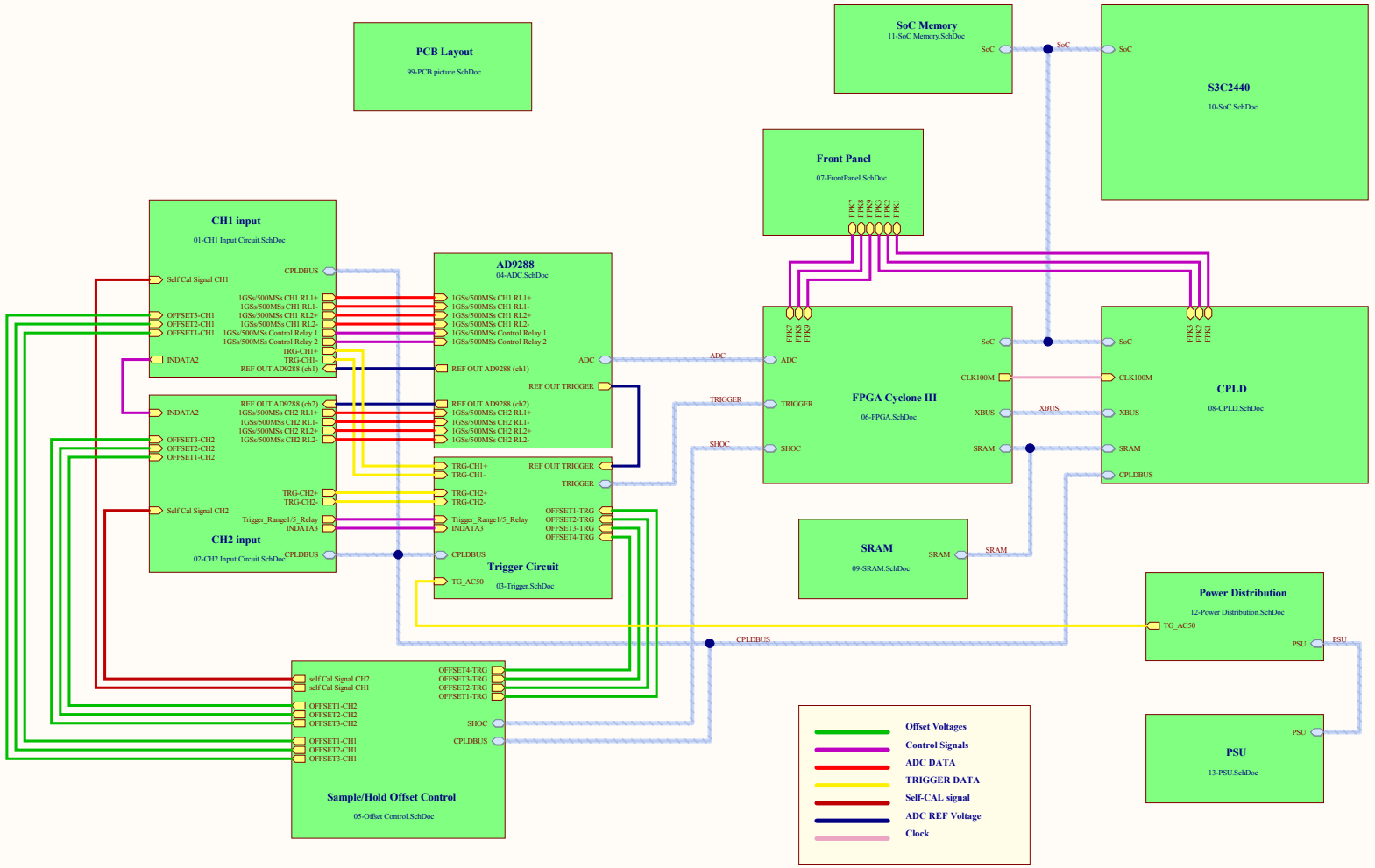
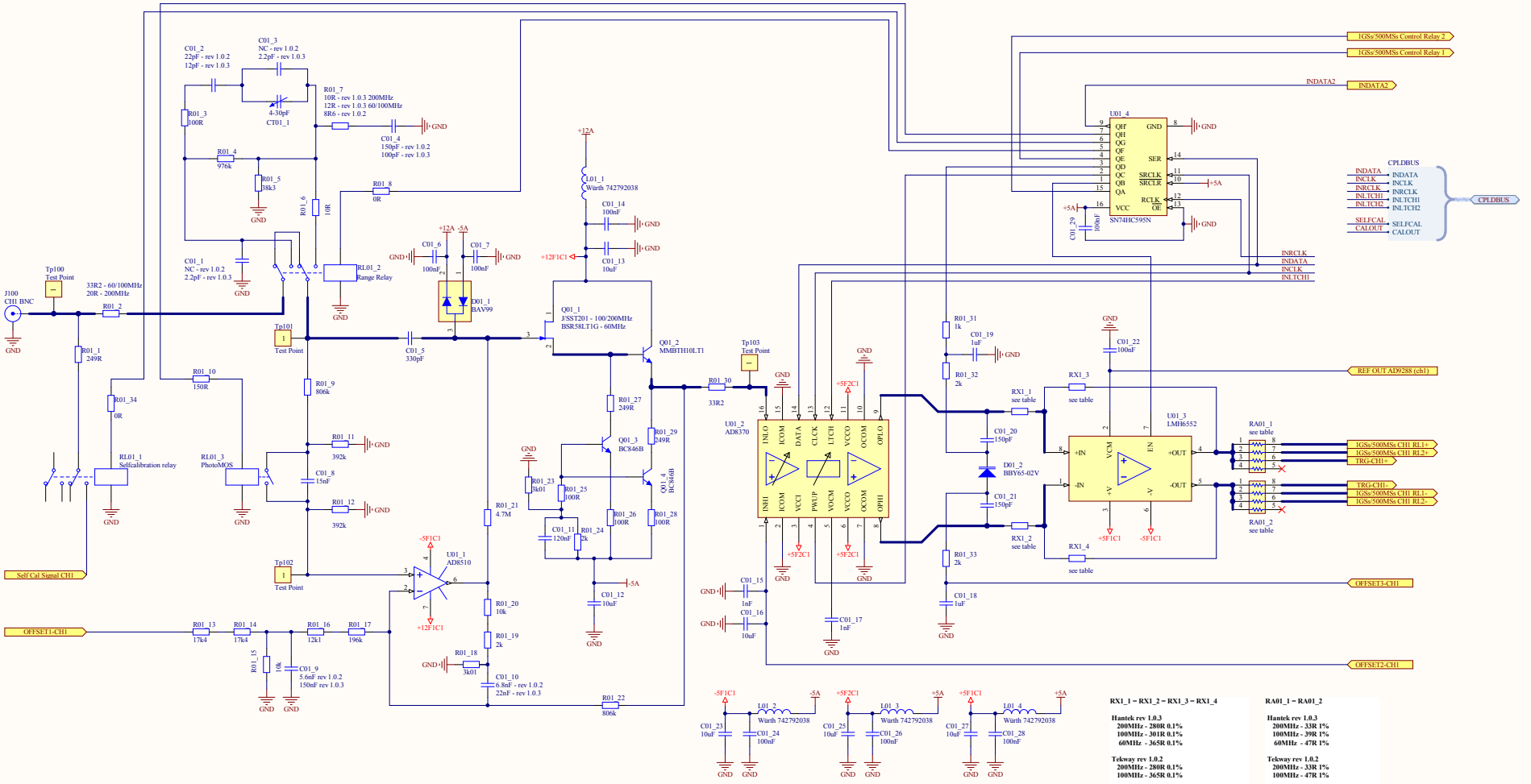
Tekway DST1xxxB DSO rev1.0.2 / 1.0.3
Hantek DSO5xxxM rev1.0.3
Hantek DSO5xxxB rev1.0.3



CH1 Input Circuit



RX1_1 = RX1_2 = RX1_3 = RX1_4

Hantek rev 1.0.3
200MHz - 280R 0.1%
100MHz - 301R 0.1%
60MHz - 365R 0.1%

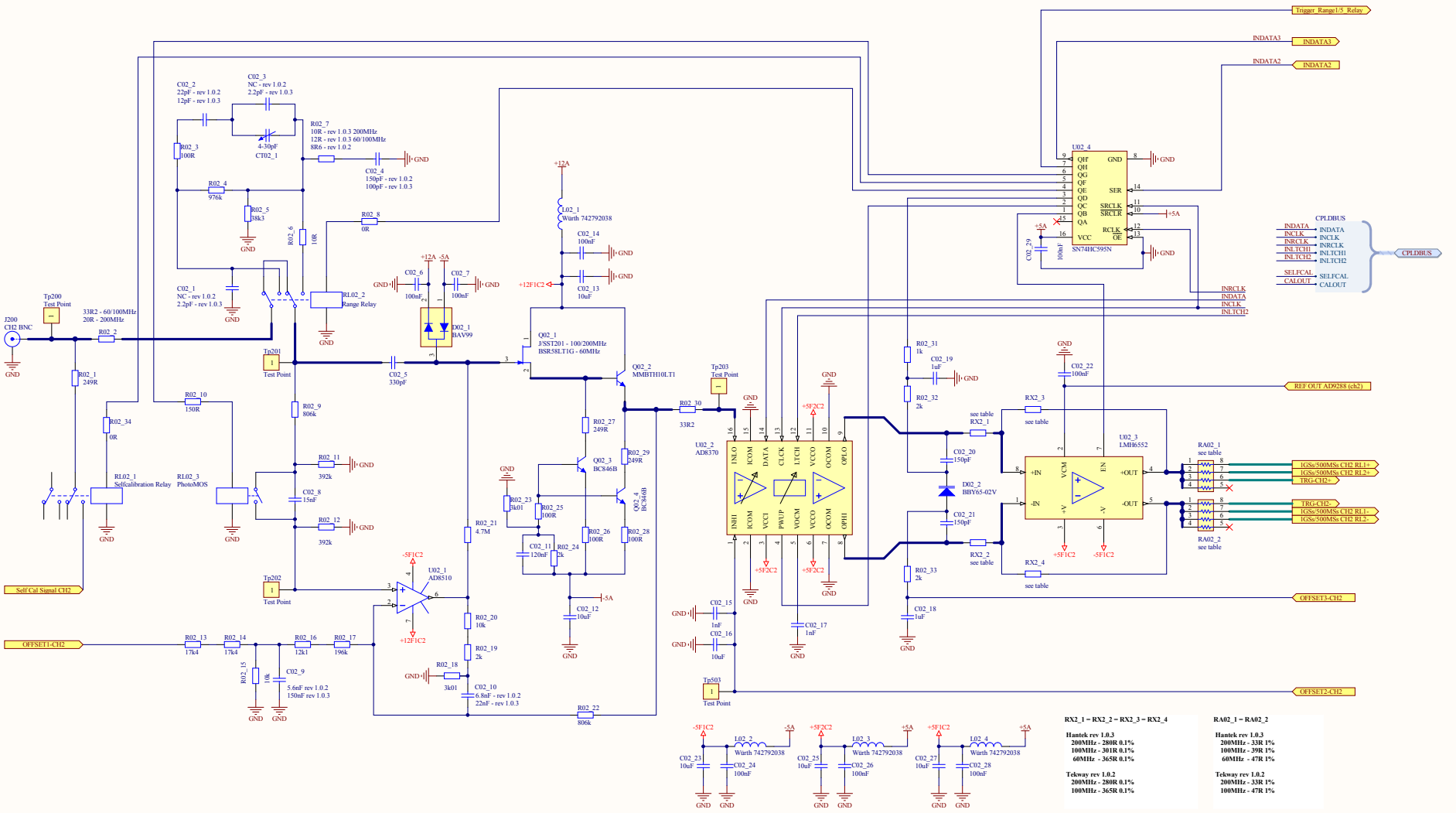
Tekway rev 1.0.2
200MHz - 280R 0.1%
100MHz - 365R 0.1%

RA01_1 = RA01_2

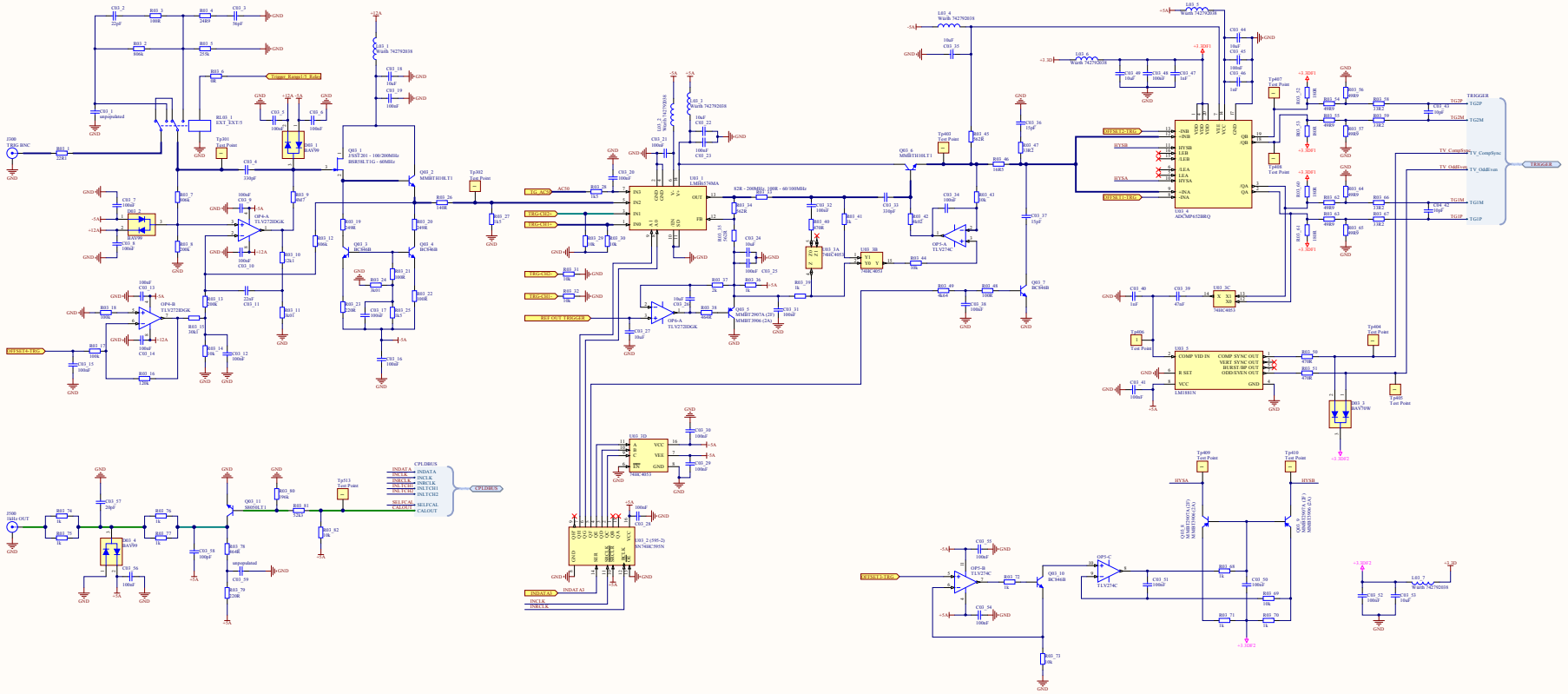
Hantek rev 1.0.3
200MHz - 33R 1%
100MHz - 39R 1%
60MHz - 47R 1%

Tekway rev 1.0.2
200MHz - 33R 1%
100MHz - 47R 1%

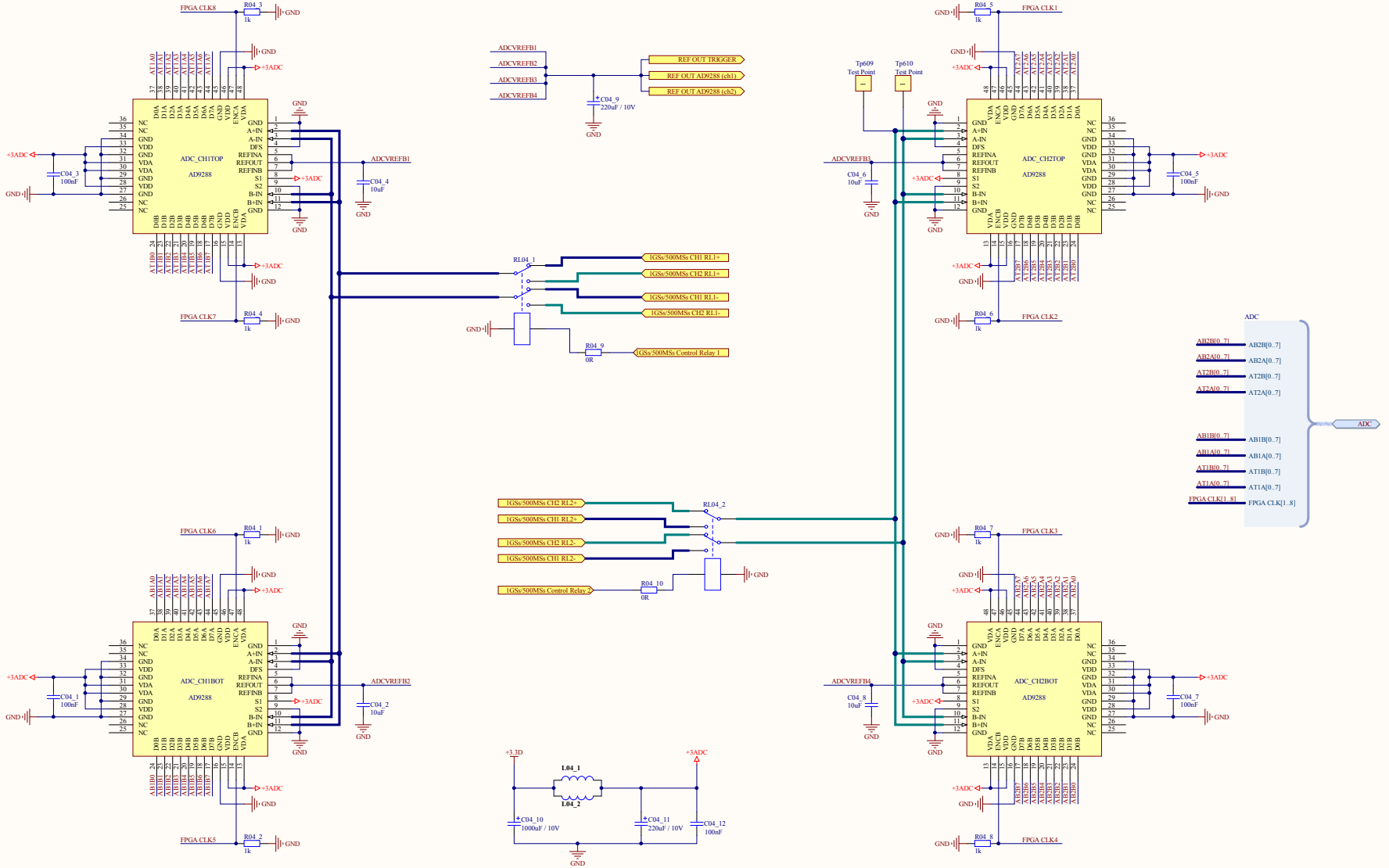
CH2 Input Circuit



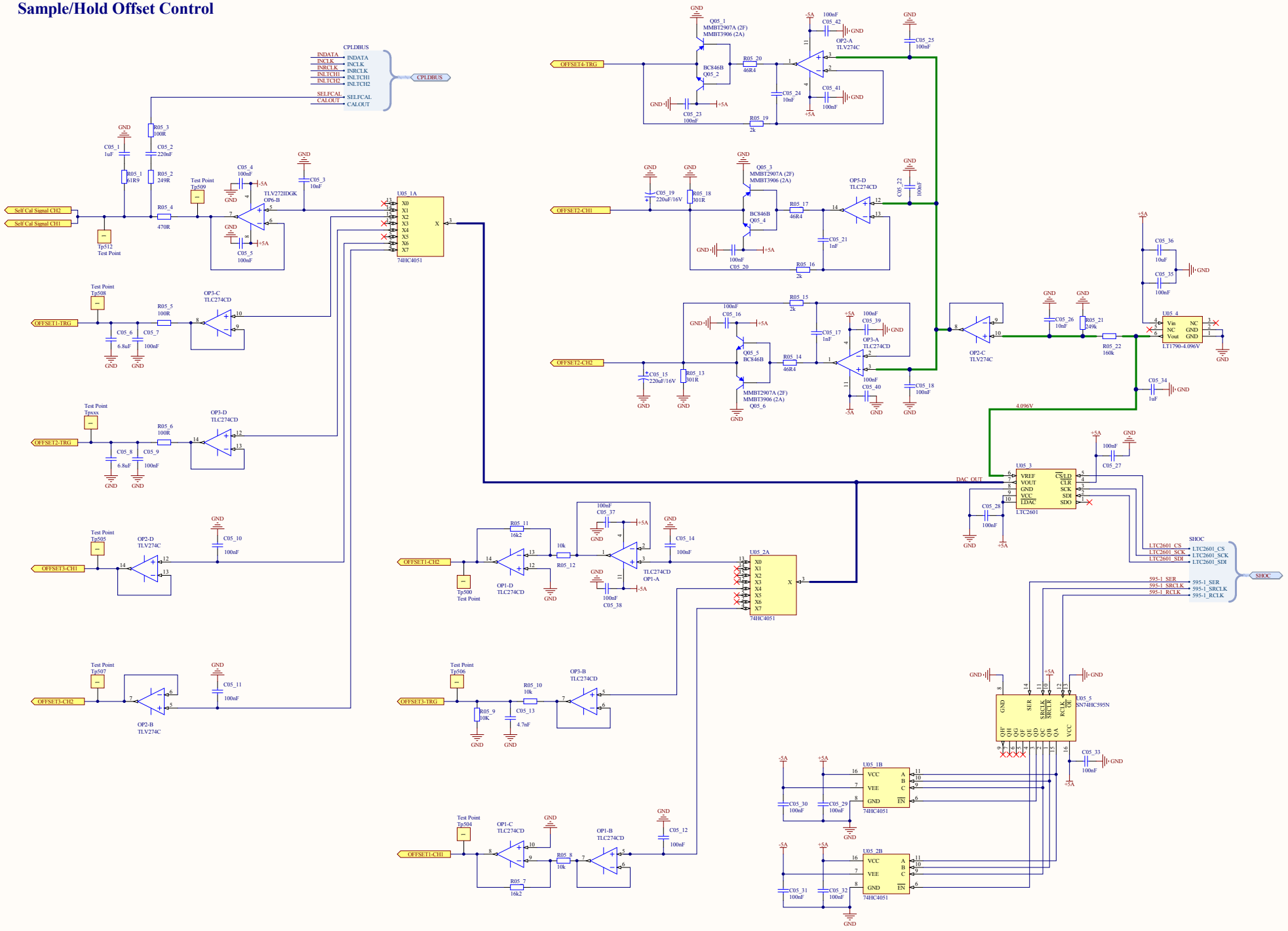
Trigger Circuit



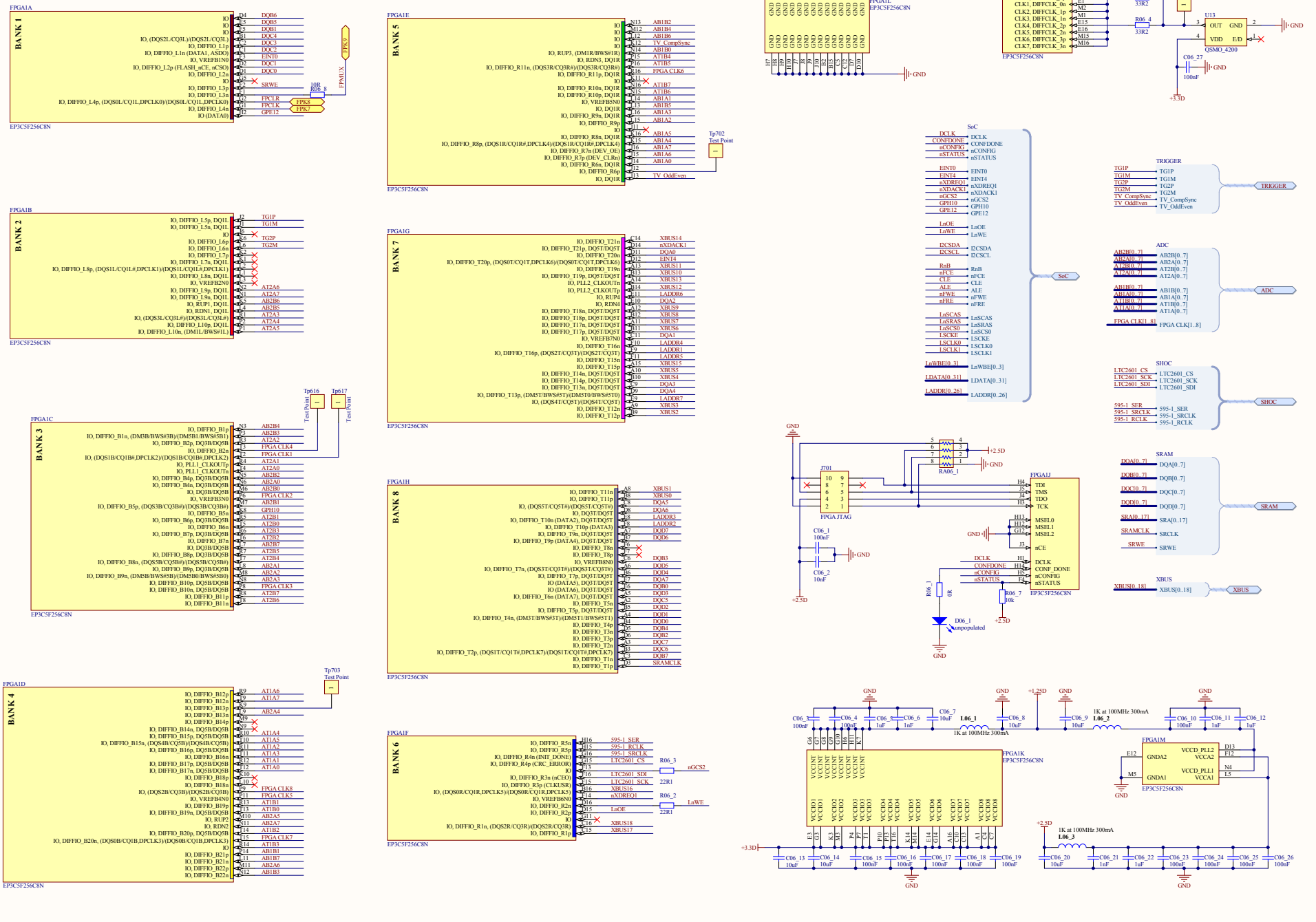
ADC Circuit


ADC_CH1TOP
ADC_CH1BOT
ADC_CH2TOP
ADC_CH2BOT
AD9288
FPGA CLK8
FPGA CLK7
FPGA CLK6
FPGA CLK5
FPGA CLK1
FPGA CLK2
FPGA CLK3
FPGA CLK4
ADCVREFB1
ADCVREFB2
ADCVREFB3
ADCVREFB4
REF OUT TRIGGER
REF OUT AD9288 (ch1)
REF OUT AD9288 (ch2)
1GSs/500MSs CH1 RL1+
1GSs/500MSs CH2 RL1+
1GSs/500MSs CH1 RL1-
1GSs/500MSs CH2 RL1-
1GSs/500MSs Control Relay 1
1GSs/500MSs CH2 RL2+
1GSs/500MSs CH1 RL2+
1GSs/500MSs CH2 RL2-
1GSs/500MSs CH1 RL2-
1GSs/500MSs Control Relay 2
RL04_1
RL04_2
Tp609
Tp610
ADC

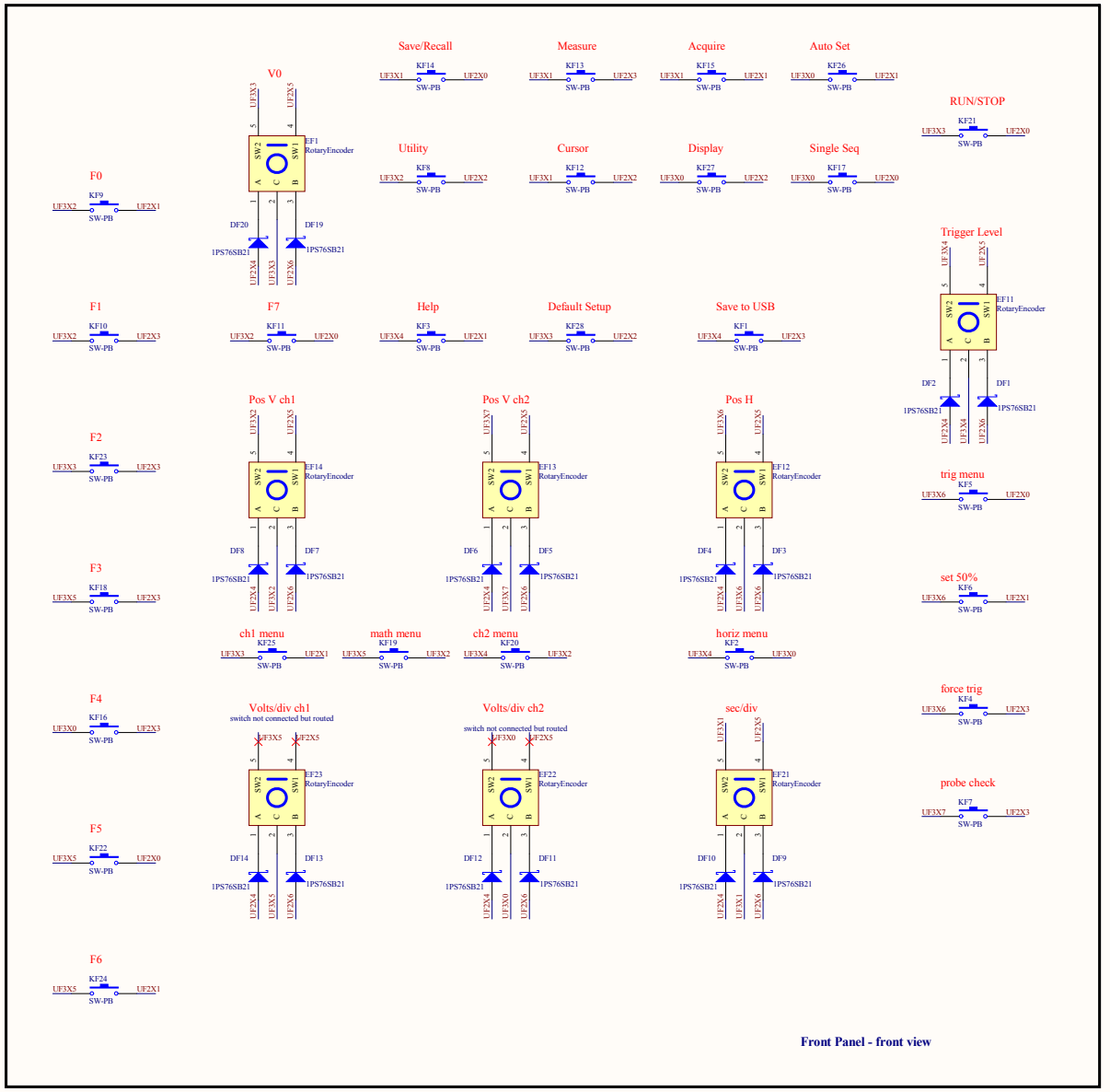
Sample/Hold Offset Control



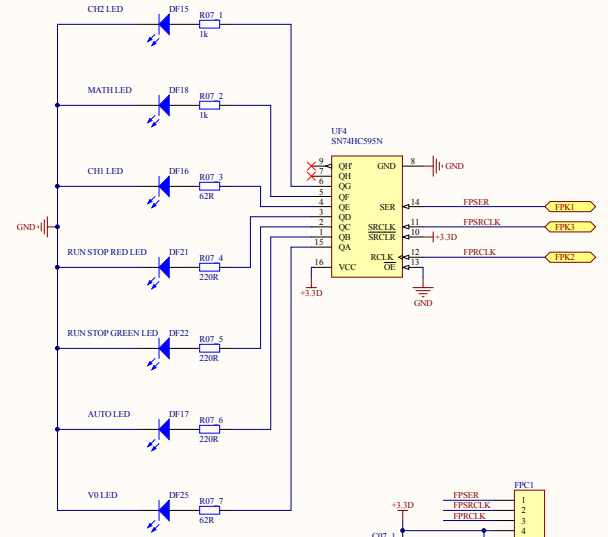
FPGA Circuit

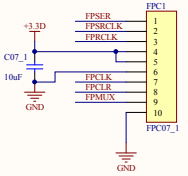


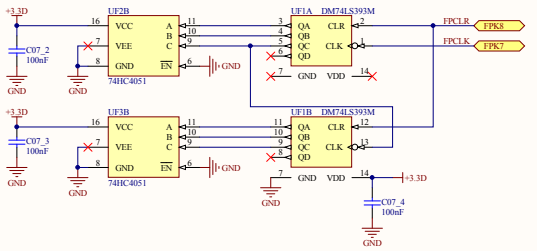
Front Panel Circuit

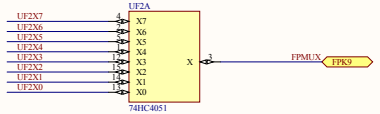


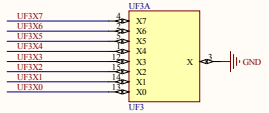
Front Panel - front view



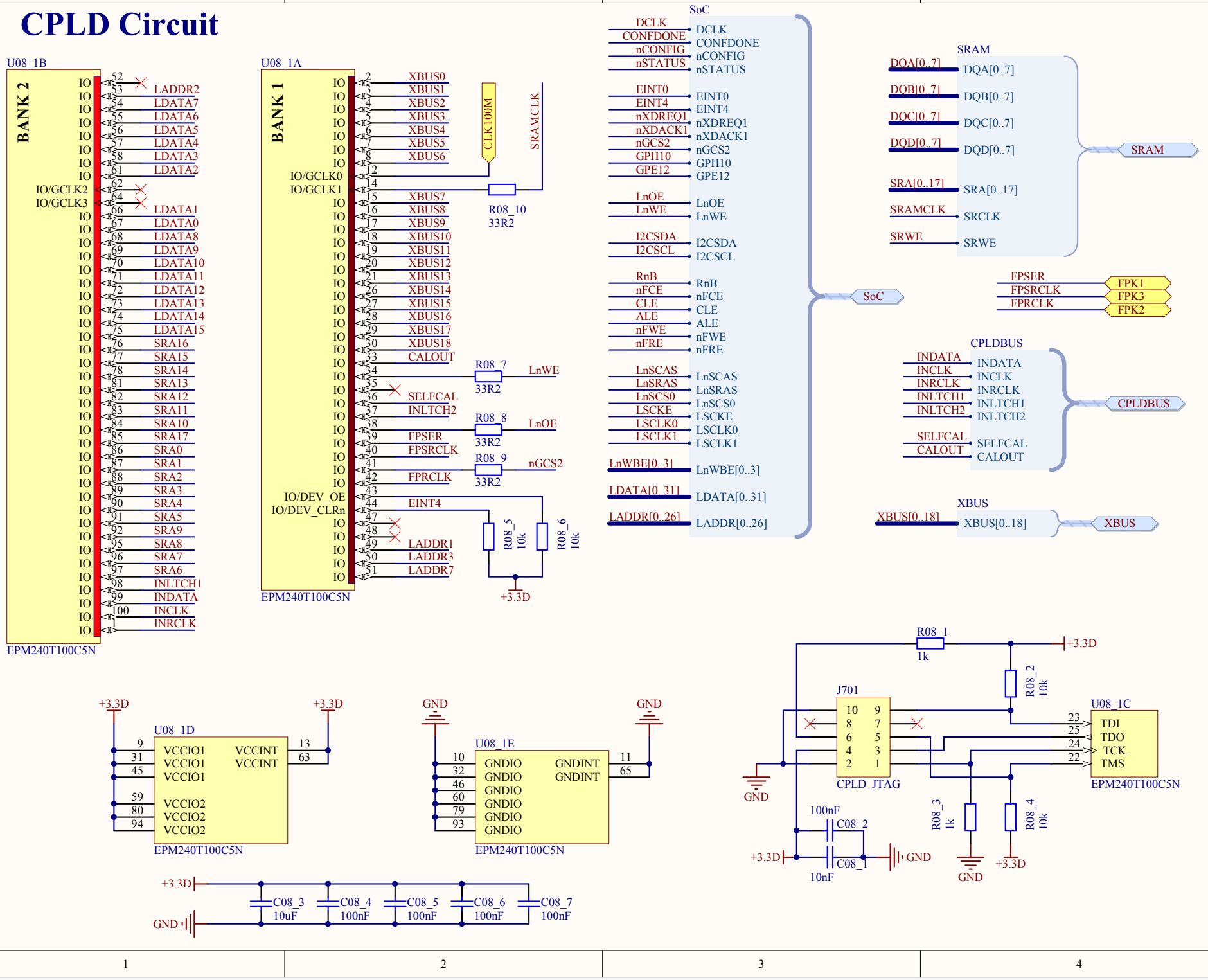




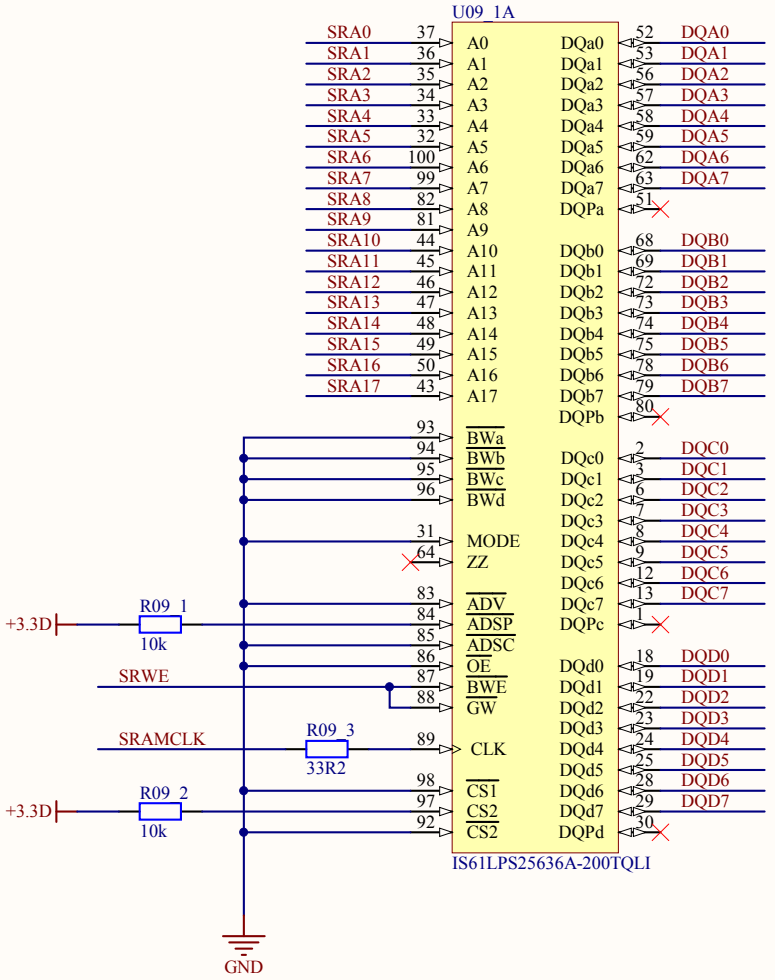


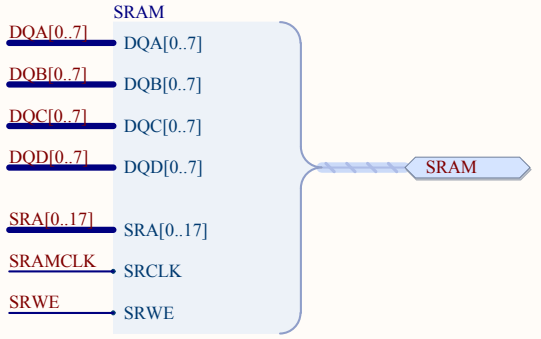


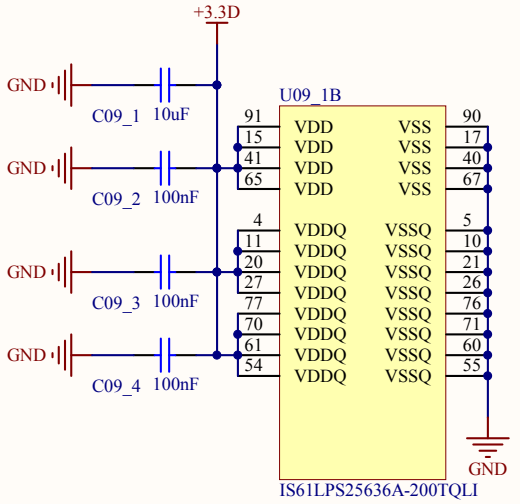
CPLD Circuit

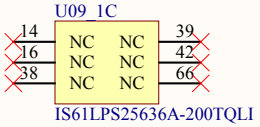


SRAM Circuit

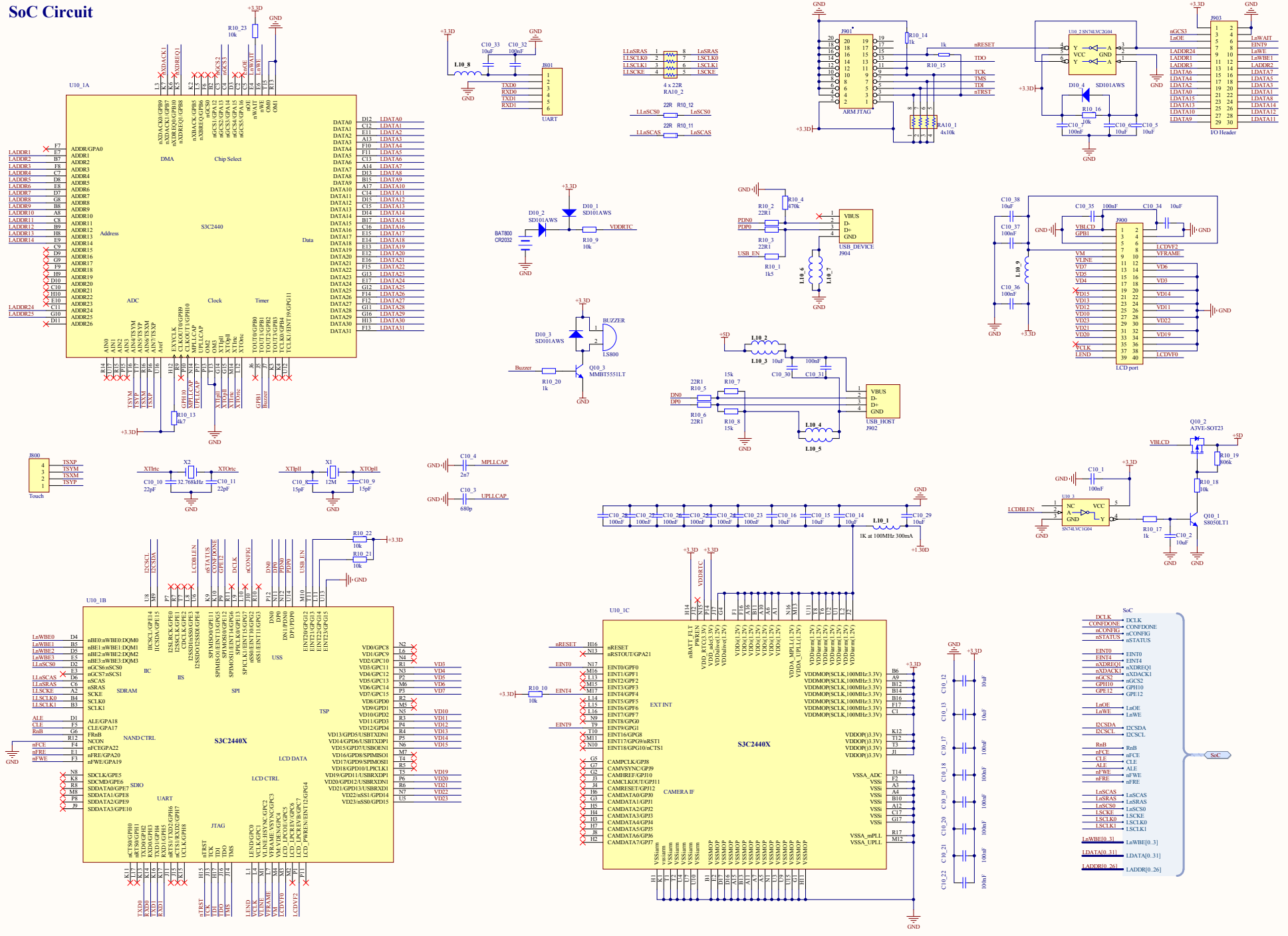




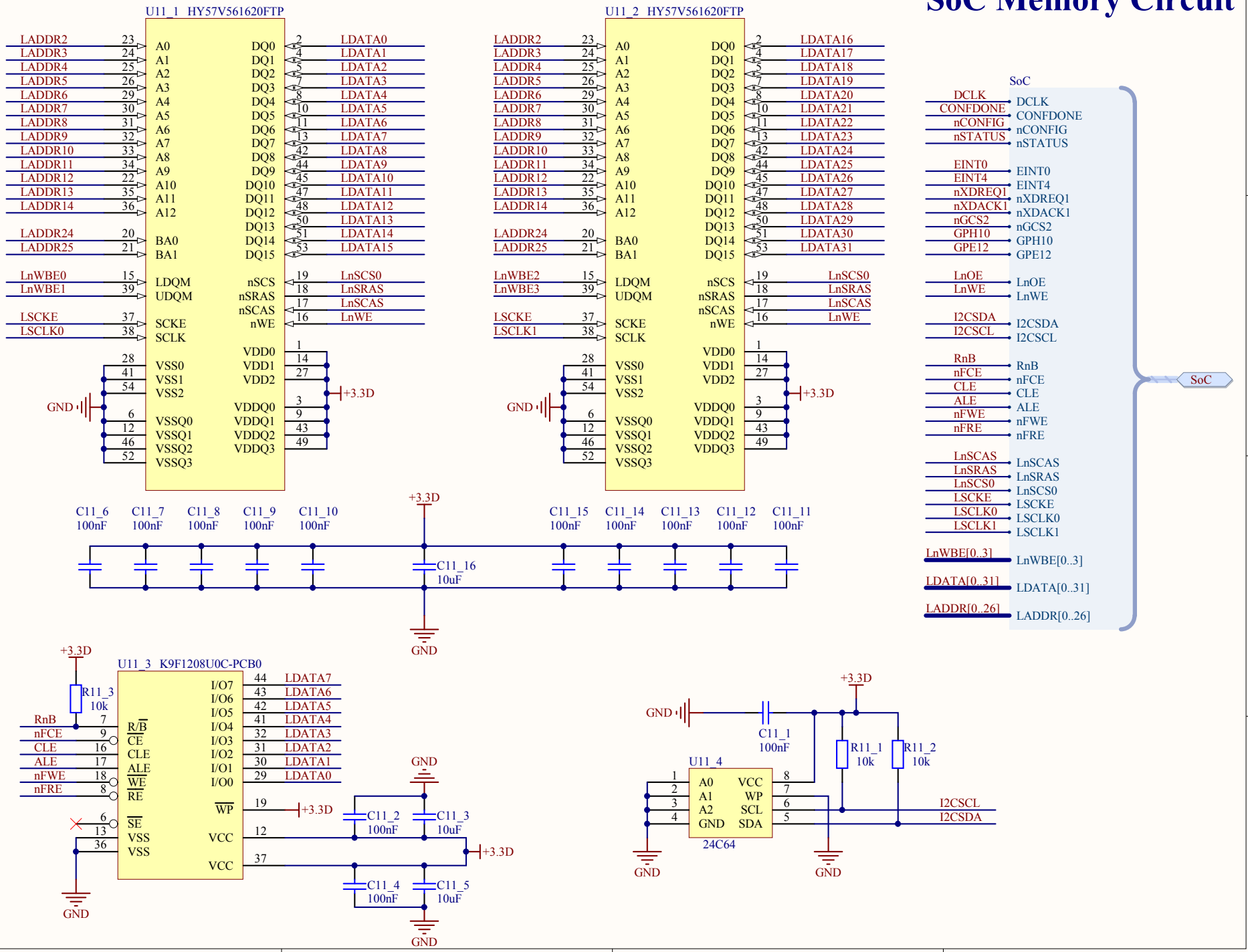




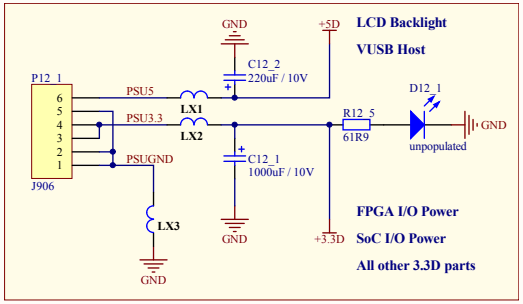
SoC Circuit

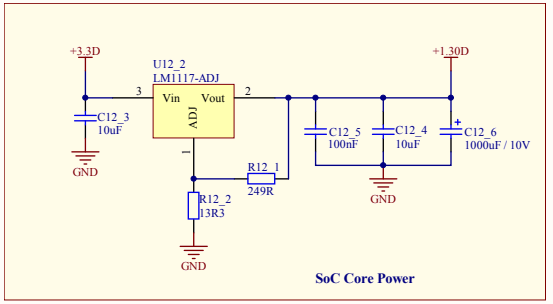

U10_1A
S3C2440
Address
Data
DMA
Chip Select
ADC
Clock
Timer
U10_1B
S3C2440X
BC
IIS
SPI
USS
NAND CTRL
SDRAM
UART
JTAG
TSP
LCD DATA
LCD CTRL
U10_1C
EXT INT
CAMERA IF
ARM JTAG
UART
USB_DEVICE
J904
USB_HOST
J902
LCD port
I/O Header
Touch
SoC
+3.3D
GND
+5D
+1.30D

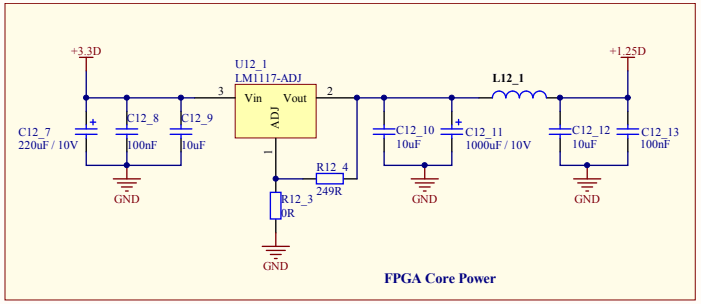
SoC Memory Circuit

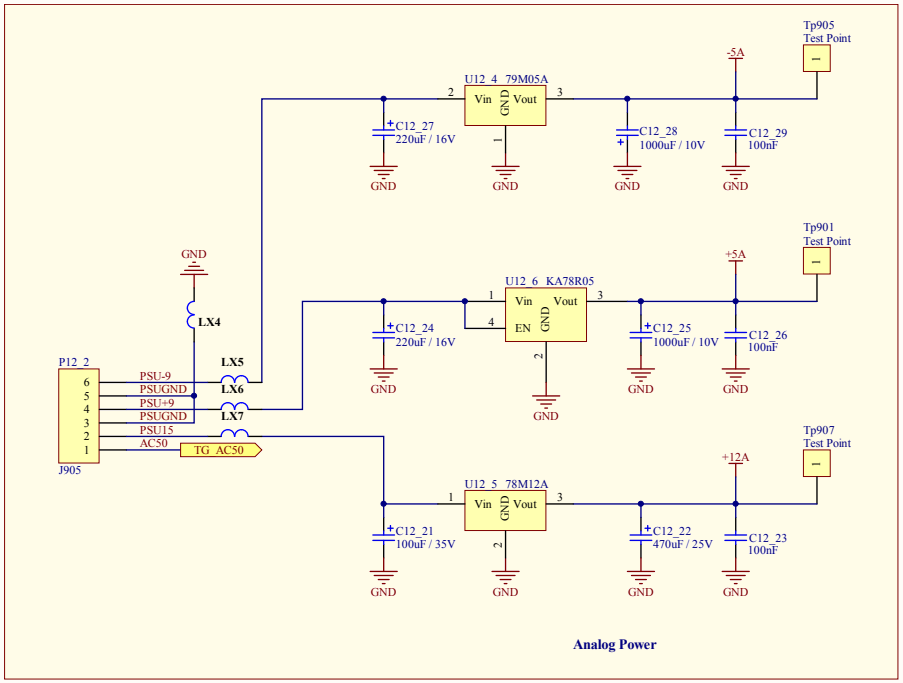


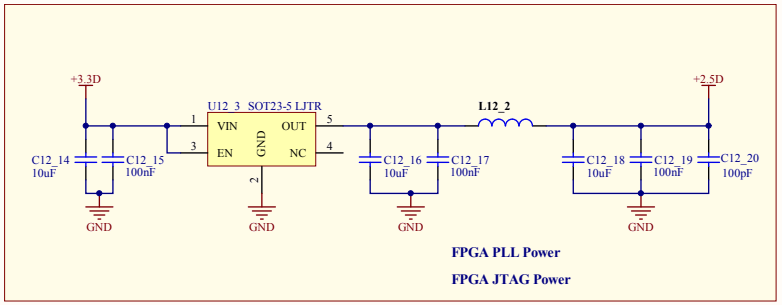
Power Distribution Circuit

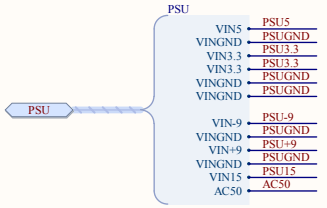




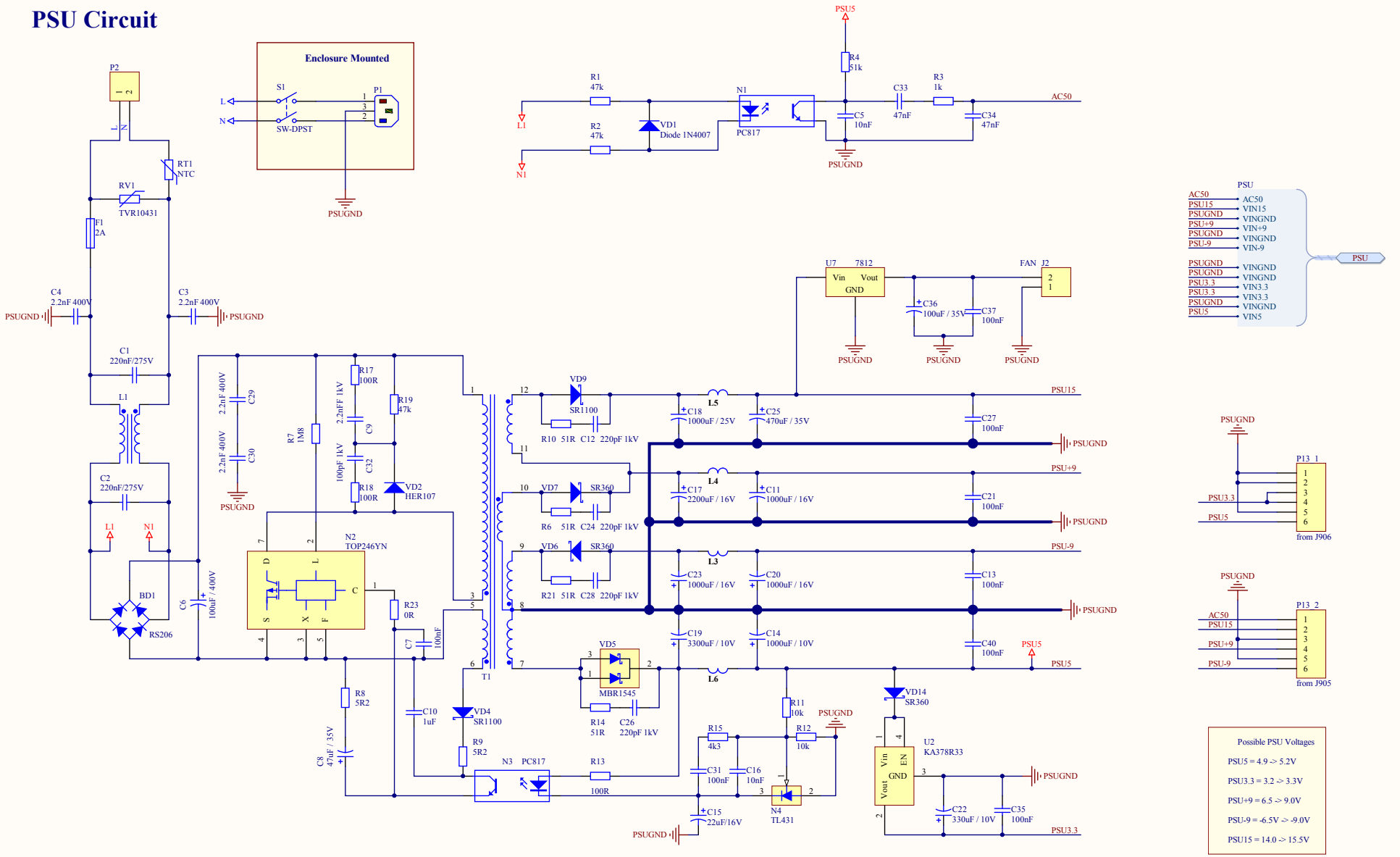


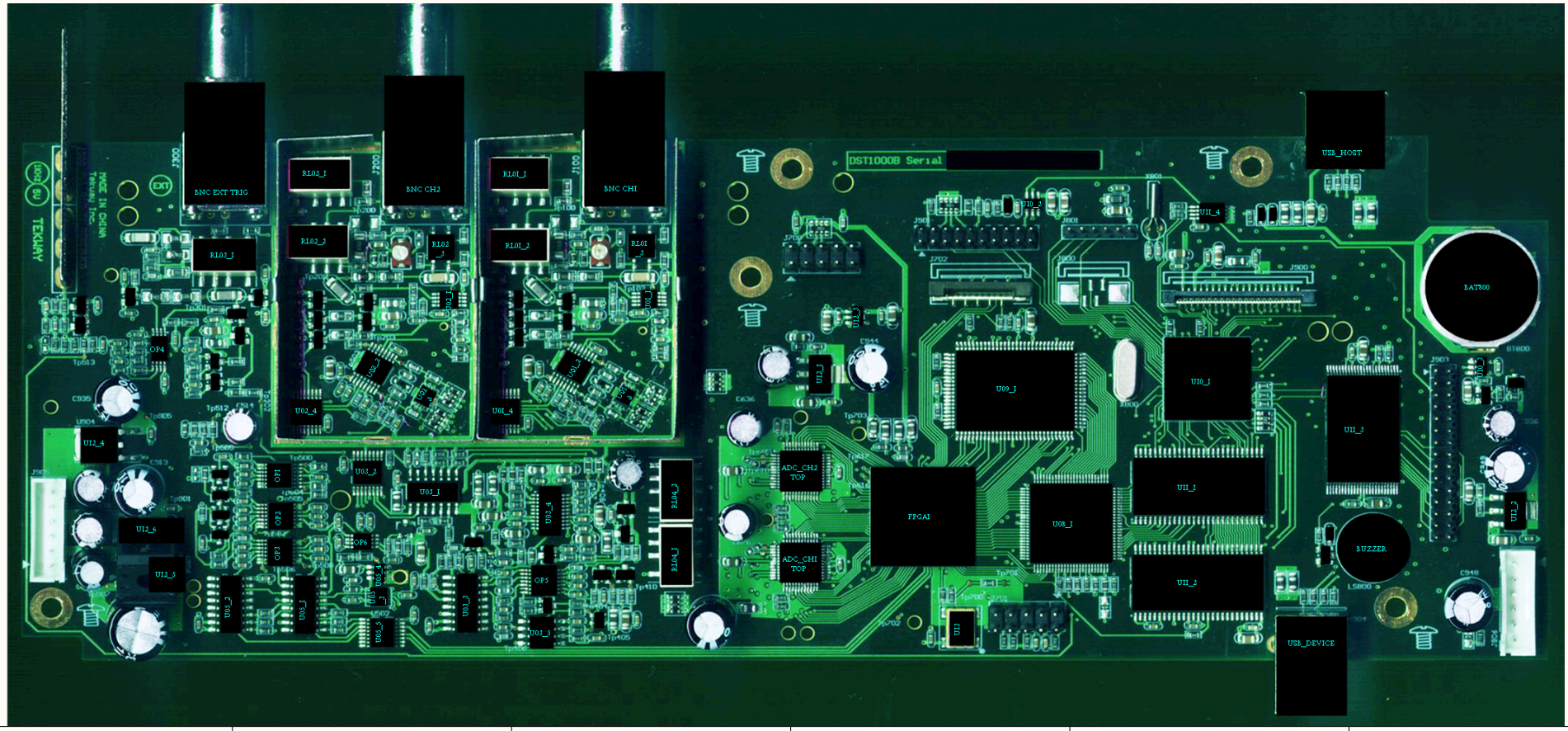






PSU Circuit


Enclosure Mounted
P2
S1
P1
SW-DPST
L
N
PSUGND
RT1
NTC
RV1
TVR10431
F1
2A
C4
2.2nF 400V
C3
2.2nF 400V
C1
220nF/275V
L1
C2
220nF/275V
BD1
RS206
C6
100uF / 400V
C29
C30
R7
1M8
R17
100R
R18
100R
R19
47k
C9
C32
VD2
HER107
N2
TOP246YN
R23
0R
C7
100nF
T1
R8
5R2
C10
1uF
VD4
SR1100
R9
5R2
C8
47uF / 35V
N3
PC817
R13
100R
R1
47k
R2
47k
VD1
Diode 1N4007
N1
PC817
R4
51k
C5
10nF
C33
47nF
R3
1k
C34
47nF
AC50
PSU5
U7
7812
Vin
Vout
GND
C36
100uF / 35V
C37
100nF
FAN
J2
VD9
SR1100
R10 51R C12 220pF 1kV
VD7
SR360
R6 51R C24 220pF 1kV
VD6
SR360
R21 51R C28 220pF 1kV
VD5
MBR1545
R14
51R
C26
220pF 1kV
L5
L4
L3
L6
C18
1000uF / 25V
C25
470uF / 35V
C17
2200uF / 16V
C11
1000uF / 16V
C23
1000uF / 16V
C20
1000uF / 16V
C19
3300uF / 10V
C14
1000uF / 10V
C27
100nF
C21
100nF
C13
100nF
C40
100nF
PSU15
PSU+9
PSU-9
PSU5
R11
10k
R12
10k
R15
4k3
C31
100nF
C16
10nF
C15
22uF/16V
N4
TL431
VD14
SR360
U2
KA378R33
Vin
EN
GND
Vout
C22
330uF / 10V
C35
100nF
PSU3.3
PSU
AC50
PSU15
PSUGND
PSU+9
PSU-9
PSU3.3
PSU5
VIN15
VINGND
VIN+9
VIN-9
VIN3.3
P13_1
from J906
P13_2
from J905
Possible PSU Voltages
PSU5 = 4.9 -> 5.2V
PSU3.3 = 3.2 -> 3.3V
PSU+9 = 6.5 -> 9.0V
PSU-9 = -6.5V -> -9.0V
PSU15 = 14.0 -> 15.5V


BNC EXT TRIG
BNC CH2
BNC CH1
USB_HOST
DST1000B Serial
BAT800
FPGAI
ADC_CH2 TOP
ADC_CH1 TOP
BUZZER
USB_DEVICE
TEKWAY
MADE IN CHINA