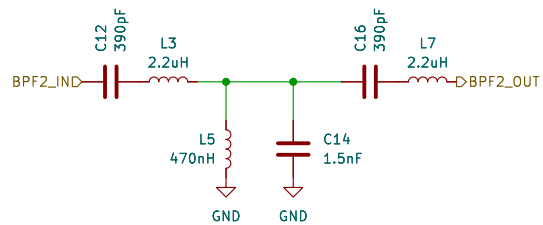
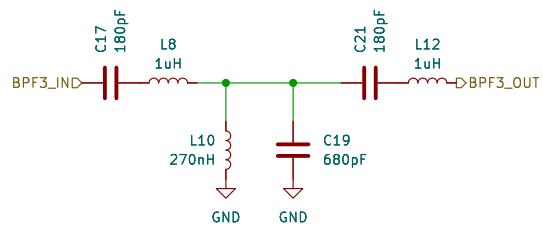
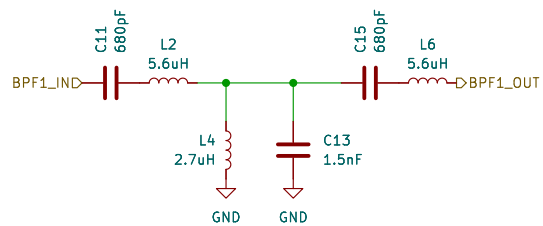
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Rev:

Id: 6/13



Sheet: /RF Processing/Filter selector/Filters/
File: filters.kicad_sch

Title:

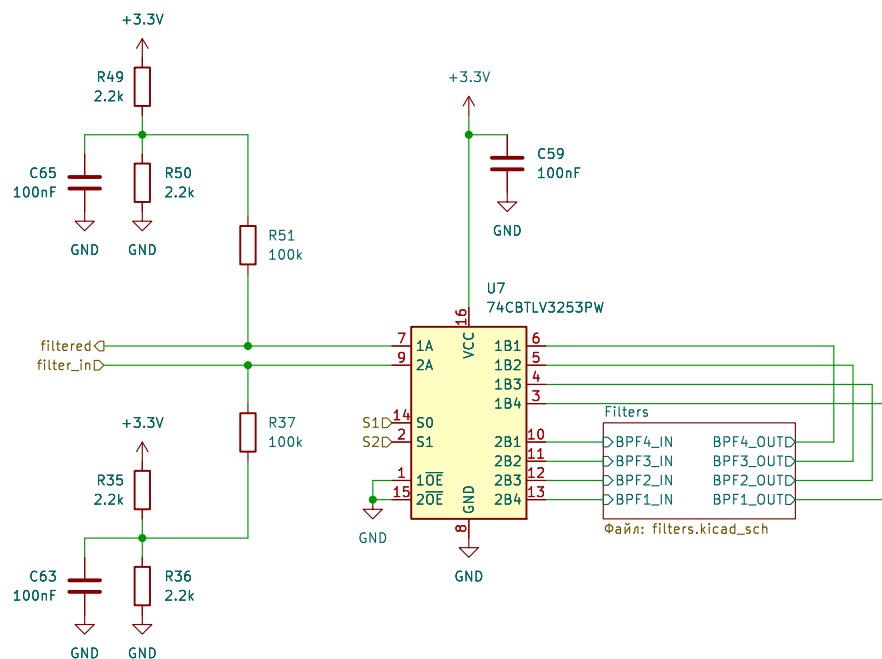
Size: A4

Date:

KiCad E.D.A. kicad 7.0.9+dfsg-1

Rev:

Id: 8/13



Sheet: /RF Processing/Filter selector/
File: filter_selector.kicad_sch

Title:

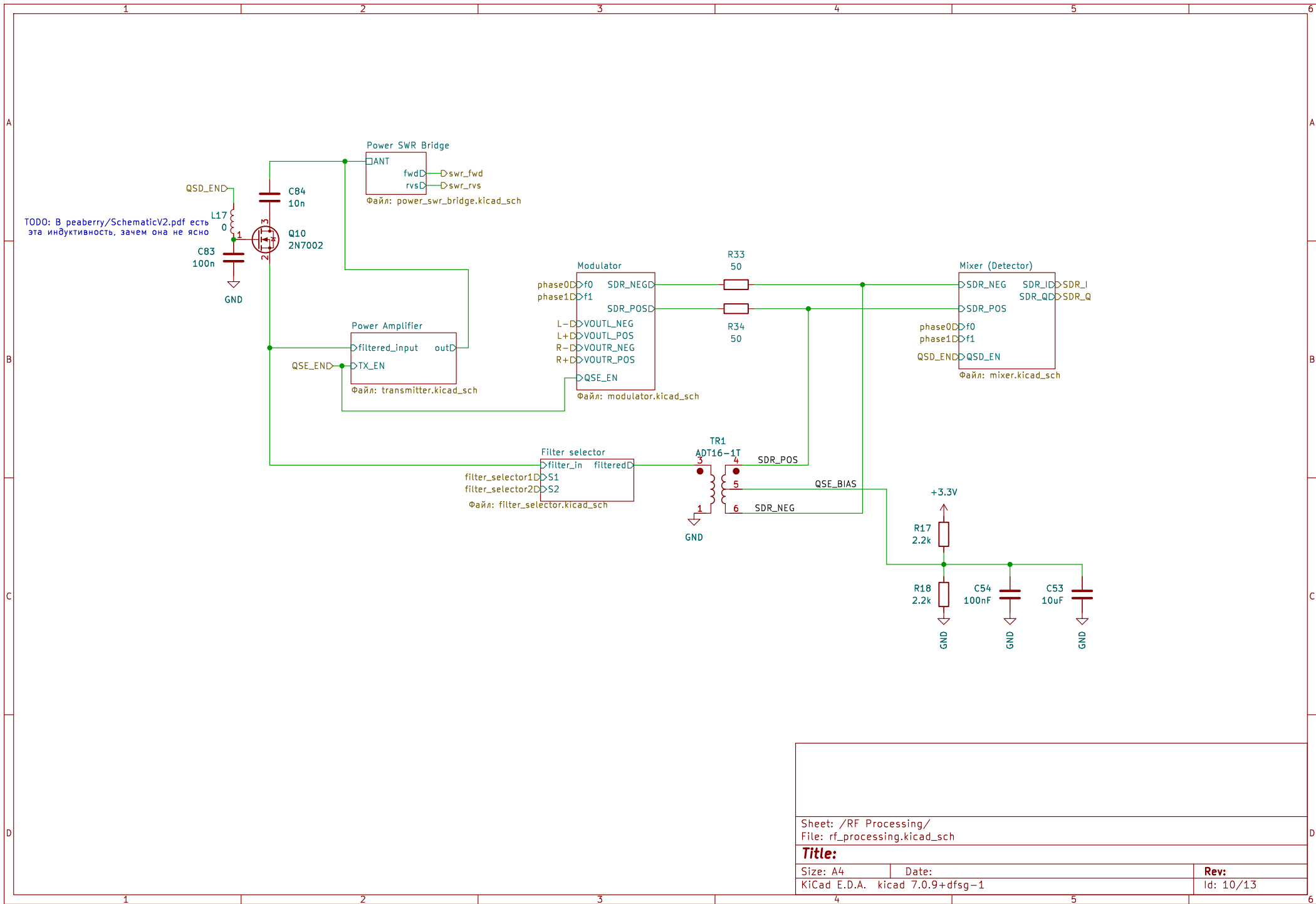
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Date:

KiCad E.D.A. kicad 7.0.9+dfsg-1

Rev:

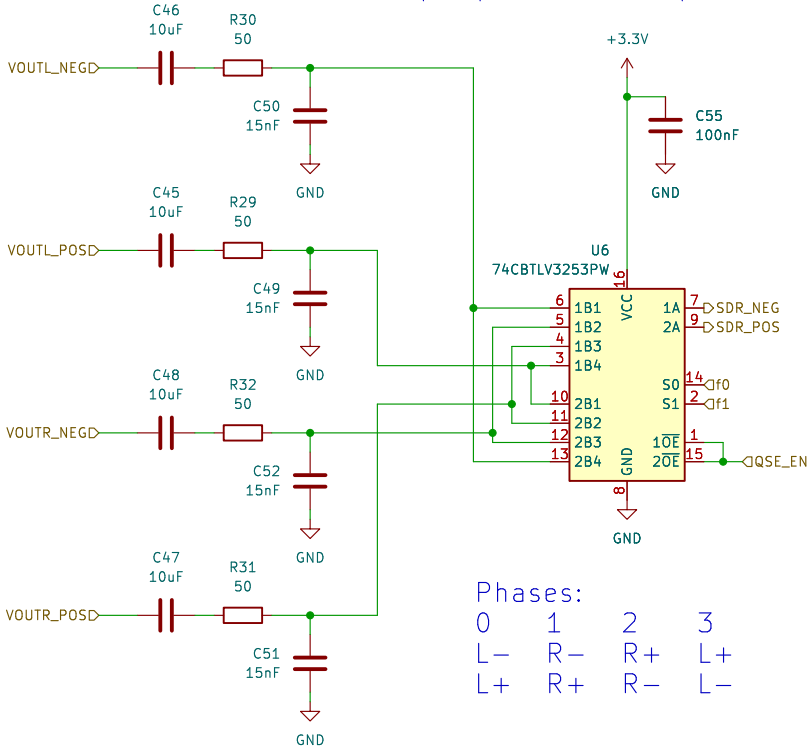
Id: 9/13



Based on Selenite Lite SDR HF Transceiver by Dmitrii Rudnev

TODO:
Вопрос:
Нужны ли разделительные конденсаторы
(C46 и прочие) на большую ёмкость?

TODO: Необходимость этих резисторов и их номинал под вопросом



Sheet: /RF Processing/Modulator/
File: modulator.kicad_sch

Title: Quadrature Sampling Exciter (QSE)

Size: A4

Date:

KiCad E.D.A. kicad 7.0.9+dfsg-1

Rev:

Id: 11/13

Double Balanced "Taylor" Detector (by Dan Tayloe)

TODO: Не факт что эти резисторы здесь нужны
Похоже, тут вылезла какая-то несогласованность
входного сопротивления

TODO: C57 не факт что нужен

TODO: R27 и R28 не нужны?

TODO: C43 и C44 не нужны?

Sheet: /RF Processing/Mixer (Detector)/
File: mixer.kicad_sch

Title: Balanced quadrature sampling detector (QSD)

Size: A4 Date: KiCad E.D.A. kicad 7.0.9+dfsg-1 Rev: Id: 12/13

Size: A4	Date:	Rev:
KiCad E.D.A. kicad 7.0.9+dfsg-1		Id: 12/13

"Stockton bridge"
from (tr)uSDX RF board

TODO: Для точности можно использовать
сдвоенное кольцо ("бинокль")

Component values and labels:

- R9: 100
- R8: 100
- D5: 1N4148W
- C66: 10n
- C64: 10n
- L18: 47uH
- R7: 68k
- L15: 3:21 ratio
- D4: 1N4148W
- R4: 68k
- L19: 47uH
- C62: 10n
- C61: 10n
- R6: 100
- R5: 100
- L14: 1:7 ratio
- J8: Conn_Coaxial
- ANT_OUT
- ANT
- GND
- fwd
- rvs

Sheet: /RF Processing/Power SWR Bridge/
File: power_swr_bridge.kicad_sch

Title:

Size: A4	Date:	Rev:
KiCad E.D.A.	kicad 7.0.9+dfsg-1	Id: 13/13

"Stockton bridge"
from (tr)uSDX RF board

TODO: Для точности можно использовать
сдвоенное кольцо ("бинокль")

The schematic diagram illustrates a "Stockton bridge" circuit, a type of SWR bridge used for measuring the Standing Wave Ratio (SWR) in RF systems. The circuit is powered by a 5V supply and includes several key components:

- Antenna Inputs:** Two antenna inputs are connected via transformer-coupled connectors (L14 and L15) with ratios of 1:7 and 3:21, respectively. The L14 input is also connected to a coaxial connector (J8 Conn_Coaxial) and a ground plane (GND).
- Bridge Components:** The central bridge consists of two diodes (D4 and D5, 1N4148W) and four resistors (R4, R5, R6, R7, all 68k). The diodes are connected in a bridge configuration to measure the forward and reverse waves.
- Output Ports:** The bridge has two output ports labeled "fwd" (forward) and "rvs" (reverse), which are connected to the diodes and the resistors.
- Capacitors and Inductors:** The circuit includes several capacitors (C61, C62, C64, C66, all 10n) and inductors (L18, L19, both 47uH) for impedance matching and signal conditioning.
- Grounding:** The circuit is grounded at multiple points, including the antenna inputs, the bridge components, and the output ports.

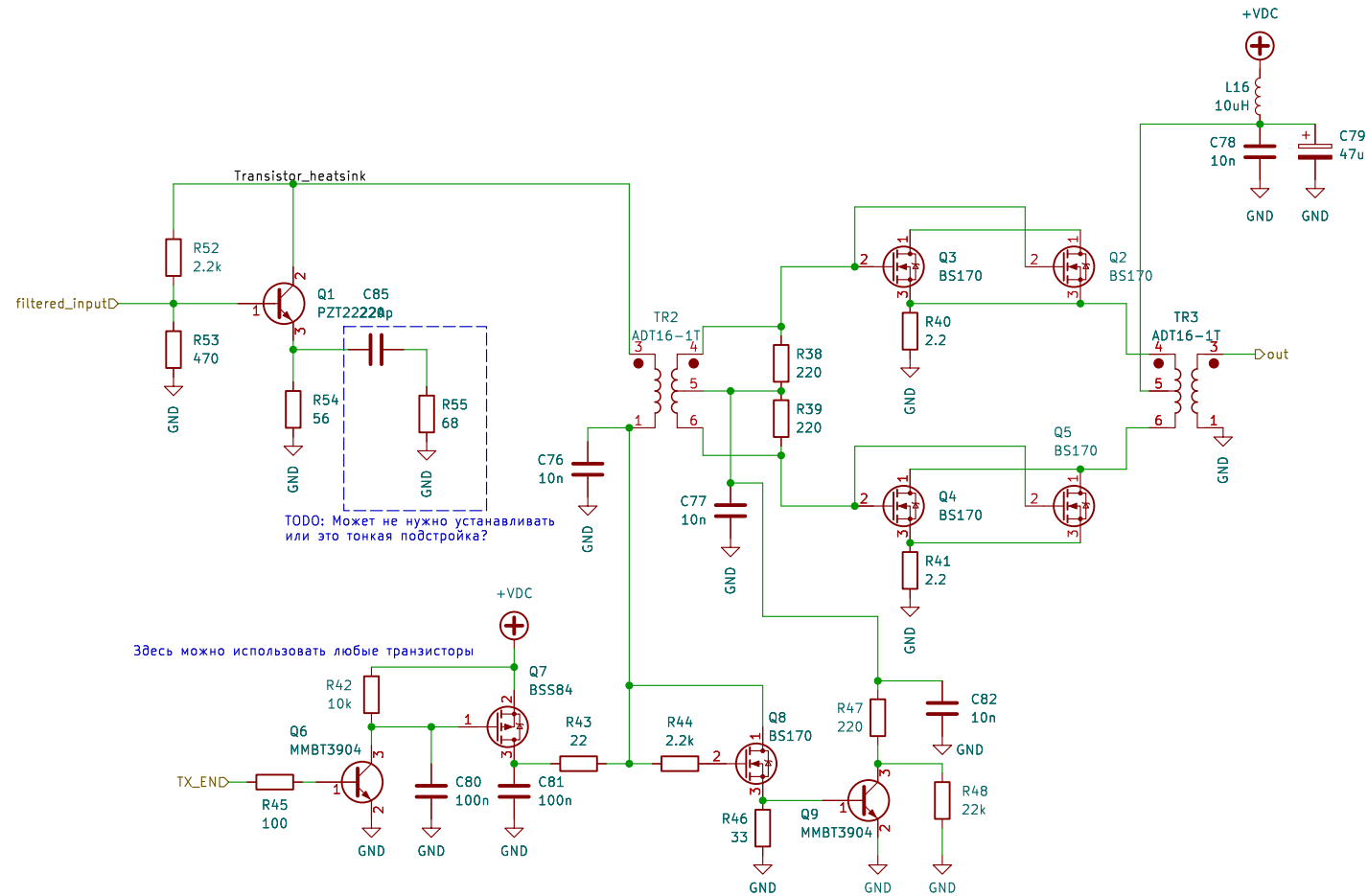
A note in Russian suggests that for accuracy, a "binocular" ring (сдвоенное кольцо) can be used instead of the current configuration.

Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad 7.0.9+dfsg-1		Id: 13/13

Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad 7.0.9+dfsg-1		Id: 13/13

Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad 7.0.9+dfsg-1		Id: 13/13

Based on AE9RB Peaberry SDR V2 circuit



Sheet: /RF Processing/Power Amplifier/
File: transmitter.kicad_sch

Title: Transmitter, Power Amplifier

Size: A4

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Rev:

KiCad E.D.A. kicad 7.0.9+dfsg-1

Id: 14/13