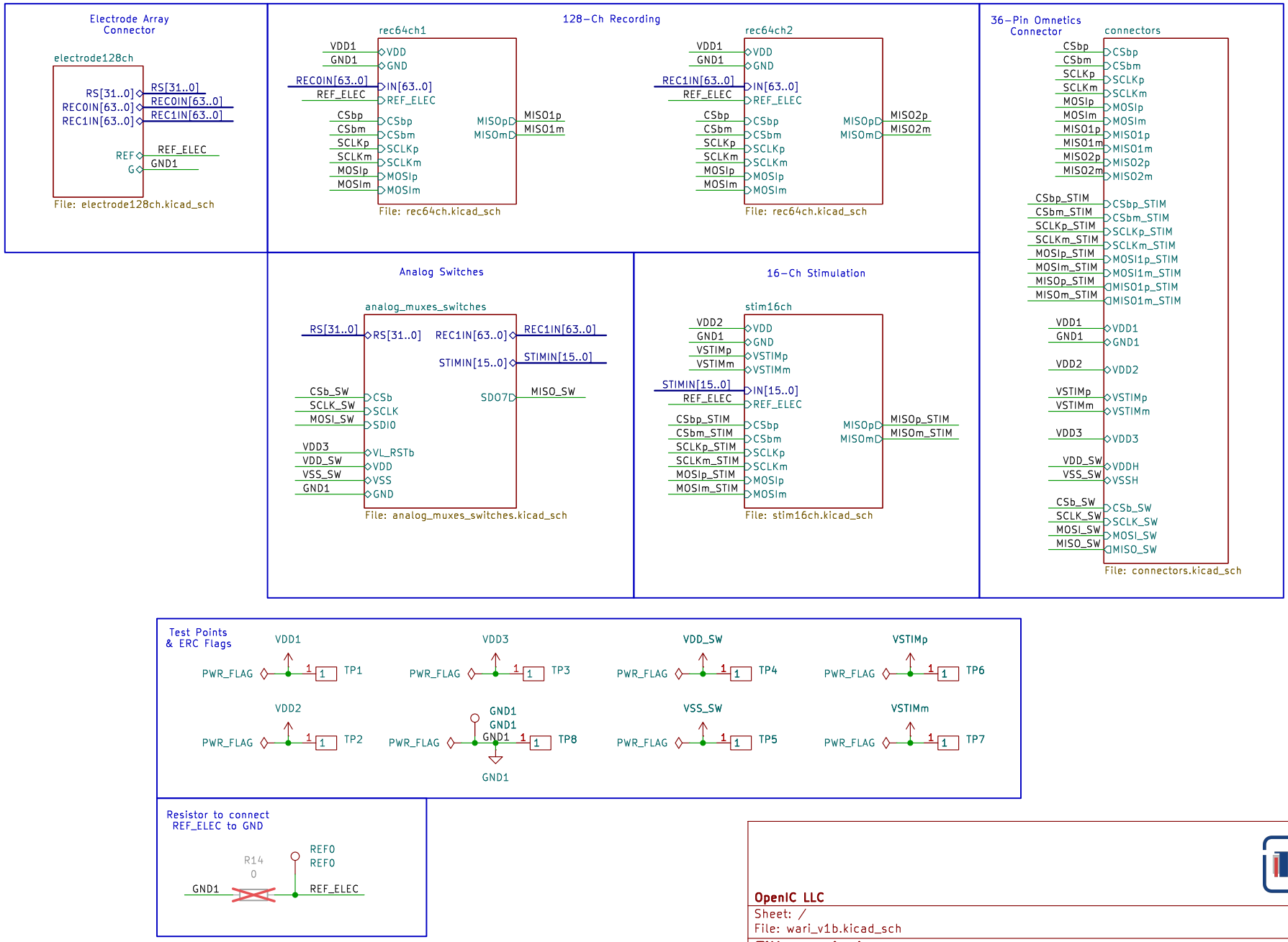
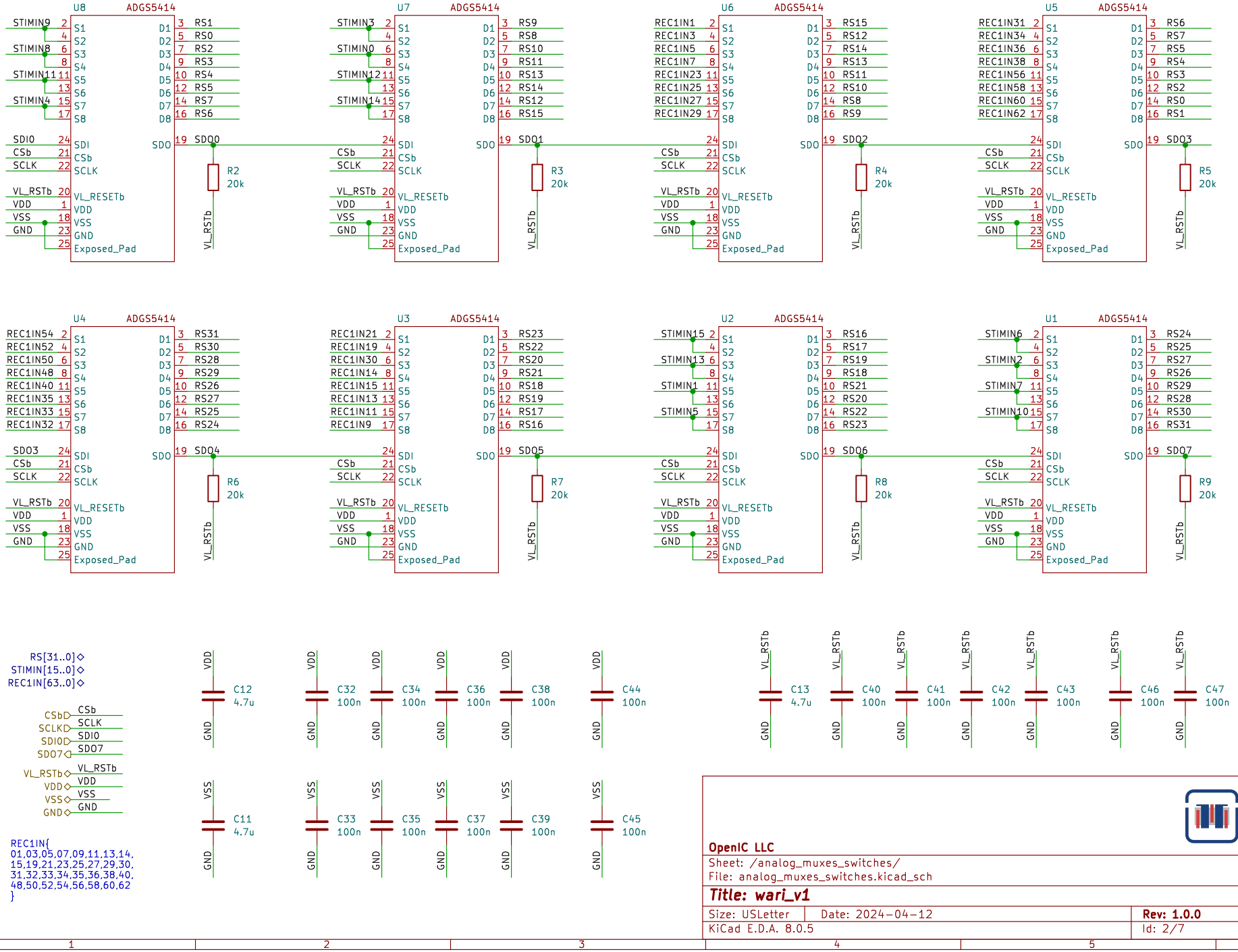
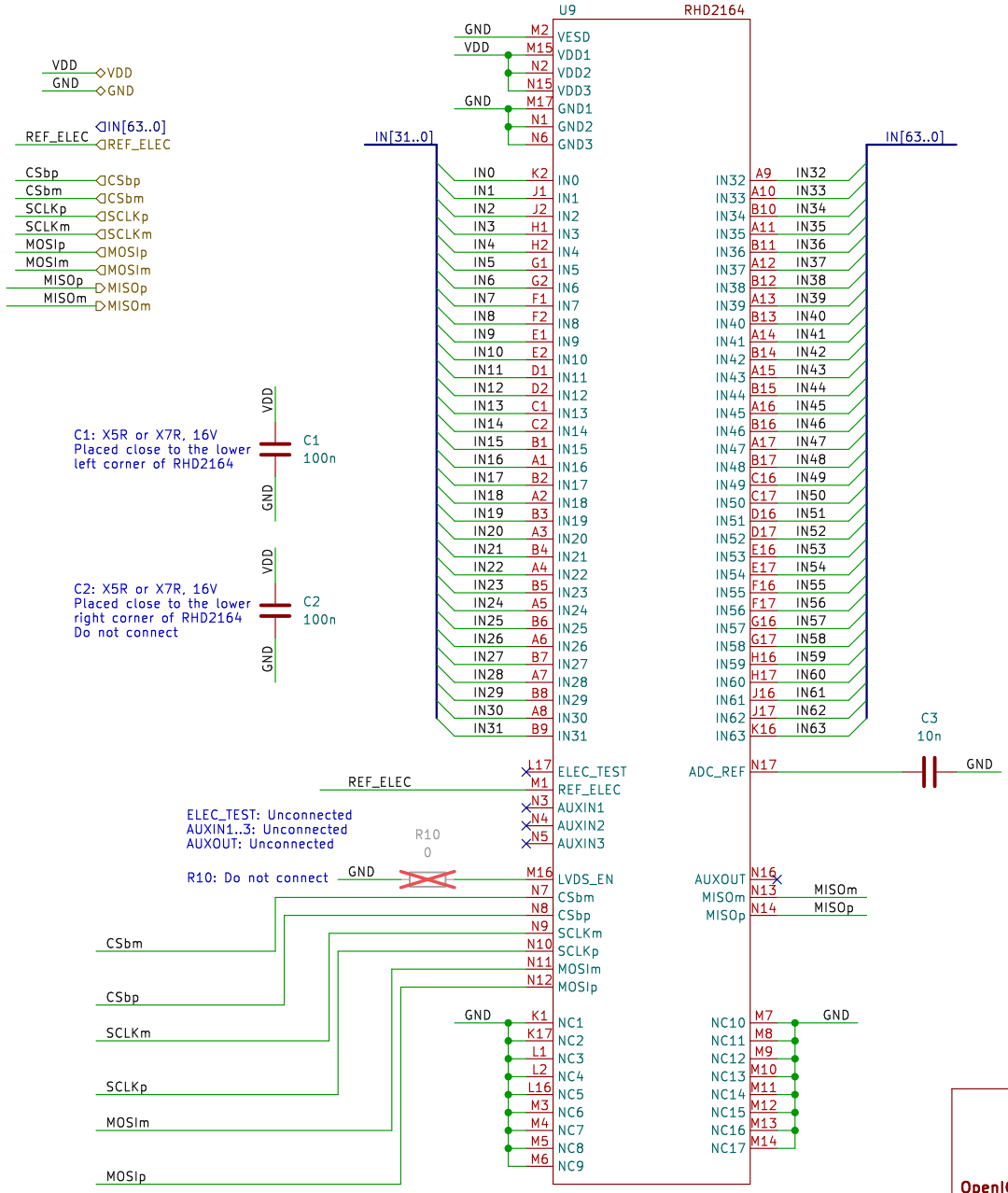

Electrode Array Connector
electrode128ch
RS[31..0]
REC0IN[63..0]
REC1IN[63..0]
REF
G
RS[31..0]
REC0IN[63..0]
REC1IN[63..0]
REF_ELEC
GND1
File: electrode128ch.kicad_sch
128-Ch Recording
rec64ch1
VDD1
GND1
REC0IN[63..0]
REF_ELEC
CSbp
CSbm
SCLKp
SCLKm
MOSIp
MOSIm
VDD
GND
IN[63..0]
REF_ELEC
CSbp
CSbm
SCLKp
SCLKm
MOSIp
MOSIm
MISOp
MISOm
MISO1p
MISO1m
File: rec64ch.kicad_sch
rec64ch2
VDD1
GND1
REC1IN[63..0]
REF_ELEC
CSbp
CSbm
SCLKp
SCLKm
MOSIp
MOSIm
VDD
GND
IN[63..0]
REF_ELEC
CSbp
CSbm
SCLKp
SCLKm
MOSIp
MOSIm
MISOp
MISOm
MISO2p
MISO2m
File: rec64ch.kicad_sch
36-Pin Omnetics Connector
connectors
CSbp
CSbm
SCLKp
SCLKm
MOSIp
MOSIm
MISO1p
MISO1m
MISO2p
MISO2m
CSbp_STIM
CSbm_STIM
SCLKp_STIM
SCLKm_STIM
MOSIp_STIM
MOSIm_STIM
MISOp_STIM
MISOm_STIM
VDD1
GND1
VDD2
VSTIMp
VSTIMm
VDD3
VDD_SW
VSS_SW
CSb_SW
SCLK_SW
MOSI_SW
MISO_SW
CSbp
CSbm
SCLKp
SCLKm
MOSIp
MOSIm
MISO1p
MISO1m
MISO2p
MISO2m
CSbp_STIM
CSbm_STIM
SCLKp_STIM
SCLKm_STIM
MOSIp_STIM
MOSIm_STIM
MISO1p_STIM
MISO1m_STIM
VDD1
GND1
VDD2
VSTIMp
VSTIMm
VDD3
VDD_SW
VSS_SW
CSb_SW
SCLK_SW
MOSI_SW
MISO_SW
VDDH
VSSH
File: connectors.kicad_sch
Analog Switches
analog_muxes_switches
RS[31..0]
REC1IN[63..0]
STIMIN[15..0]
CSb_SW
SCLK_SW
MOSI_SW
VDD3
VDD_SW
VSS_SW
GND1
RS[31..0]
REC1IN[63..0]
STIMIN[15..0]
SDO7
CSb
SCLK
SDIO
VL_RSTb
VDD
VSS
GND
MISO_SW
File: analog_muxes_switches.kicad_sch
16-Ch Stimulation
stim16ch
VDD2
GND1
VSTIMp
VSTIMm
STIMIN[15..0]
REF_ELEC
CSbp_STIM
CSbm_STIM
SCLKp_STIM
SCLKm_STIM
MOSIp_STIM
MOSIm_STIM
VDD
GND
VSTIMp
VSTIMm
IN[15..0]
REF_ELEC
CSbp
CSbm
SCLKp
SCLKm
MOSIp
MOSIm
MISOp
MISOm
MISOp_STIM
MISOm_STIM
File: stim16ch.kicad_sch
Test Points & ERC Flags
VDD1
PWR_FLAG
TP1
VDD3
PWR_FLAG
TP3
VDD_SW
PWR_FLAG
TP4
VSTIMp
PWR_FLAG
TP6
VDD2
PWR_FLAG
TP2
GND1
GND1
GND1
PWR_FLAG
TP8
GND1
VSS_SW
PWR_FLAG
TP5
VSTIMm
PWR_FLAG
TP7
Resistor to connect REF_ELEC to GND
R14
0
GND1
REF0
REF0
REF_ELEC
OpenIC LLC
Sheet: /
File: wari_v1b.kicad_sch
Title: wari_v1
Size: USLetter
Date: 2024-04-12
Rev: 1.0.0
KiCad E.D.A. 8.0.5
Id: 1/7


U8 ADGS5414
U7 ADGS5414
U6 ADGS5414
U5 ADGS5414
U4 ADGS5414
U3 ADGS5414
U2 ADGS5414
U1 ADGS5414
R2 20k
R3 20k
R4 20k
R5 20k
R6 20k
R7 20k
R8 20k
R9 20k
RS[31..0]
STIMIN[15..0]
REC1IN[63..0]
REC1IN{
01,03,05,07,09,11,13,14,
15,19,21,23,25,27,29,30,
31,32,33,34,35,36,38,40,
48,50,52,54,56,58,60,62
}
OpenIC LLC
Sheet: /analog_muxes_switches/
File: analog_muxes_switches.kicad_sch
Title: wari_v1
Size: USLetter
Date: 2024-04-12
Rev: 1.0.0
KiCad E.D.A. 8.0.5
Id: 2/7



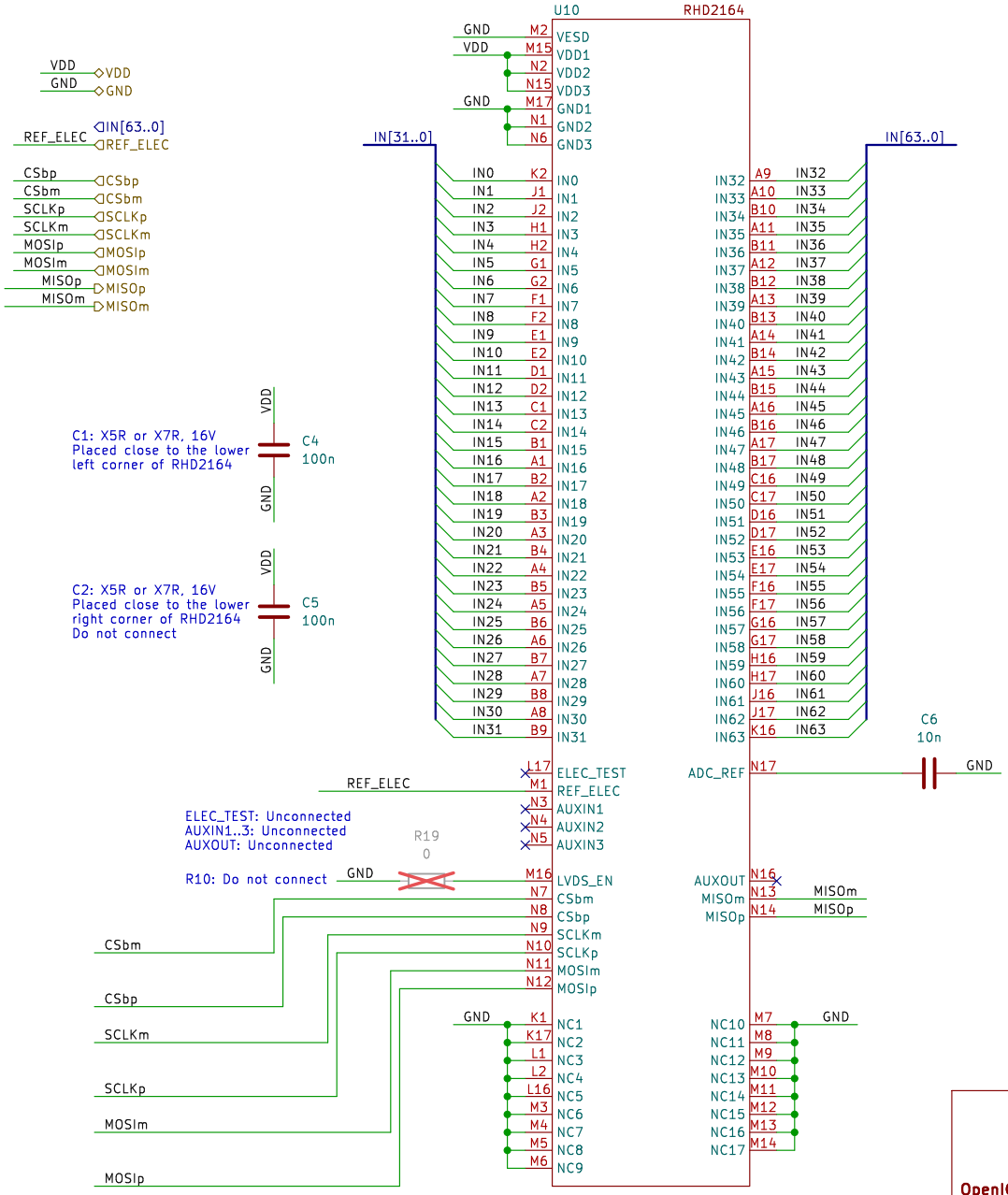
OpenIC LLC

Sheet: /rec64ch1/

File: rec64ch.kicad_sch

Title: wari_v1

Size: USLetter	Date: 2024-04-12	**Rev: 1.0.0**
KiCad E.D.A. 8.0.5		Id: 3/7



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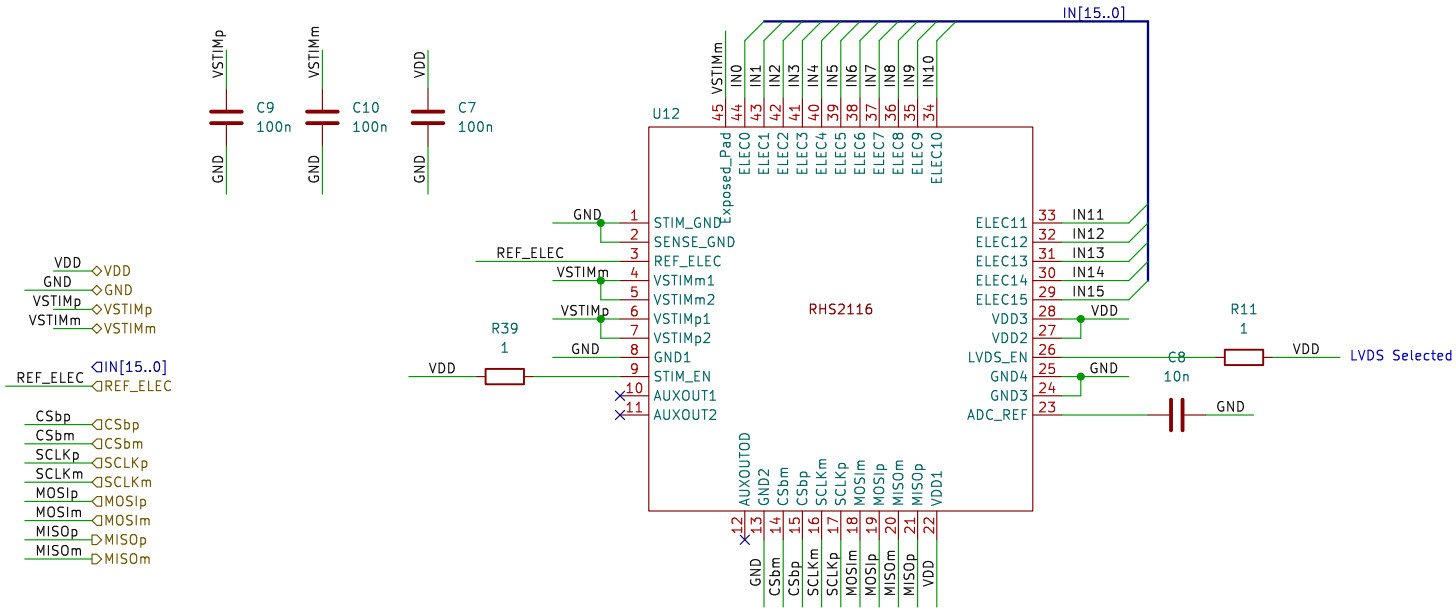
Sheet: /rec64ch2/

File: rec64ch.kicad_sch

Title: wari_v1

Size: USLetter	Date: 2024-04-12	**Rev: 1.0.0**
KiCad E.D.A. 8.0.5		Id: 4/7



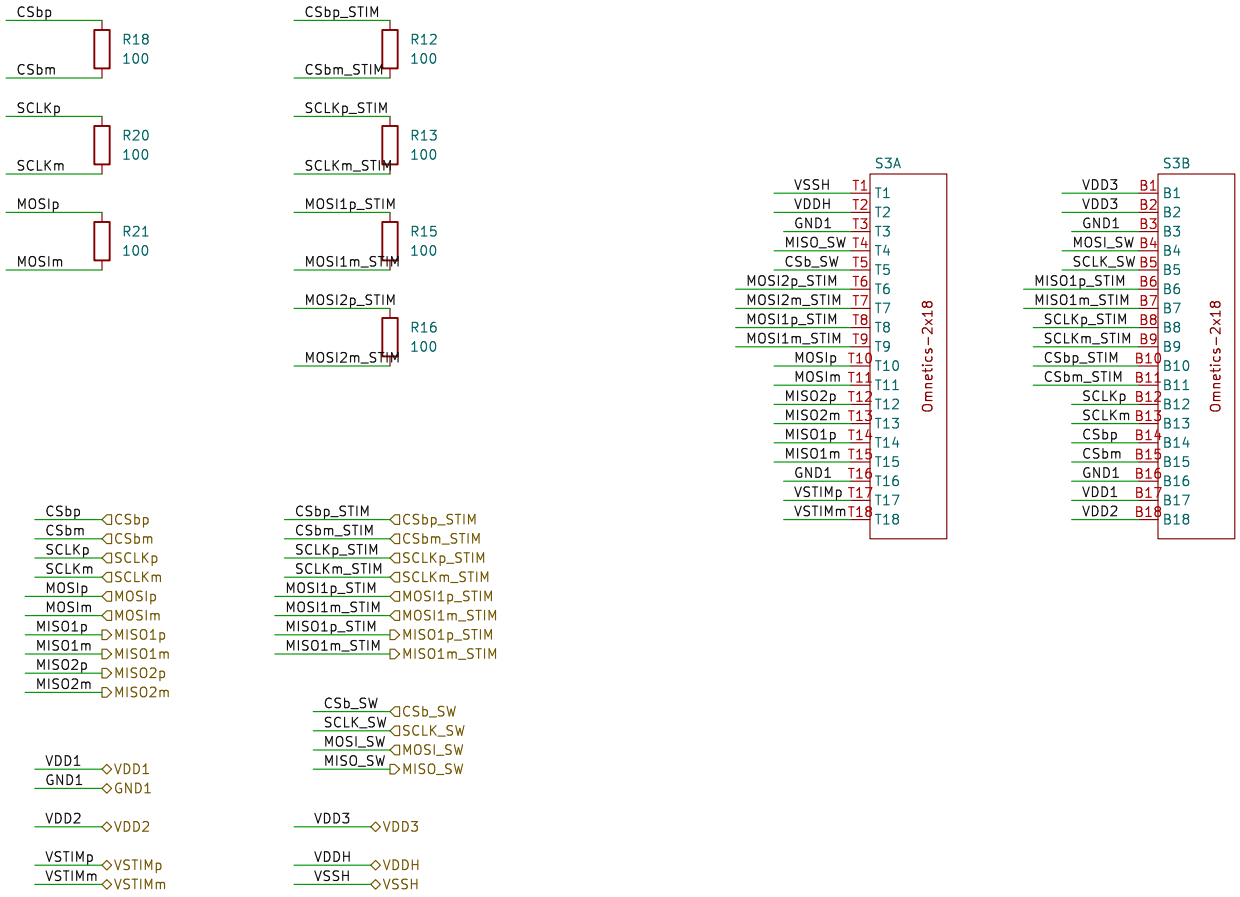
OpenIC LLC

Sheet: /stim16ch/

File: stim16ch.kicad_sch

Title: wari_v1

Size: USLetter	Date: 2024-04-12	**Rev: 1.0.0**
KiCad E.D.A. 8.0.5		Id: 5/7



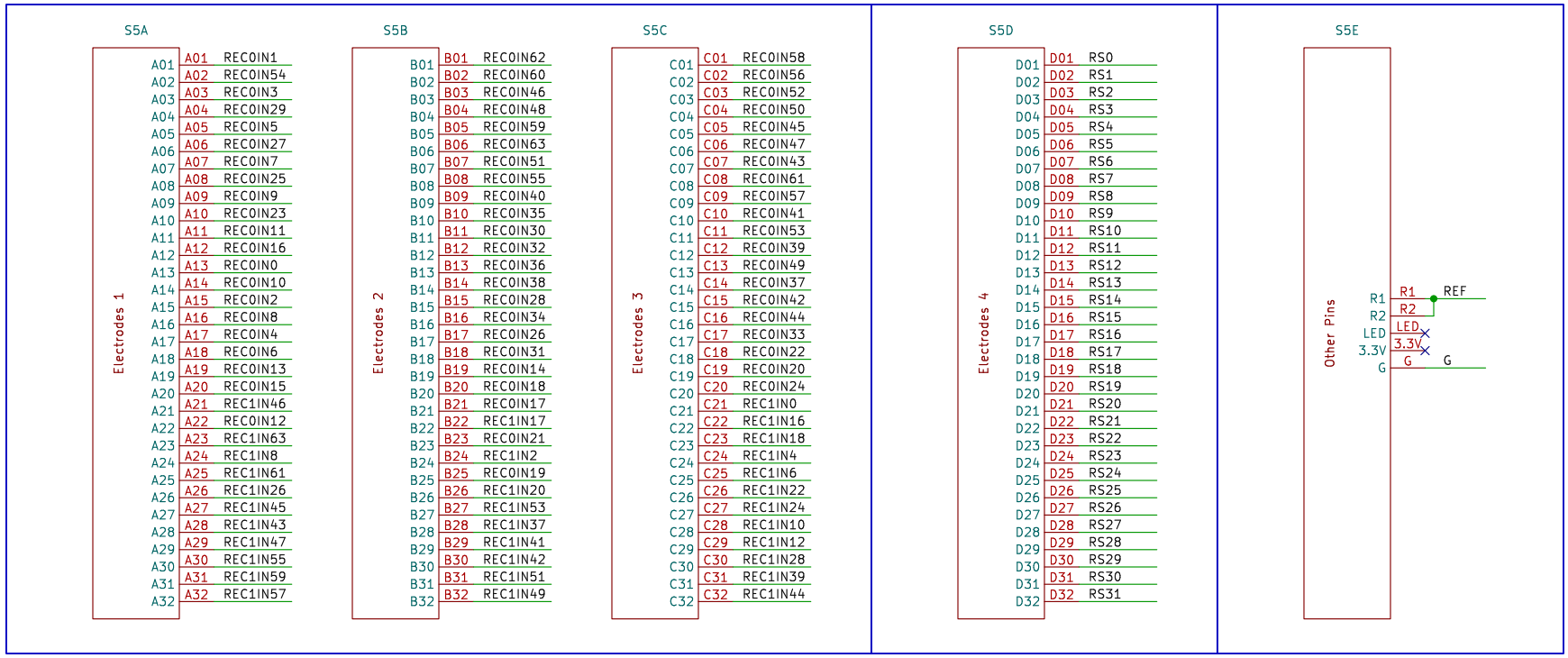
OpenIC LLC

Sheet: /connectors/

File: connectors.kicad_sch

Title: wari_v1

Size: USLetter	Date: 2024-04-12	**Rev: 1.0.0**
KiCad E.D.A. 8.0.5		Id: 6/7



REF ◇REF

◇RECOIN[63..0]
◇REC1IN[63..0]
G ◇G
◇RS[31..0]

REC1IN{
00,02,04,06,08,10,12,16,
17,18,20,22,24,26,28,37
39,41,42,43,44,45,46,47,
49,51,53,55,57,59,61,63
}

OpenIC LLC

Sheet: /electrode128ch/
File: electrode128ch.kicad_sch

Title: wari_v1

Size: USLetter	Date: 2024-04-12	**Rev: 1.0.0**
KiCad E.D.A. 8.0.5		Id: 7/7