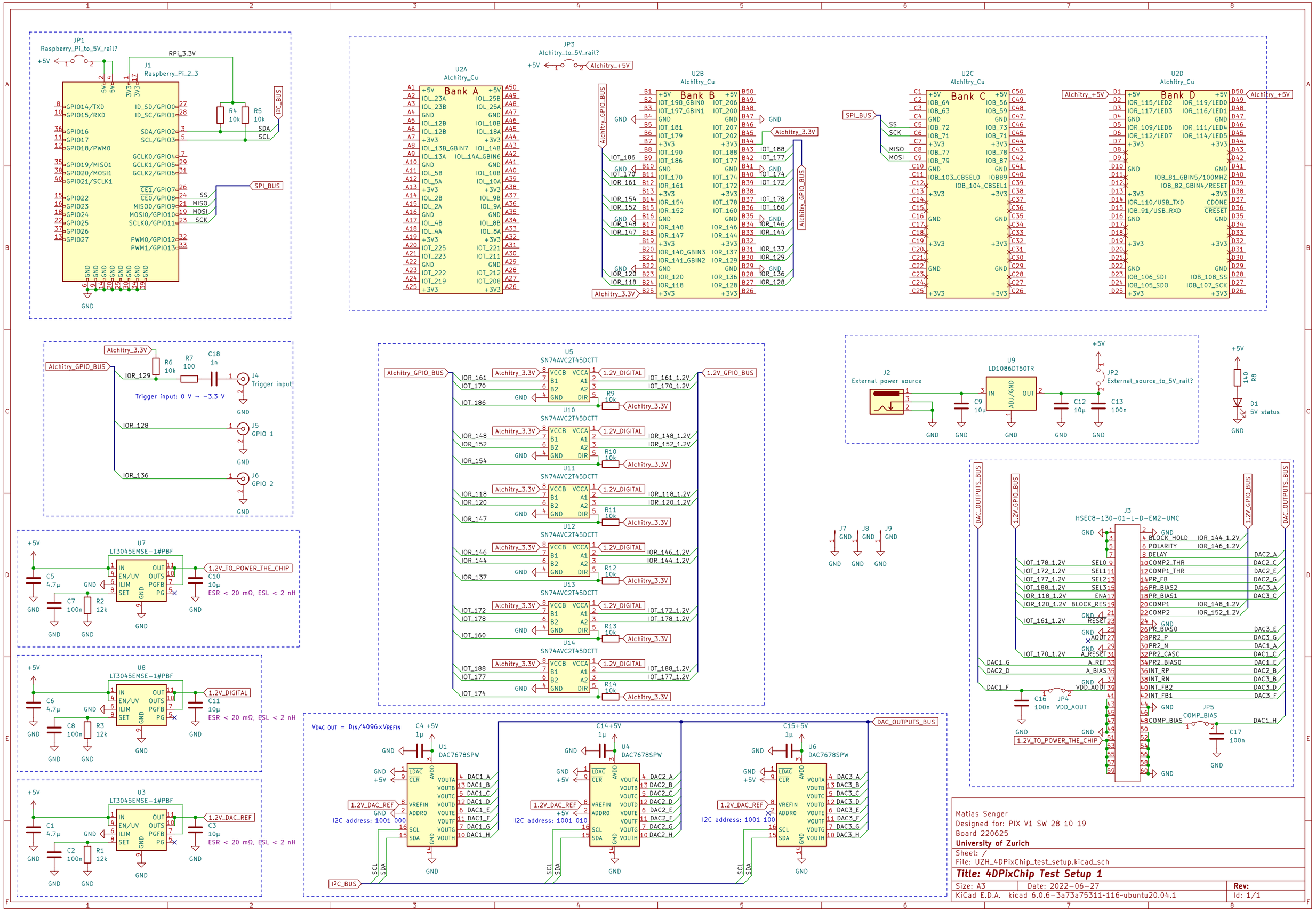
JP1
Raspberry_Pi_to_5V_rail?
J1
Raspberry_Pi_2_3
RPi_3.3V
R4 10k
R5 10k
I2C_BUS
SDA
SCL
SPI_BUS
SS
MISO
MOSI
SCK
GND
JP3
Alchitry_to_5V_rail?
Alchitry_+5V
U2A
Alchitry_Cu
Bank A
U2B
Bank B
Alchitry_GPIO_BUS
Alchitry_3.3V
U2C
Bank C
U2D
Bank D
Alchitry_3.3V
R6 10k
R7 100
C18 1n
J4
Trigger input
Trigger input: 0 V → −3.3 V
J5
GPIO 1
J6
GPIO 2
U5
SN74AVC2T45DCTT
U10
U11
U12
U13
U14
1.2V_DIGITAL
1.2V_GPIO_BUS
R9 10k
R10 10k
R11 10k
R12 10k
R13 10k
R14 10k
J2
External power source
U9
LD1086DT50TR
JP2
External_source_to_5V_rail?
C9 10µ
C12 10µ
C13 100n
R8 140
D1
5V status
J7
J8
J9
U7
LT3045EMSE-1#PBF
C5 4.7µ
C7 100n
R2 12k
C10 10µ
ESR < 20 mΩ, ESL < 2 nH
1.2V_TO_POWER_THE_CHIP
U8
C6 4.7µ
C8 100n
R3 12k
C11 10µ
U3
C1 4.7µ
C2 100n
R1 12k
C3 10µ
1.2V_DAC_REF
VDAC OUT = DIN/4096×VREFIN
C4 +5V 1µ
U1
DAC7678SPW
C14+5V 1µ
U4
C15+5V 1µ
U6
I2C address: 1001 000
I2C address: 1001 010
I2C address: 1001 100
I2C_BUS
DAC_OUTPUTS_BUS
J3
HSEC8-130-01-L-D-EM2-UMC
C16 100n
JP4
VDD_AOUT
JP5
COMP_BIAS
C17 100n
Matias Senger
Designed for: PIX V1 SW 28 10 19
Board 220625
University of Zurich
Sheet: /
File: UZH_4DPixChip_test_setup.kicad_sch
Title: 4DPixChip Test Setup 1
Size: A3
Date: 2022-06-27
Rev:
KiCad E.D.A. kicad 6.0.6-3a73a75311-116-ubuntu20.04.1
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