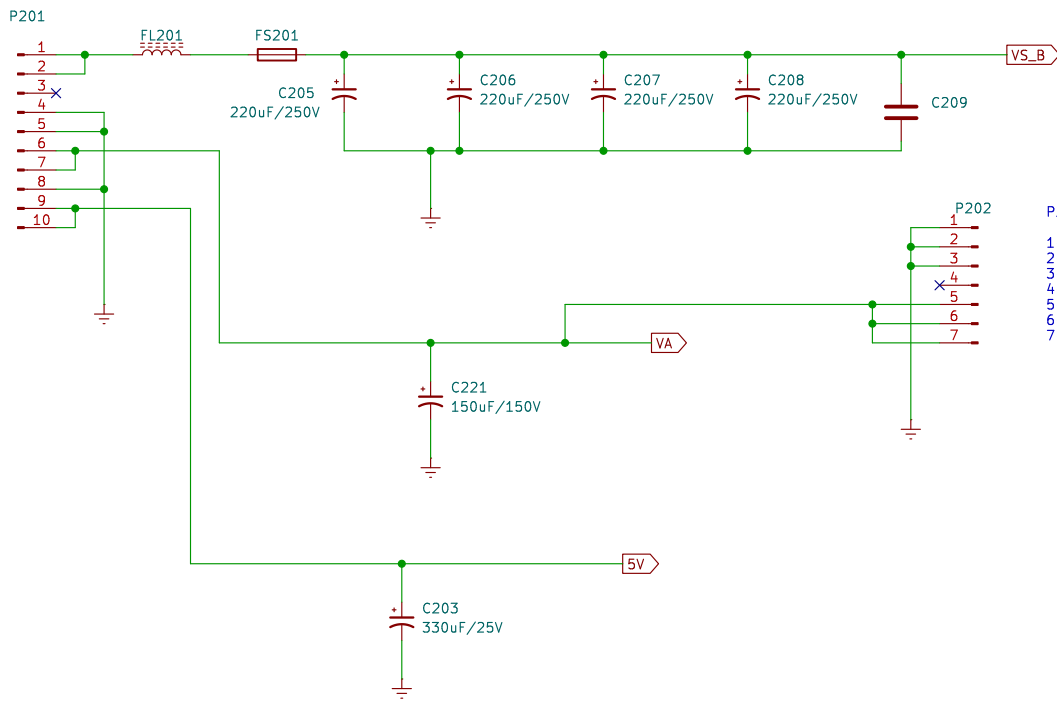


VOLTAGES SUPPLY

P201 (Input Power Supply)

- 1- +VS
- 2- +VS
- 3- NC
- 4- GND
- 5- GND
- 6- +VA
- 7- +VA
- 8- GND
- 9- +5V
- 10- +5V



P202 (Output VA Supply)

- 1- GND
- 2- GND
- 3- GND
- 4- NC
- 5- +VA
- 6- +VA
- 7- +VA

VS Voltage supply
Author: Fábio Pereira da Silva

Sheet: /
File: y_board.kicad_sch

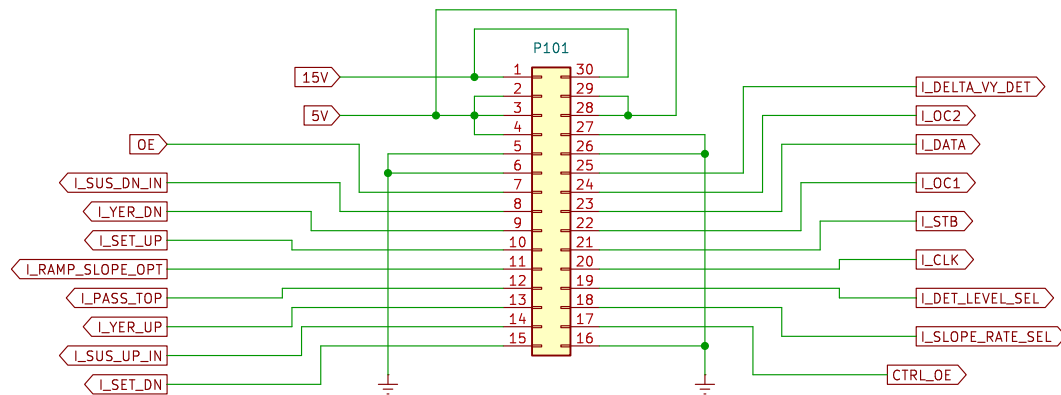
Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24	Rev: 1.0
KiCad E.D.A. 8.0.9		Id: 1/23

Input Control (Part 1 of 3)

P101

1- 15V	30- 15V
2- 5V	29- 5V
3- 5V	28- 5V
4- 5V	27- GND
5- GND	26- GND
6- GND	25- (1- L_DELTA_VY_DET)
7- (2- OE)	24- (3- L_OC2)
8- (4- L_SUS_DN_IN)	23- (5- L_DATA)
9- (6- L_YER_DN)	22- (7- L_OC1)
10- (8- L_SET_UP)	21- (9- L_STB)
11- (10- L_RAMP_SLOPE_OPT)	20- (11- L_CLK)
12- (12- L_PASS_TOP)	19- (13- L_DET_LEVEL_SEL)
13- (14- L_YER_UP)	18- (15- L_SLOPE_RATE_SEL)
14- (16- L_SUS_UP_IN)	17- (17- L_CTRL_OE)
15- (18- L_SET_DN)	16- GND



Input Control (Part 1 of 3)
Author: Fábio Pereira da Silva

Sheet: /Input control (Part 1 of 3)/
File: input_control.kicad_sch

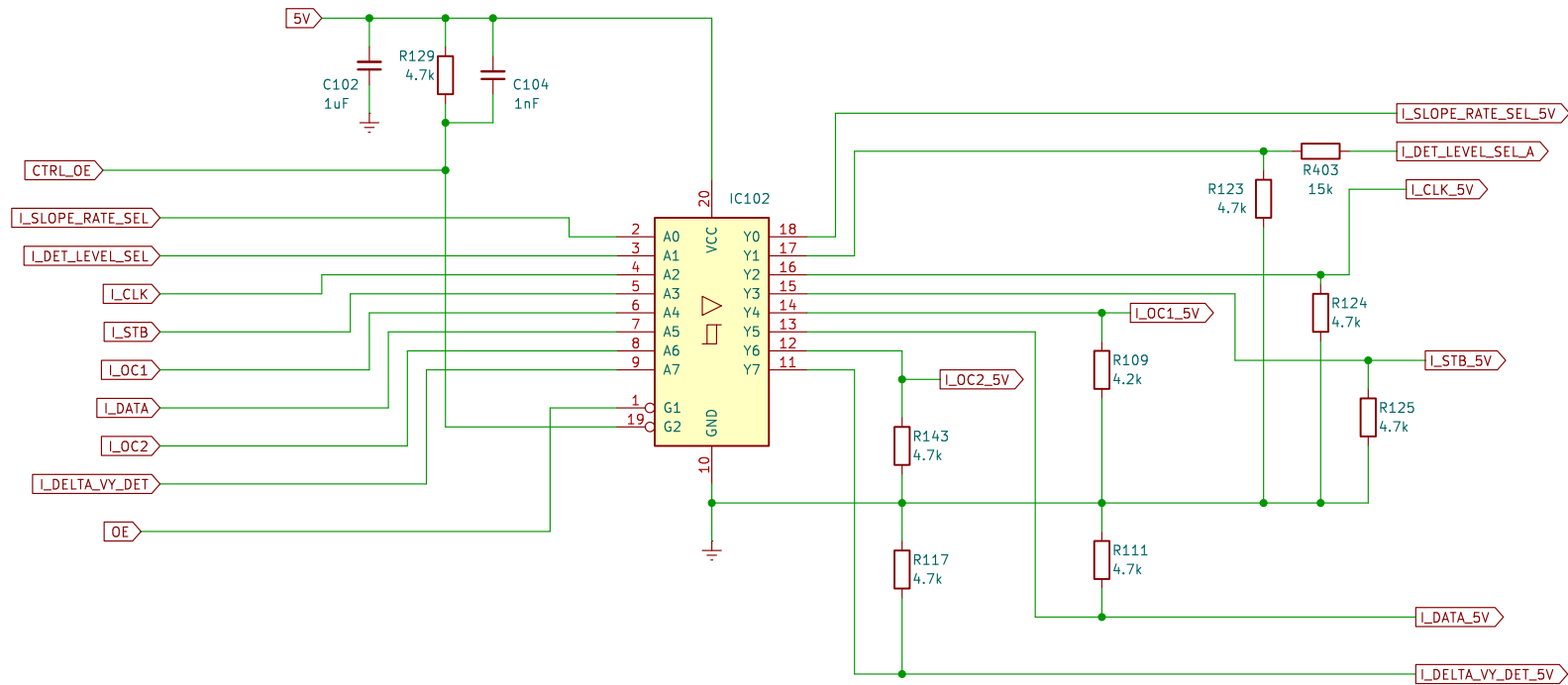
Title: Y BOARD LG PLASMA TV PANEL

Size: A4
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Date: 2025-03-24

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Id: 2/23

Input Control (Part 2 of 3)



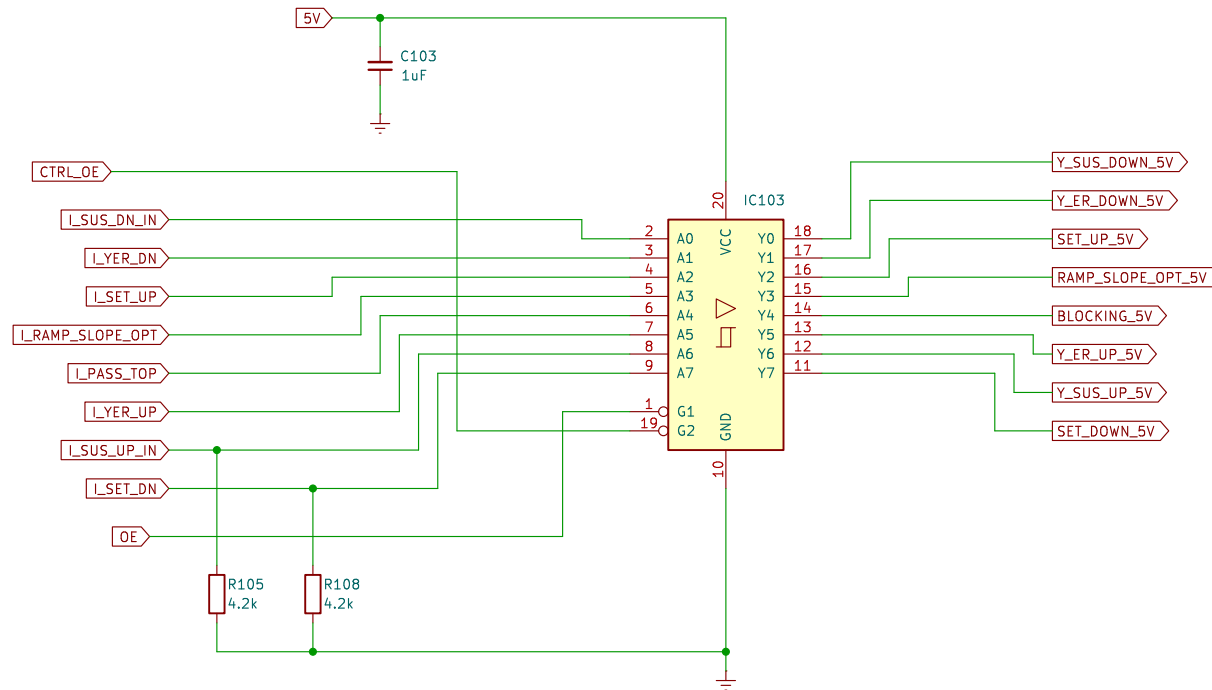
Input Control (Part 2 of 3)
Author: Fábio Pereira da Silva

Sheet: /Input control (Part 2 of 3)/
File: input_control2.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24	Rev: 1.0
KiCad E.D.A. 8.0.9		Id: 3/23

Input Control (Part 3 of 3)



Input Control (Part 3 of 3)
Author: Fábio Pereira da Silva

Sheet: /Input control (Part 3 of 3)/
File: input_control3.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4

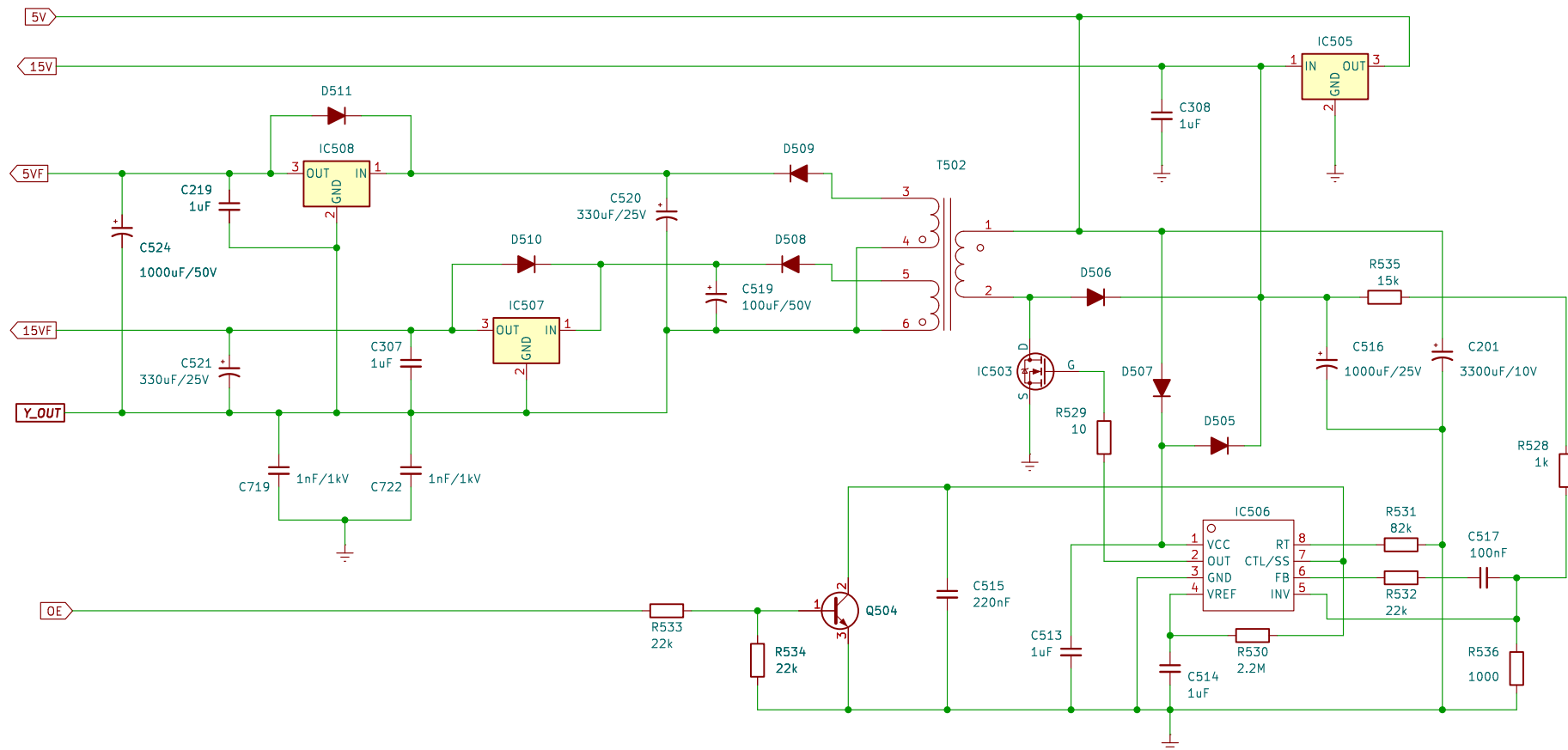
Date: 2025-03-24

Rev: 1.0

KiCad E.D.A. 8.0.9

Id: 4/23

5VF, 15VF and 15V Supply



5VF, 15VF and 15V Supply
 Author: Fábio Pereira da Silva

Sheet: /5VF, 15VF 15v/
 File: 5VF_15VF_15V.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4 Date: 2025-03-24

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Rev: 1.0

Id: 5/23

VSC and VY (Part 1 of 3)

VSC and VY (Part 1 of 3)

Author: Fábio Pereira da Silva

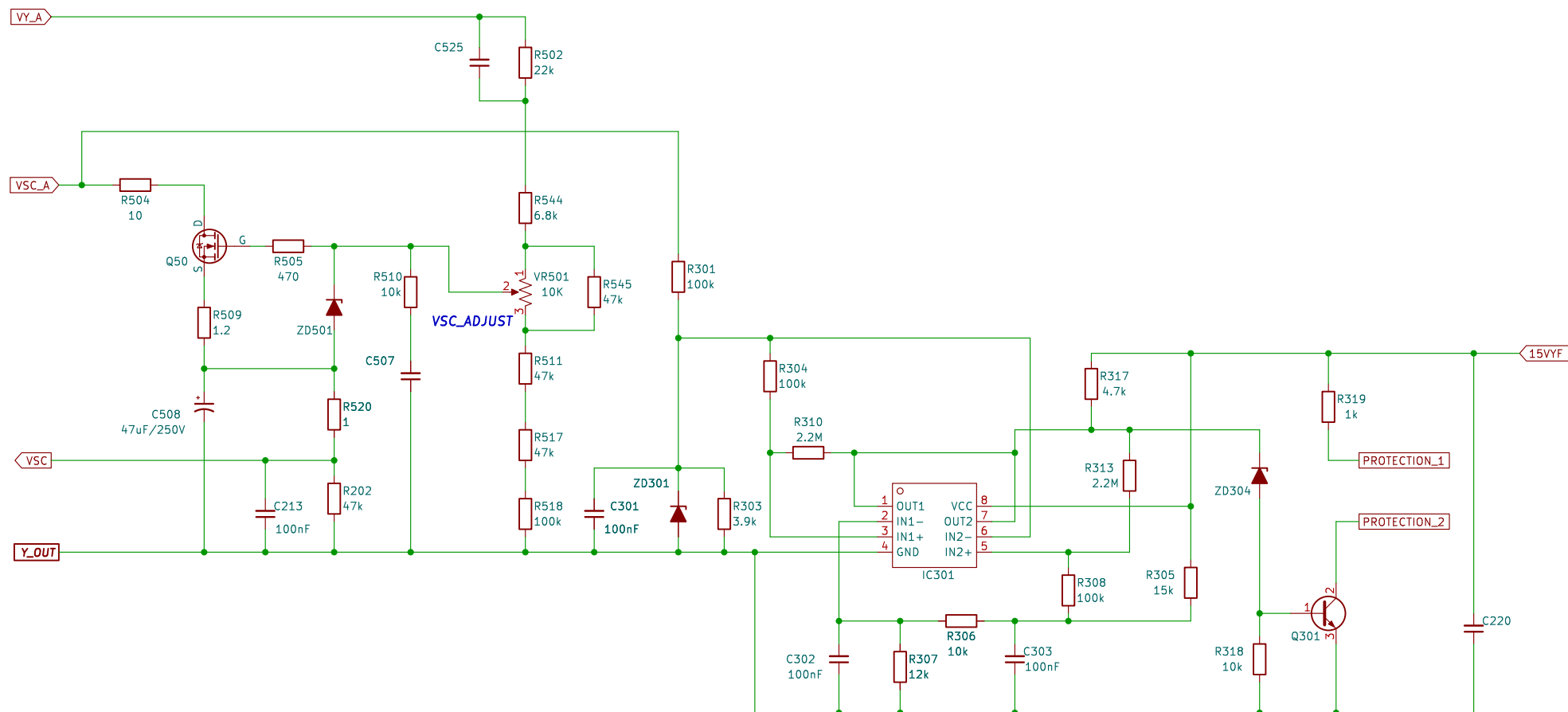
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File: vsc_and_vy.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24	Rev: 1.0
KiCad E.D.A. 8.0.9		Id: 6/23

Rev: 1.0
Id: 6/23

VSC and VY (Part 2 of 3)



VSC and VY (Part 2 of 3)
Author: Fábio Pereira da Silva

Sheet: /VSC and VY (Part 2 of 3)/
File: vcs_and_vy_part2_of_3.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4

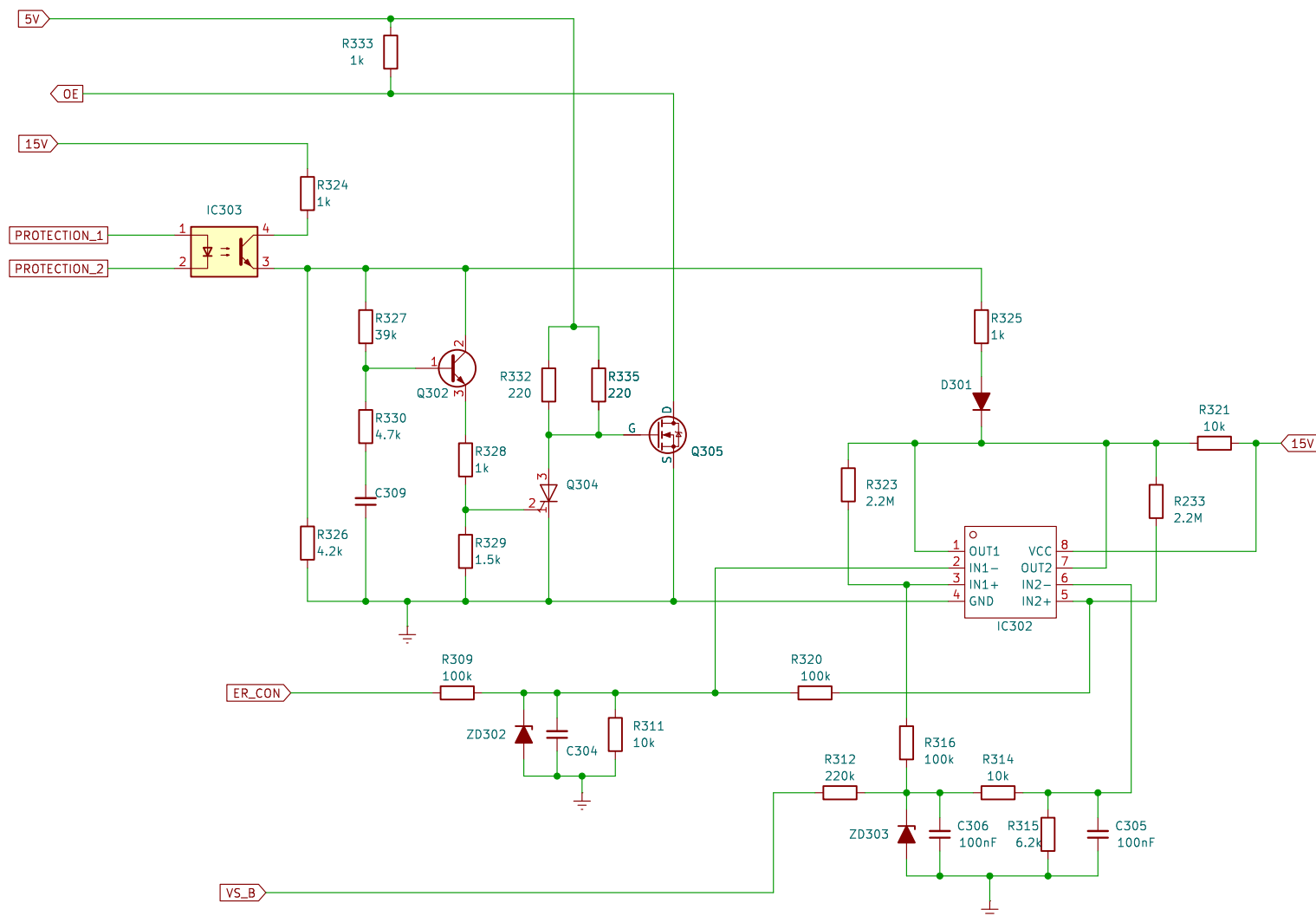
Date: 2025-03-24

Rev: 1.0

KiCad E.D.A. 8.0.9

Id: 7/23

VSC and VY (Part 3 of 3)



Author: Fábio Pereira da Silva

Sheet: /VSC and VY (Part 3 of 3)/
File: vsc_and_vy_part3_of_3.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4

Date: 2025-03-24

KiCad E.D.A. 8.0.9

Rev: 1.0

Id: 8/23

Y BLOCKING AND Y SUS DOWN

The schematic diagram illustrates the Y BLOCKING AND Y SUS DOWN circuit for the LG PLASMA TV PANEL. The circuit is powered by a 15V supply, a 5V supply, and a 15VYF supply. It includes several resistors (R540, R541, R542, R543, R722, R747, R719, R114, R718, R724, R726, R603, R606, R608, R118, R609, R613, R614, R615), capacitors (C202, C708, C603, C605, C606, C608, C724, C710, C16), and integrated circuits (IC703, IC601). The circuit is divided into two main sections: Y_SUS_DOWN and Y_BLOCKING. The Y_SUS_DOWN section includes a 15V supply, a 5V supply, and a 15VYF supply. The Y_BLOCKING section includes a 5V supply, a 15VYF supply, and a 15VYF supply. The circuit is designed to control the Y-axis signal and blocking for the LG PLASMA TV PANEL.

Y SUS DOWN

Y BLOCKING

Y SUSDN_A

Y_OUT

15V

5V

15VYF

15VYF_A

15VYF_B

15VYF_C

15VYF_D

15VYF_E

15VYF_F

15VYF_G

15VYF_H

15VYF_I

15VYF_J

15VYF_K

15VYF_L

15VYF_M

15VYF_N

15VYF_O

15VYF_P

15VYF_Q

15VYF_R

15VYF_S

15VYF_T

15VYF_U

15VYF_V

15VYF_W

15VYF_X

15VYF_Y

15VYF_Z

15VYF_AA

15VYF_AB

15VYF_AC

15VYF_AD

15VYF_AE

15VYF_AF

15VYF_AG

15VYF_AH

15VYF_AI

15VYF_AJ

15VYF_AK

15VYF_AL

15VYF_AM

15VYF_AN

15VYF_AO

15VYF_AP

15VYF_AQ

15VYF_AR

15VYF_AS

15VYF_AT

15VYF_AU

15VYF_AV

15VYF_AW

15VYF_AX

15VYF_AY

15VYF_AZ

15VYF_BA

15VYF_BB

15VYF_BC

15VYF_BD

15VYF_BE

15VYF_BF

15VYF_BG

15VYF_BH

15VYF_BI

15VYF_BJ

15VYF_BK

15VYF_BL

15VYF_BM

15VYF_BN

15VYF_BO

15VYF_BP

15VYF_BQ

15VYF_BR

15VYF_BS

15VYF_BT

15VYF_BU

15VYF_BV

15VYF_BW

15VYF_BX

15VYF_BY

15VYF_BZ

15VYF_CA

15VYF_CB

15VYF_CC

15VYF_CD

15VYF_CE

15VYF_CF

15VYF.CG

15VYF_CH

15VYF_CI

15VYF_CJ

15VYF_CK

15VYF_CL

15VYF_CM

15VYF_CN

15VYF_CO

15VYF_CP

15VYF_CQ

15VYF_CR

15VYF_CS

15VYF_CT

15VYF_CU

15VYF_CV

15VYF_CW

15VYF_CX

15VYF_CY

15VYF_CZ

15VYF_DA

15VYF_DB

15VYF_DC

15VYF_DD

15VYF_DE

15VYF_DF

15VYF.DG

15VYF_DH

15VYF_DI

15VYF_DJ

15VYF_DK

15VYF_DL

15VYF_DM

15VYF_DN

15VYF_DO

15VYF_DP

15VYF_DQ

15VYF_DR

15VYF_DS

15VYF_DT

15VYF_DU

15VYF_DV

15VYF_DW

15VYF_DX

15VYF_DY

15VYF_DZ

15VYF_EA

15VYF_EB

15VYF_EC

15VYF_ED

15VYF_EE

15VYF_EF

15VYF.EG

15VYF_EH

15VYF_EI

15VYF_EJ

15VYF_EK

15VYF_EL

15VYF_EM

15VYF_EN

15VYF_EO

15VYF_EP

15VYF_EQ

15VYF_ER

15VYF_ES

15VYF_ET

15VYF_EU

15VYF_EV

15VYF_EW

15VYF_EX

15VYF_EY

15VYF_EZ

15VYF_FA

15VYF_FB

15VYF_FC

15VYF_FD

15VYF_FE

15VYF_FF

15VYF.FG

15VYF_FH

15VYF_FI

15VYF_FJ

15VYF_FK

15VYF_FL

15VYF_FM

15VYF_FN

15VYF_FO

15VYF_FP

15VYF_FQ

15VYF_FR

15VYF_FS

15VYF_FT

15VYF_FU

15VYF_FV

15VYF_FW

15VYF_FX

15VYF_FY

15VYF_FZ

15VYF_GA

15VYF_GB

15VYF_GC

15VYF_GD

15VYF_GE

15VYF_GF

15VYF.GG

15VYF_GH

15VYF_GI

15VYF_GJ

15VYF_GK

15VYF_GL

15VYF_GM

15VYF_GN

15VYF_GO

15VYF_GP

15VYF_GQ

15VYF_GR

15VYF_GS

15VYF_GT

15VYF_GU

15VYF_GV

15VYF_GW

15VYF_GX

15VYF_GY

15VYF_GZ

15VYF_HA

15VYF_HB

15VYF_HC

15VYF_HD

15VYF_HE

15VYF_HF

15VYF.HG

15VYF_HH

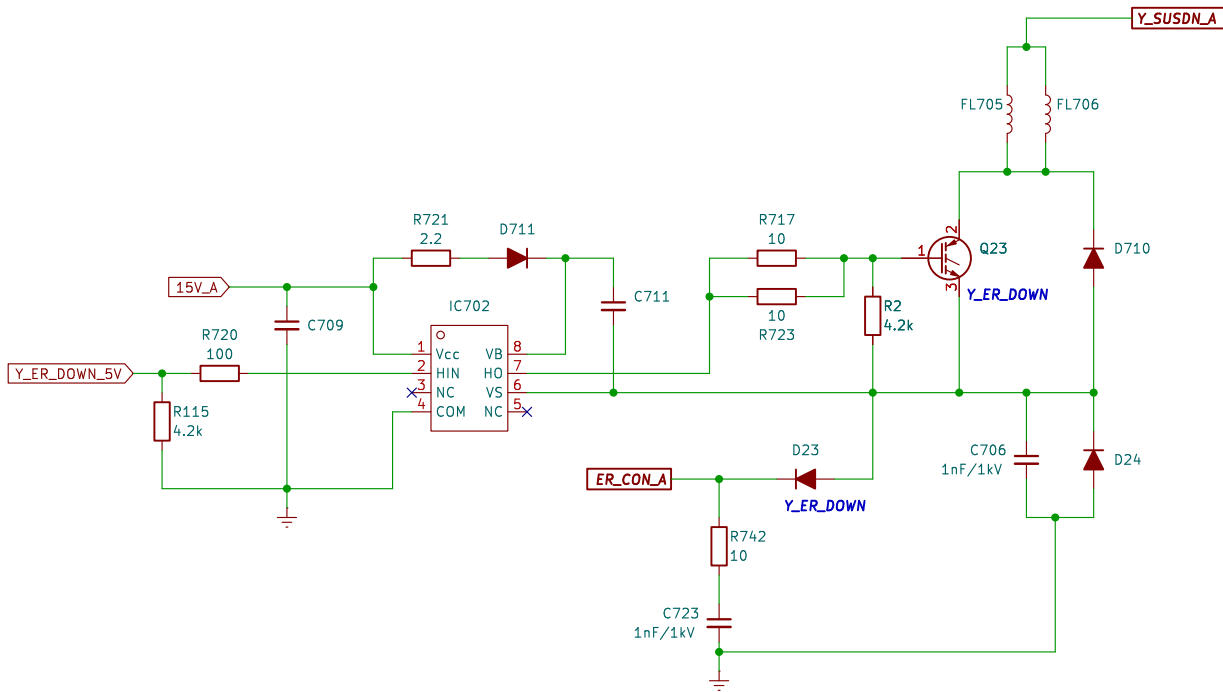
15VYF_HI

15VYF_HJ

15VYF

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Y ENERGY RECOVERY DOWN



Y ER DOWN
Author: Fábio Pereira da Silva

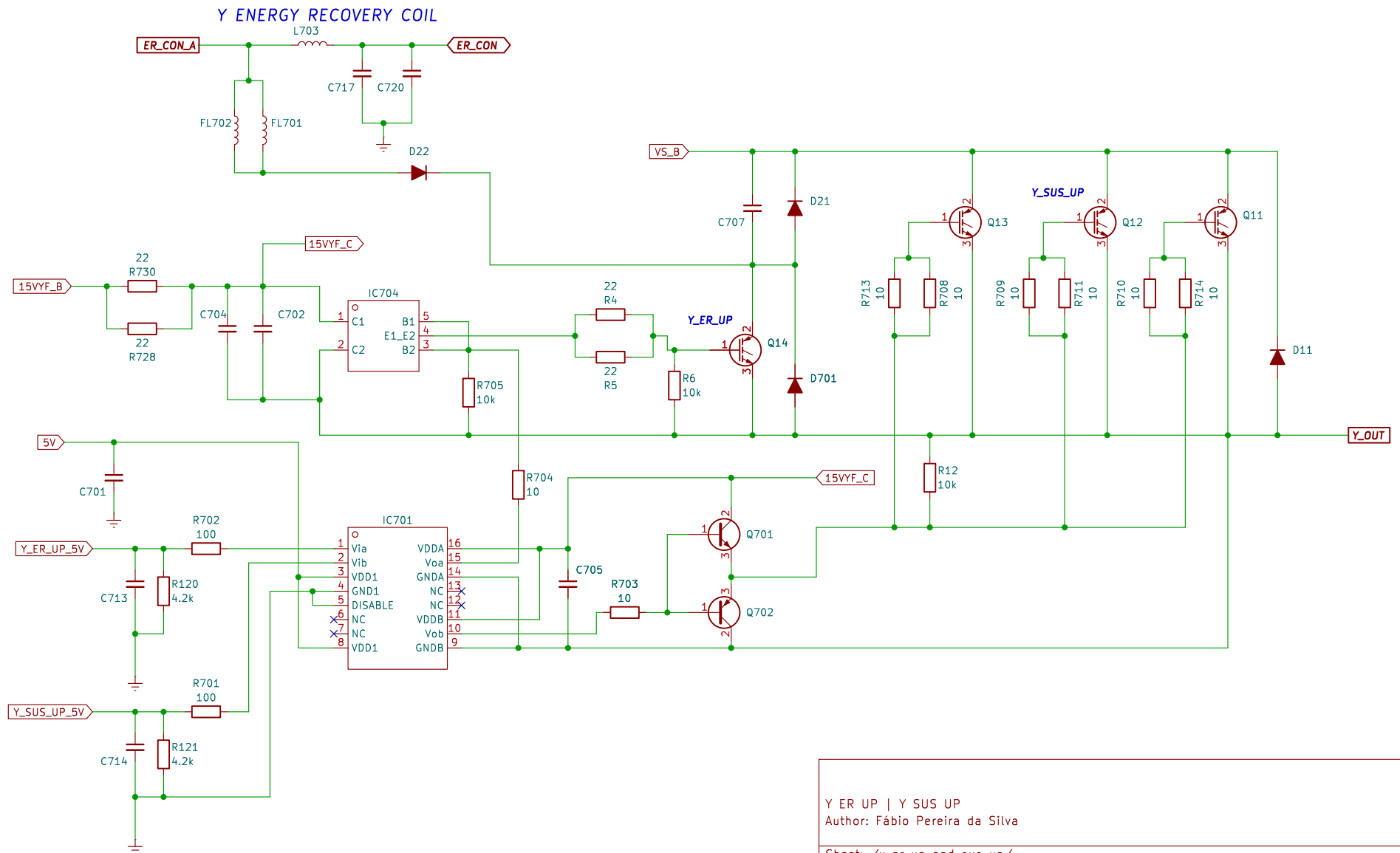
Sheet: /y_er_down/
File: y_er_down.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24
KiCad E.D.A. 8.0.9	

Rev: 1.0
Id: 10/23

Y ENERGY RECOVERY UP AND Y SUS UP



Y ER UP | Y SUS UP
Author: Fábio Pereira da Silva

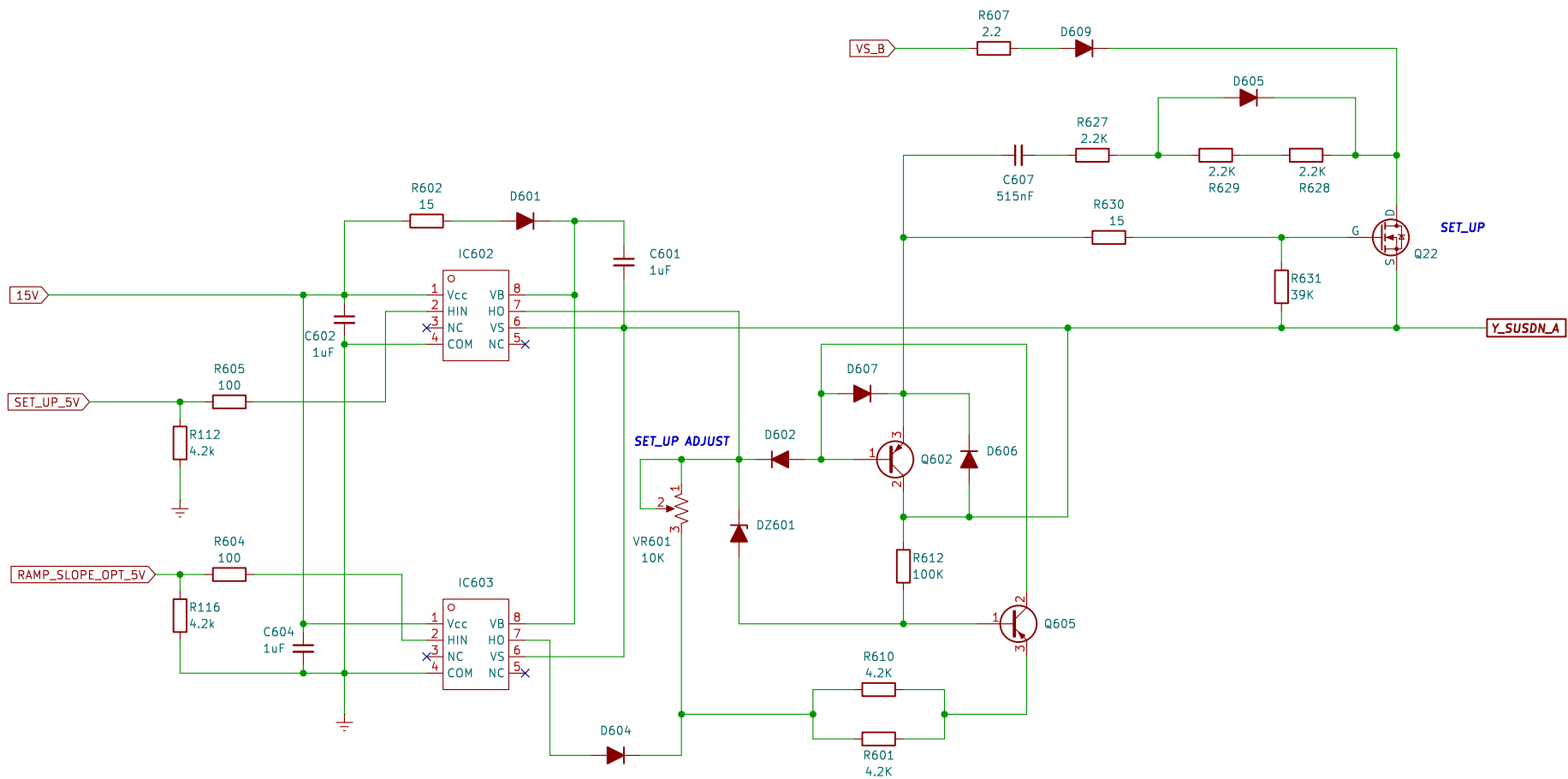
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File: y_er_up_and_sus_up.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24
KiCad E.D.A. 8.0.9	

Rev: 1.0
Id: 11/23

SET UP



Set Up
Author: Fábio Pereira da Silva

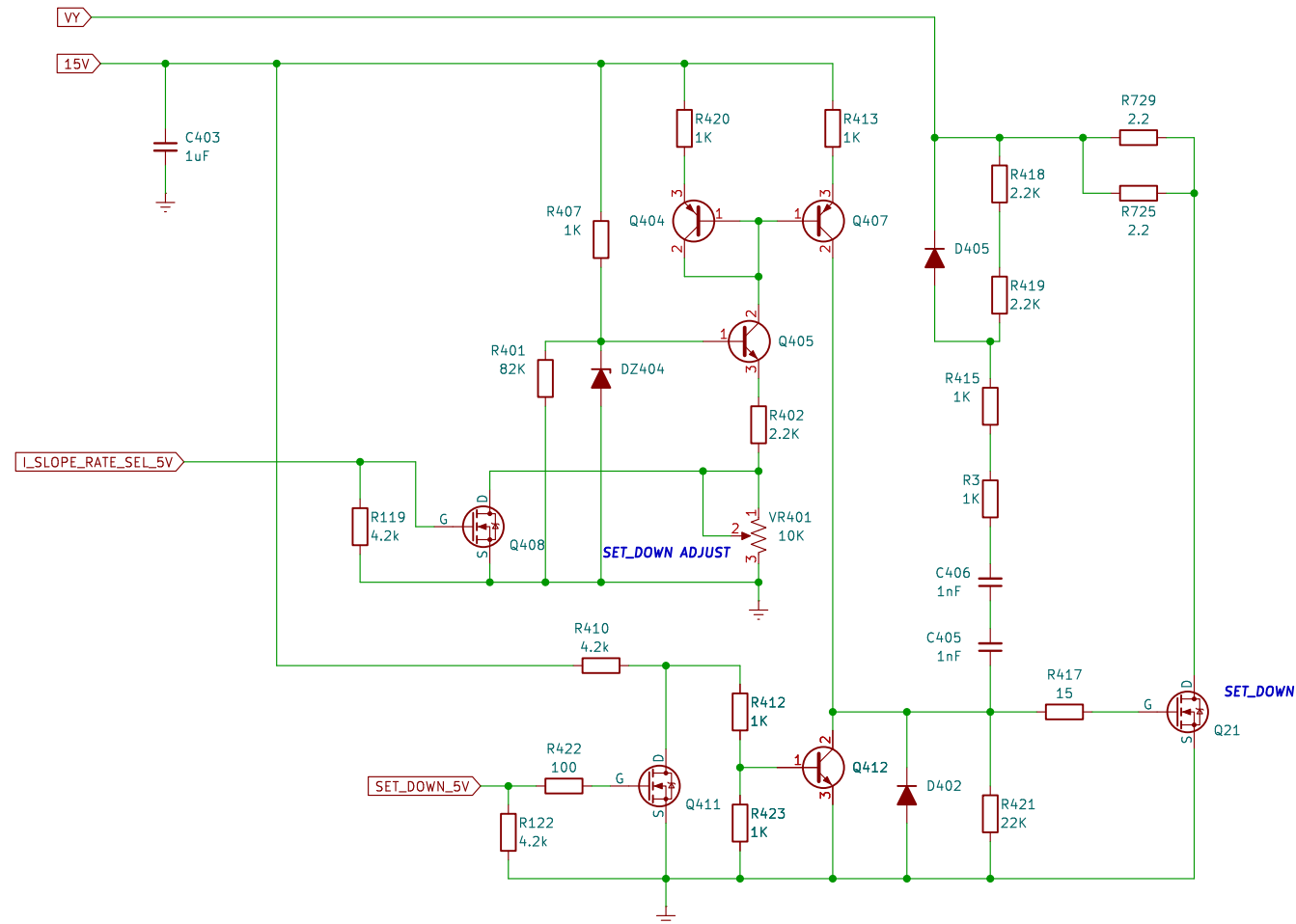
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File: set_up.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24
KiCad E.D.A. 8.0.9	

Rev: 1.0
Id: 12/23

SET DOWN



Author: Fábio Pereira da Silva

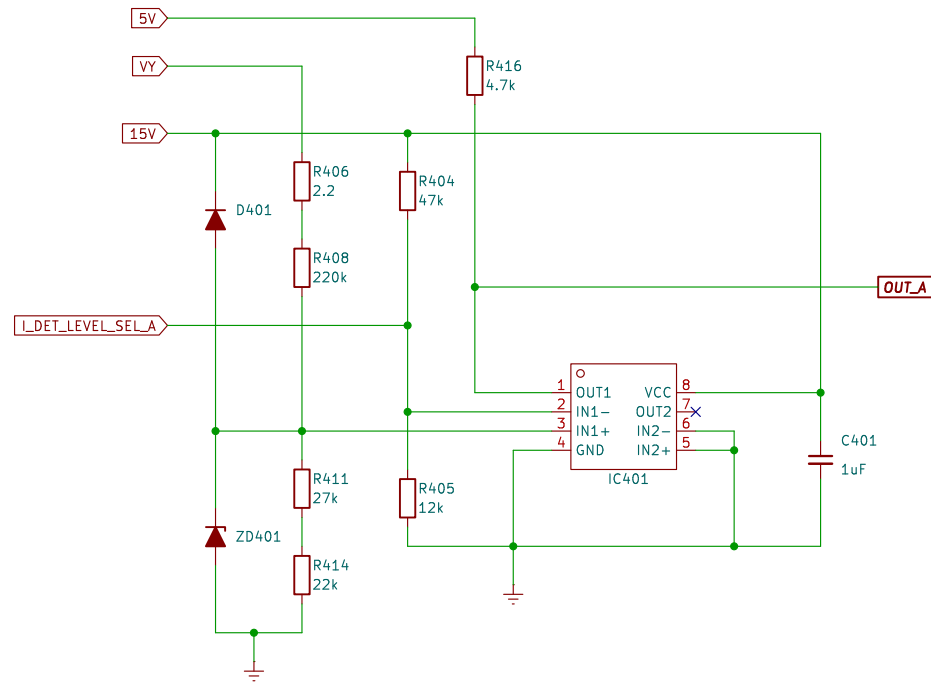
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File: set_down.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24
KiCad E.D.A. 8.0.9	

Rev: 1.0
Id: 13/23

OUTPUT CONTROL (Part 1 of 4)



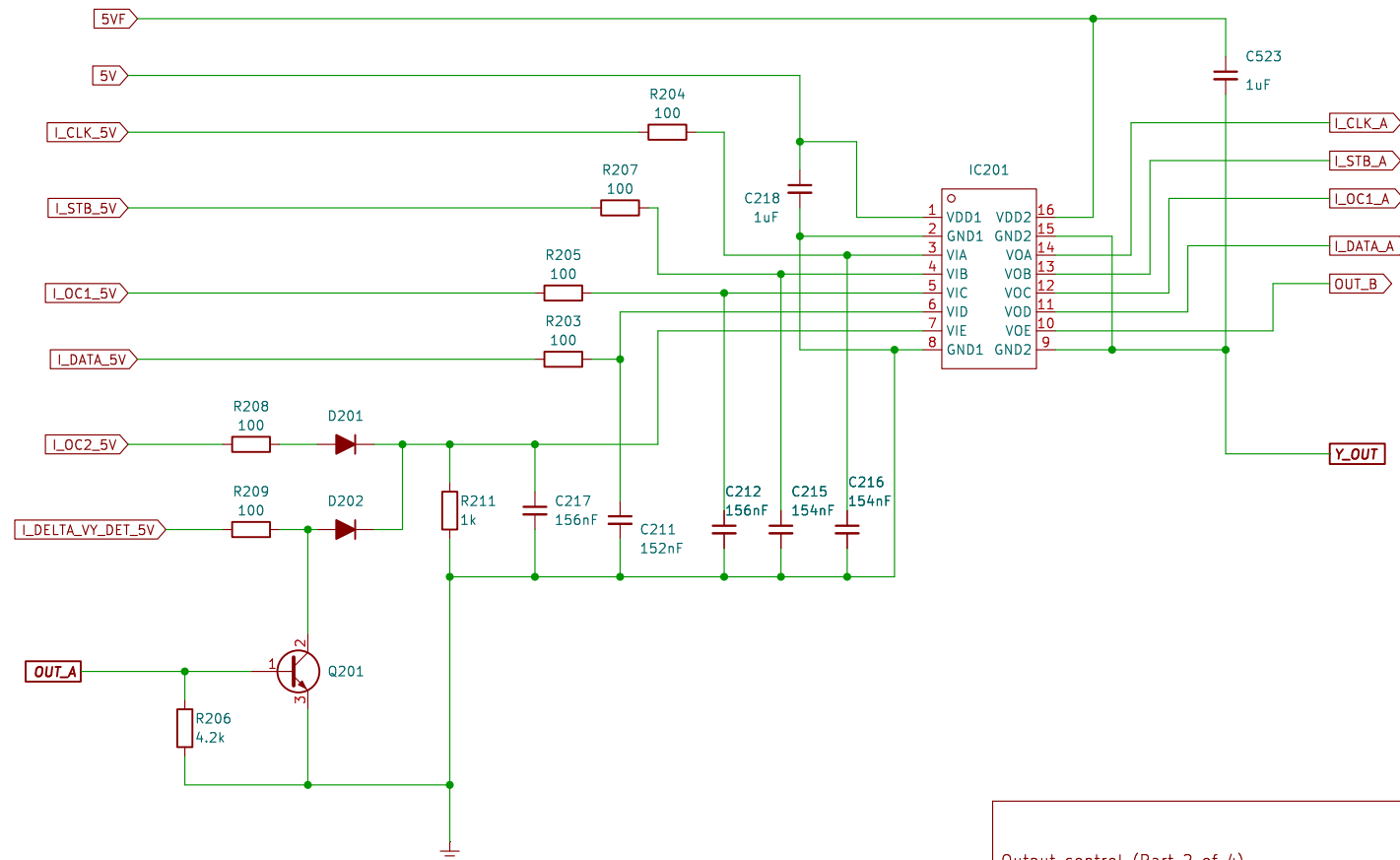
Output Control (Part 1 of 4)
Author: Fábio Pereira da Silva

Sheet: /Output Control (Part 1 of 4)/
File: output_control.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24	Rev: 1.0
KiCad E.D.A. 8.0.9		Id: 14/23

OUTPUT CONTROL (Part 2 of 4)



Output control (Part 2 of 4)
Author: Fábio Pereira da Silva

Sheet: /Output Control (Part 2 of 4)/
File: output_control2.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

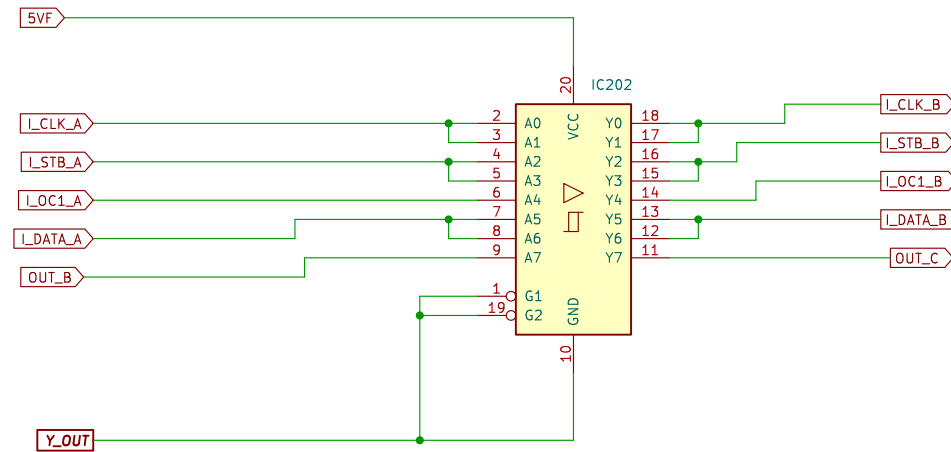
Size: A4 Date: 2025-03-24

KiCad E.D.A. 8.0.9

Rev: 1.0

Id: 15/23

OUTPUT CONTROL (Part 3 of 4)



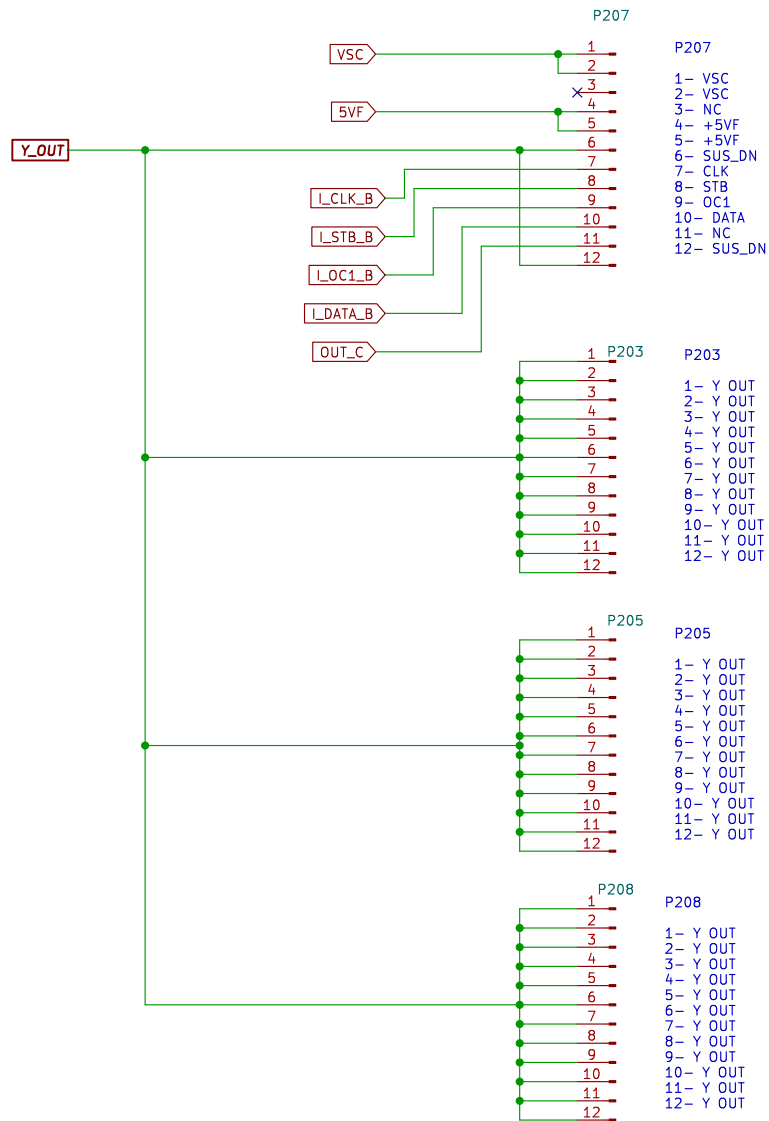
Output control (Part 3 of 4)
Author: Fábio Pereira da Silva

Sheet: /Output Control (Part 3 of 4)/
File: output_control3.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24	Rev: 1.0
KiCad E.D.A. 8.0.9		Id: 16/23

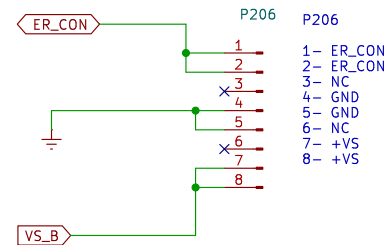
OUTPUT CONTROL (Part 4 of 4)



NOTES:

=====

- Serigraphy notation in P207 (Y Out) is called SUS_DN
- Pin 11 in P207 in Serigraphy is NC but is connected to output pin 11 in IC 202



Output Control (Part 4 of 4)
Author: Fábio Pereira da Silva

Sheet: /Output Control (Part 4 of 4)/
File: output_control4.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4

Date: 2025-03-24

Rev: 1.0

KiCad E.D.A. 8.0.9

Id: 17/23

Measurements (P201)

P201

Res (OHMS)	Reverse bias (V)	Foward bias (V)
1 >200k	1- 0.551	1- OL
2 >200k	2- 0.551	2- OL
3- -	3- -	3- -
4- 0	4- 0	4- 0
5- 0	5- 0	5- 0
6- >1M	6- OL	6- OL
7- >1M	7- OL	7- OL
8- 0	8- 0	8- 0
9- 2.2k	9- 0.504	9- 1.1
10- 2.2k	10- 0.504	10- 1.1

MEASUREMENTS (P201)
Author: Fábio Pereira da Silva

Sheet: /Measurements P201/
File: measurements.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24	Rev: 1.0
KiCad E.D.A. 8.0.9		Id: 18/23

Measurements (P206)

P206

Res (OHMS)

1- 110k
2- 110k
3- OL
4- 0
5- 0
6- OL
7- OL
8- OL

Reverse bias (V)

1- 0.769
2- 0.769
3- OL
4- 0
5- 0
6- OL
7- 0.550
8- 0.550

Foward bias (V)

1- OL
2- OL
3- OL
4- 0
5- 0
6- OL
7- OL
8- OL

Measurements P206
Author: Fábio Pereira da Silva

Sheet: /Measurements P206/
File: measurements_p206.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24	Rev: 1.0
KiCad E.D.A. 8.0.9		Id: 19/23

Measurements (P101)

P101

Res (OHMS)	Reverse bias (V)	Foward bias (V)
1- 917	1- 0.495	1- 0.945
2- 918	2- 0.495	2- 0.944
3- 2.264k	3- 0.503	3- 1.089
4- 2.240k	4- 0.503	4- 1.090
5- 2.220k	5- 0.502	5- 1.089
6- 2.240k	6- 0.503	6- 1.089
7- 2.242k	7- 0.503	7- 1.089
8- 0	8- 0	8- 0
9- 0	9- 0	9- 0
10- 0	10- 0	10- 0
11- 0	11- 0	11- 0
12- 0L	12- 0.658	12- 0L
13- 3.2k	13- 0.614	13- 1.804
14- 0L	14- 0.659	14- 0L
15- 4.699k	15- 0.650	15- 2.723
16- 0L	16- 0.659	16- 0L
17- 4.695k	17- 0.650	17- 2.722
18- 0L	18- 0.660	18- 0L
19- 4.708k	19- 0.651	19- 2.724
20- 0L	20- 0.660	20- 0L
21- 0L	21- 0.657	21- 0L
22- 0L	22- 0.660	22- 0L
23- 4.689k	23- 0.650	23- 2.720
24- 0L	24- 0.660	24- 0L
25- 4.676k	25- 0.650	25- 2.718
26- 0L	26- 0.660	26- 0L
27- 4.699k	27- 0.650	27- 2.723
28- 7.7k	28- 0.617	28- 2.926
29- 4.685k	29- 0.649	29- 2.720
30- 0	30- 0	30- 0

Measurements (P101)
Author: Fábio Pereira da Silva

Sheet: /Measurements P101/
File: measurements_p101.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24	Rev: 1.0
KiCad E.D.A. 8.0.9		Id: 20/23

Measurements (P202)

P202

Res (OHMS)

1 0
2 0
3- 0
4- 0L
5- >50M
6- >50M
7- >50M

Reverse bias (V)

1- 0
2- 0
3- 0
4- 0L
5- 0L
6- 0L
7- 0L

Foward bias (V)

1- 0
2- 0
3- 0
4- 0L
5- 0L
6- 0L
7- 0L

Measurements (P202)
Author: Fábio Pereira da Silva

Sheet: /Measurements P202/
File: measurements_p202.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4	Date: 2025-03-24	Rev: 1.0
KiCad E.D.A. 8.0.9		Id: 21/23

Measurements (P207)

NOTES:

=====

Measure is related to floating ground (Y OUT)

P207

Res (OHMS)

1- 29.2k

2- 29.2k

3- 0L

4- 5.97k

5- 5.97k

6- 0

7- 744k

8- 742k

9- 795k

10- 740k

11- 790k

12- 0

Reverse bias (V)

1- 3.209

2- 3.209

3- 0L

4- 0.590

5- 0.590

6- 0

7- 0.609

8- 0.600

9- 0.641

10- 0.601

11- 0.659

12- 0

Foward bias (V)

1- 0L

2- 0L

3- 0L

4- 1.916

5- 1.916

6- 0

7- 1.464

8- 1.466

9- 1.576

10- 1.490

11- 1.561

12- 0

Author: Fábio Pereira da Silva

Sheet: /Measurements P207/

File: measurements_p207.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4

Date: 2025-03-24

Rev: 1.0

KiCad E.D.A. 8.0.9

Id: 22/23

Measurements (P203, P208 and P205)

NOTES:

=====

– All pins are Y Out connection (Floating ground)

1-> Y OUT related to Ground

=====

Res (OHMS)	Reverse bias (V)	Foward bias (V)
210k	OL	OL

2-> Y OUT related to +VS

=====

Res (OHMS)

–

Reverse bias (Black point in VS and Red point in Y Out) (V)
0.402

Foward bias (Red point in VS and Black point in Y Out) (V)
OL

Measurements (P203, P208 and P205)
Author: Fábio Pereira da Silva

Sheet: /Measurements P203, P208 and P205/
File: measurements_p203_p208_p205.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4

Date: 2025-03-24

Rev: 1.0

KiCad E.D.A. 8.0.9

Id: 23/23