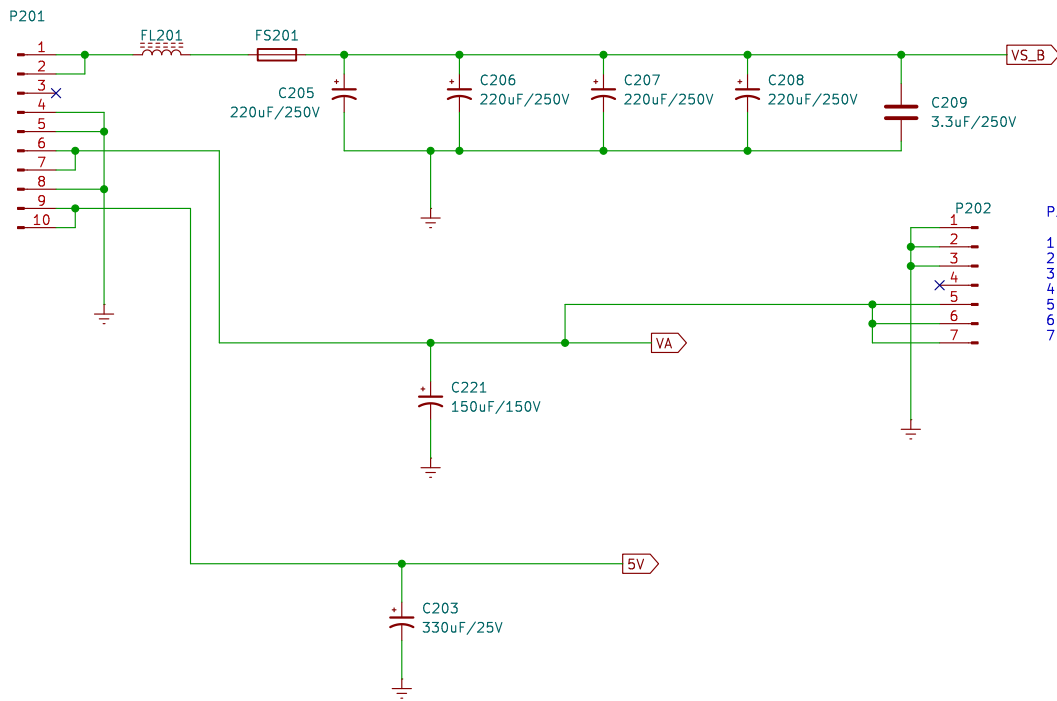


VOLTAGES SUPPLY

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

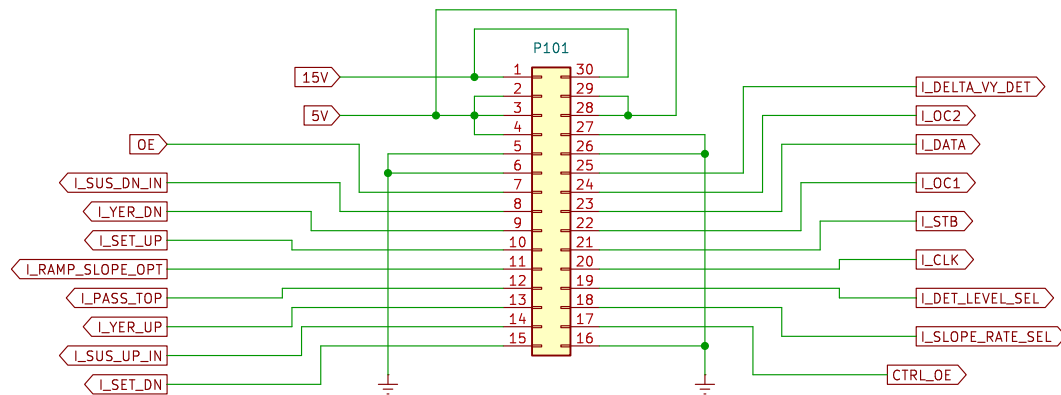
Title: Y BOARD LG PLASMA TV PANEL

| | | |
|--------------------|------------------|----------|
| 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

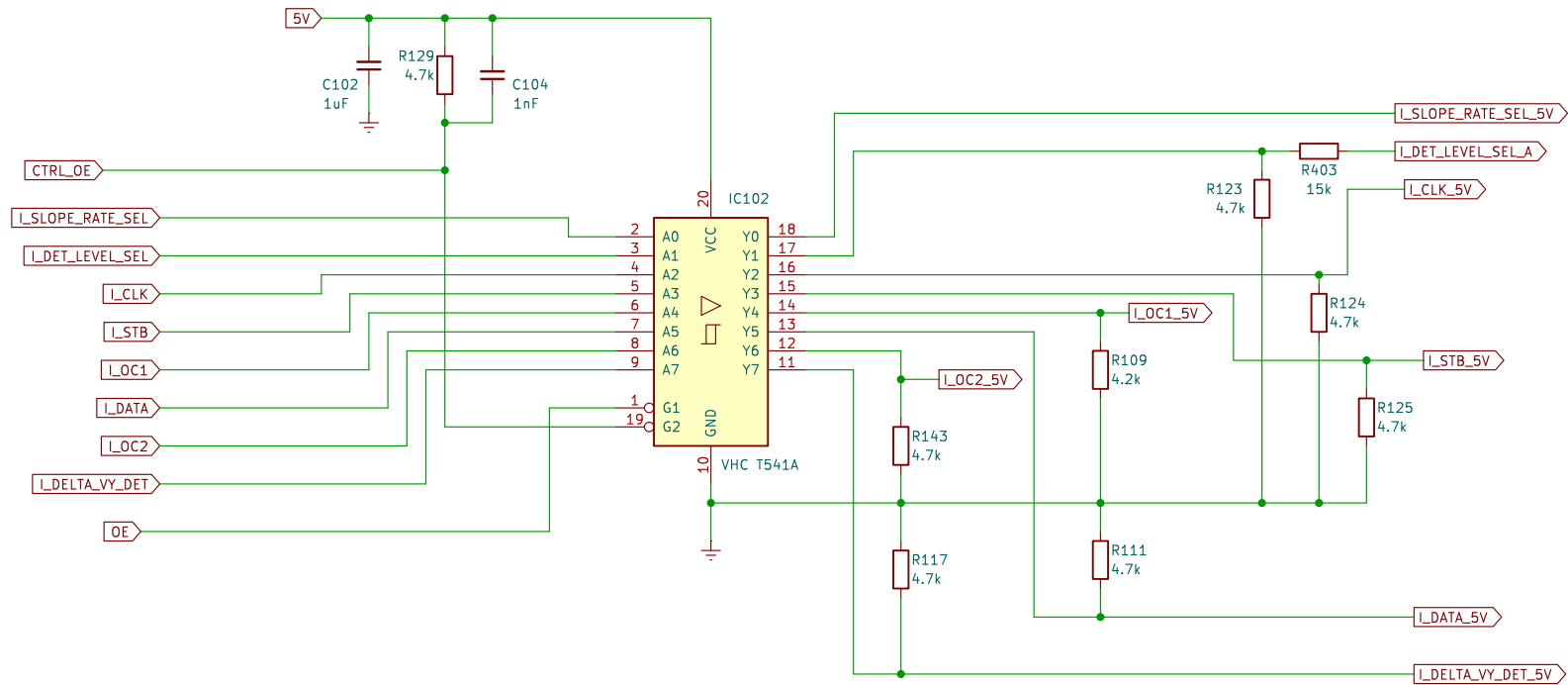
Title: Y BOARD LG PLASMA TV PANEL

Size: A4
KiCad E.D.A. 8.0.9

Date: 2025-03-24

Rev: 1.0
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

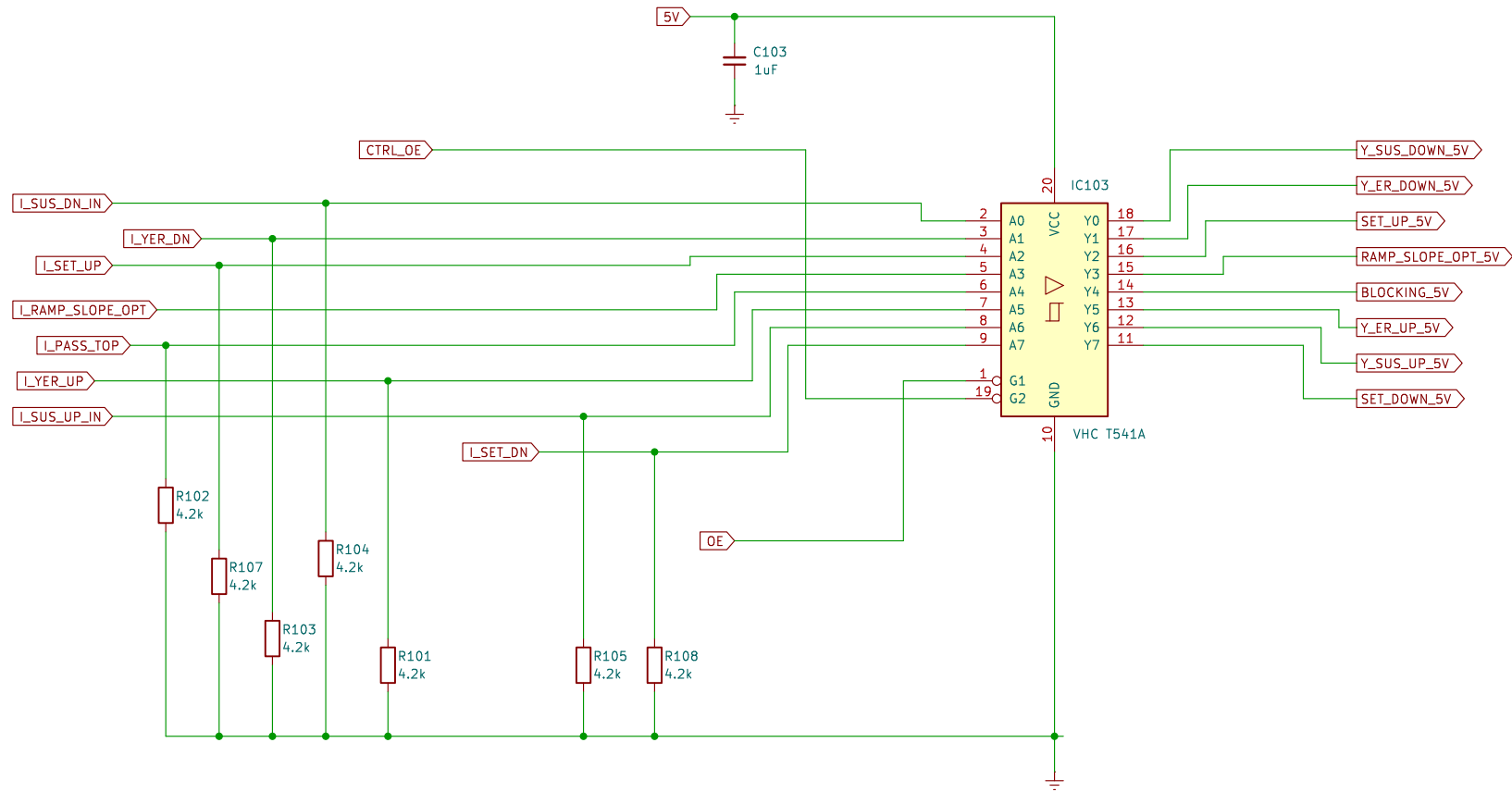
Date: 2025-03-24

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

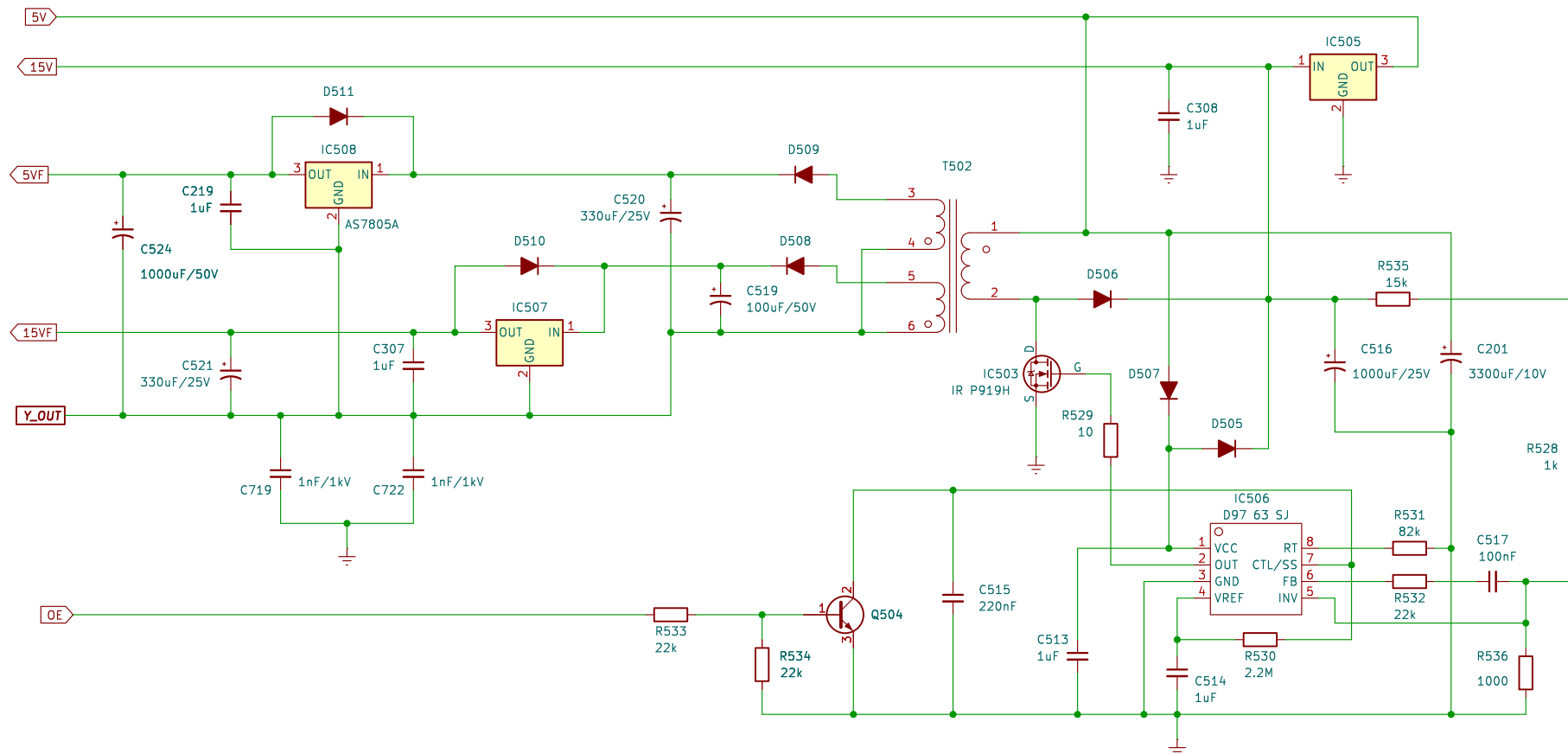
Title: Y BOARD LG PLASMA TV PANEL

Size: A4
KiCad E.D.A. 8.0.9

Date: 2025-03-24

Rev: 1.0
Id: 4/23

5VF, 15VF and 15V Supply



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

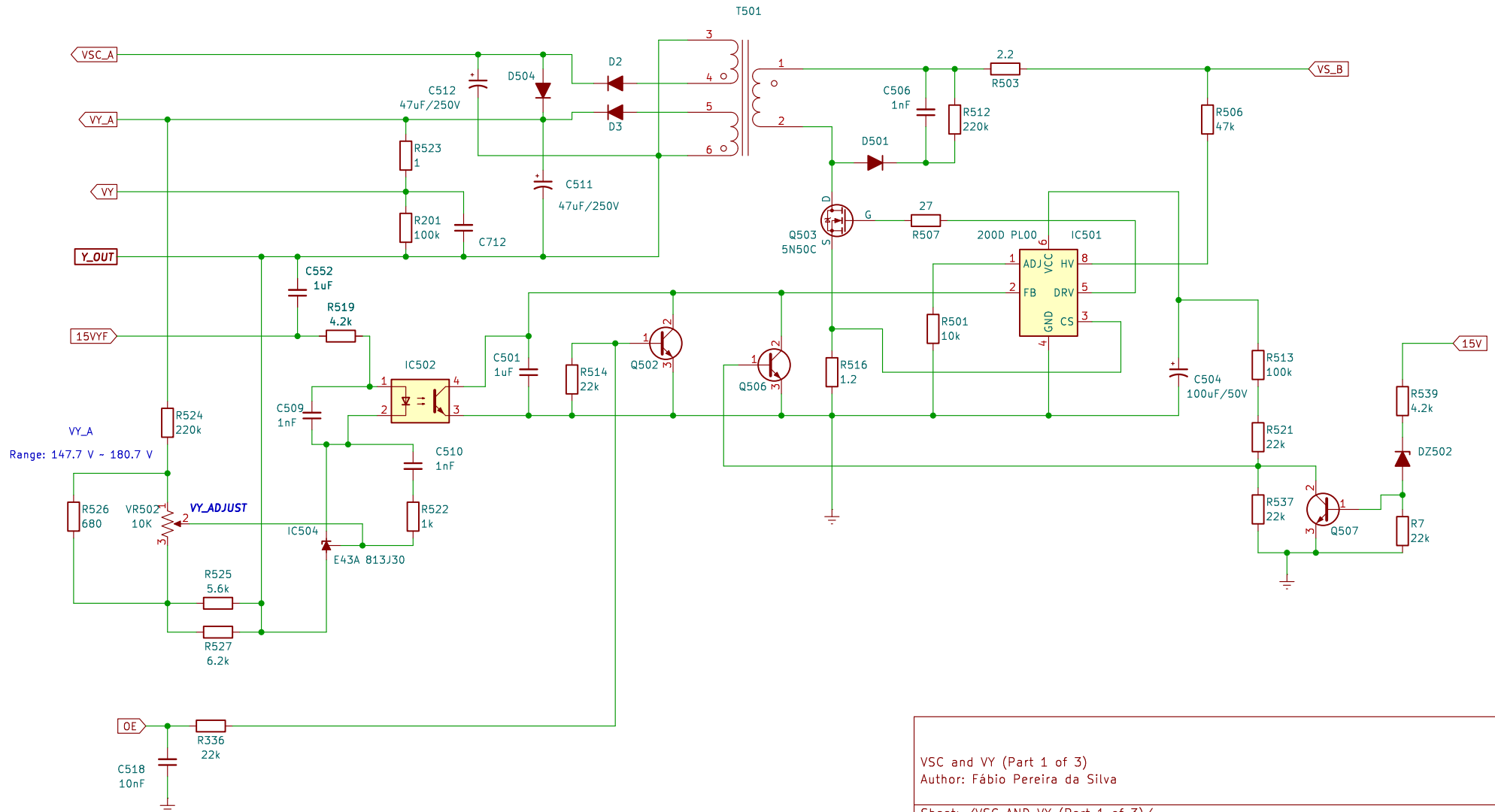
Sheet: /5VF, 15VF 15v/
File: 5VF_15VF_15V.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

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

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

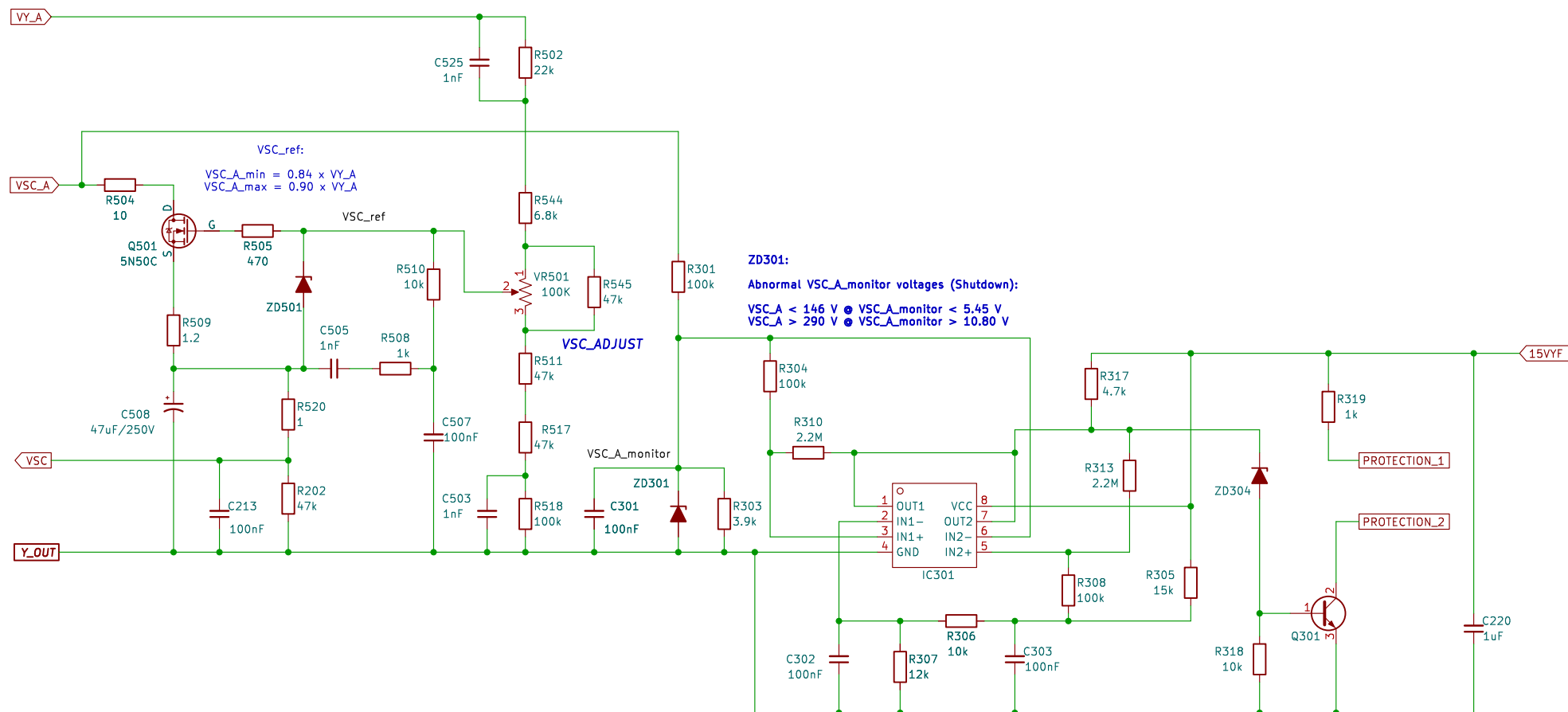
Sheet: /VSC AND VY (Part 1 of 3)/
File: vsc_and_vy.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

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

Rev: 1.0
Id: 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

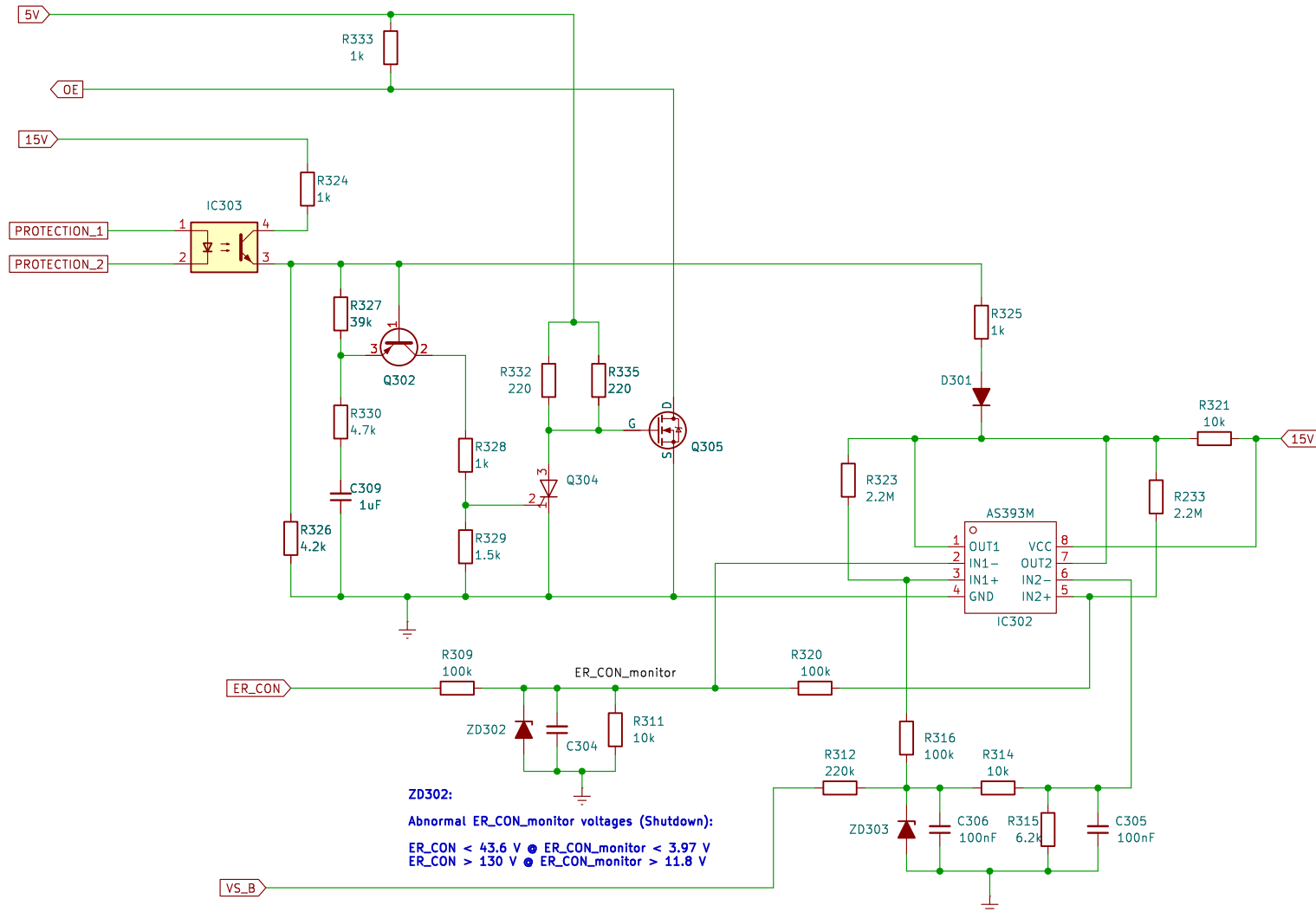
Date: 2025-03-24

KiCad E.D.A. 8.0.9

Rev: 1.0

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

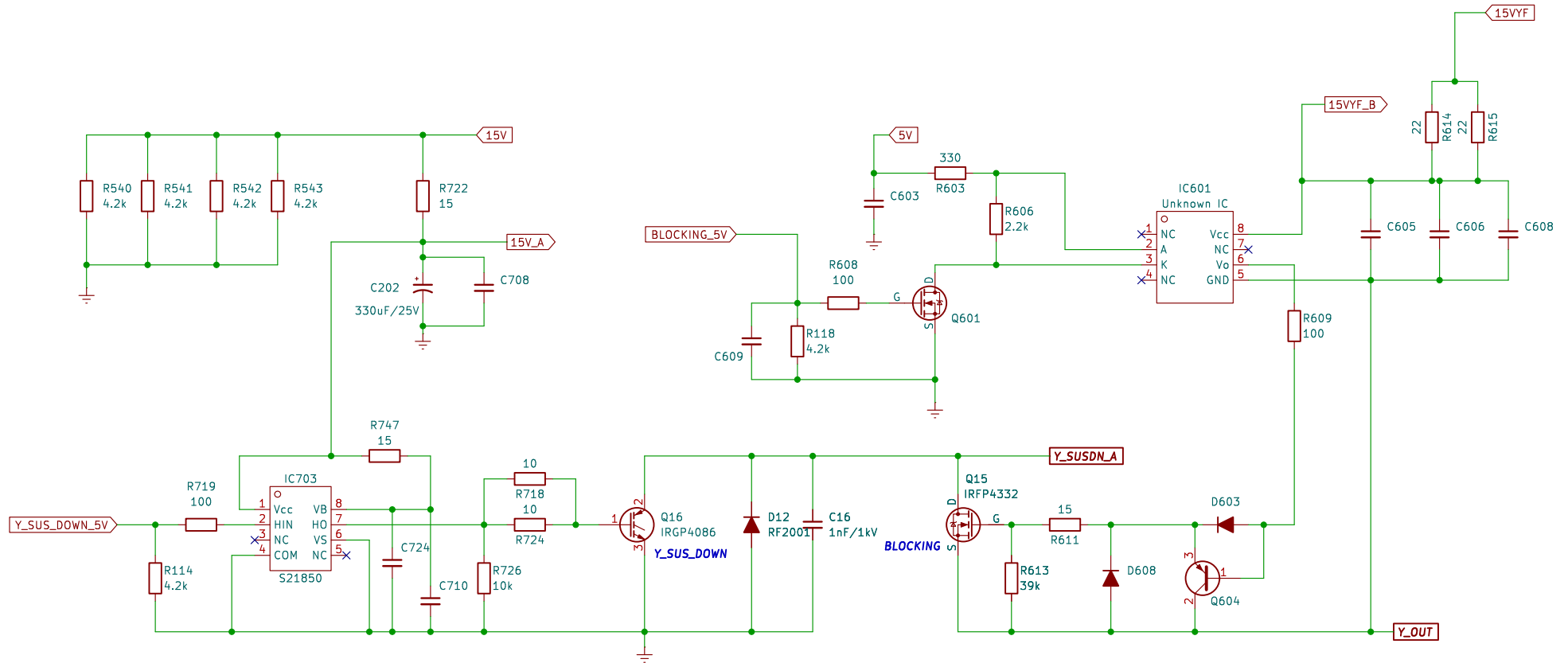
Size: A4 Date: 2025-03-24

KiCad E.D.A. 8.0.9

Rev: 1.0

Id: 8/23

Y BLOCKING AND Y SUS DOWN



Y_BLOCKING | Y_SUS_DOWN
 Author: Fábio Pereira da Silva

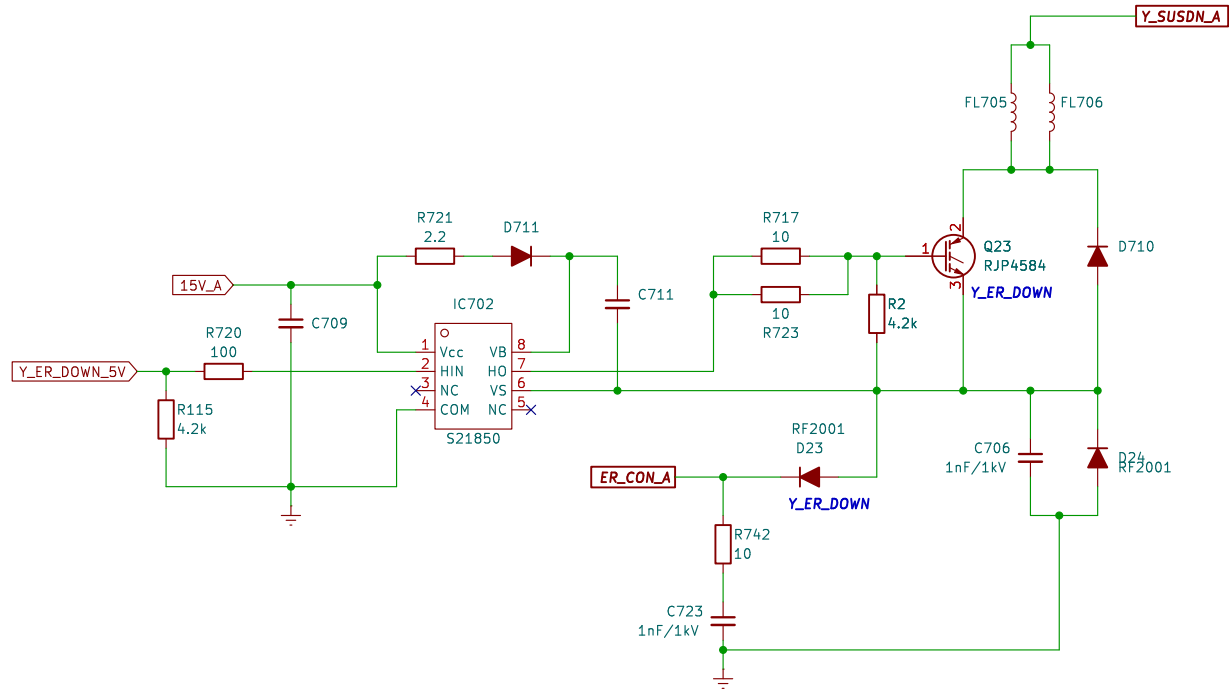
Sheet: /Y_SUS_DOWN_AND_Y_BLOCKING/
 File: y_sus_dn_and_blocking.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

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

Rev: 1.0
 Id: 9/23

Y ENERGY RECOVERY DOWN



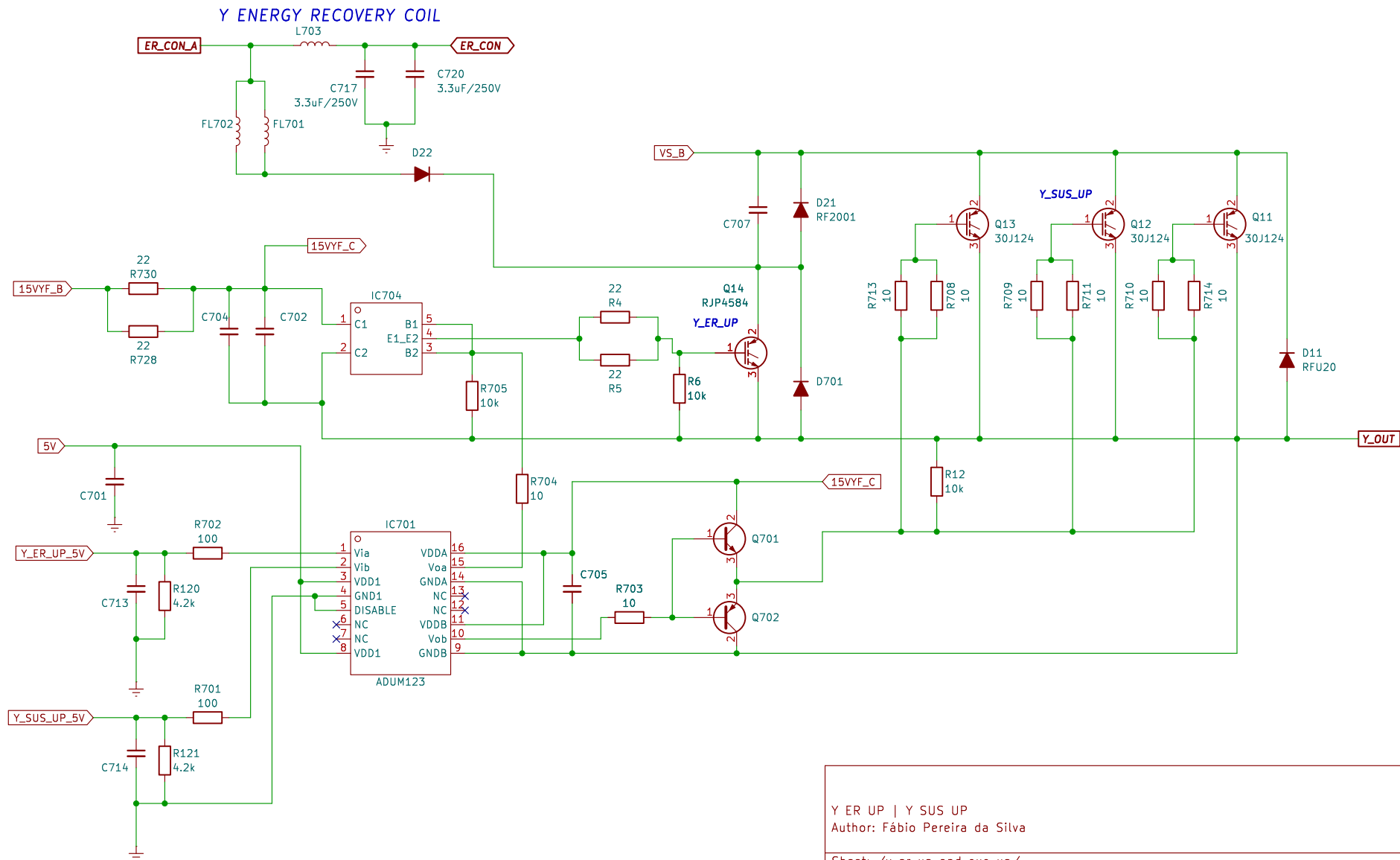
Y ER DOWN
Author: Fábio Pereira da Silva

Sheet: /y_er_down/
File: y_er_down.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

| | | |
|--------------------|------------------|-----------|
| Size: A4 | Date: 2025-03-24 | Rev: 1.0 |
| KiCad E.D.A. 8.0.9 | | Id: 10/23 |

Y ENERGY RECOVERY UP AND Y SUS UP



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

Sheet: /y_er_up_and_sus_up/
File: y_er_up_and_sus_up.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

Size: A4

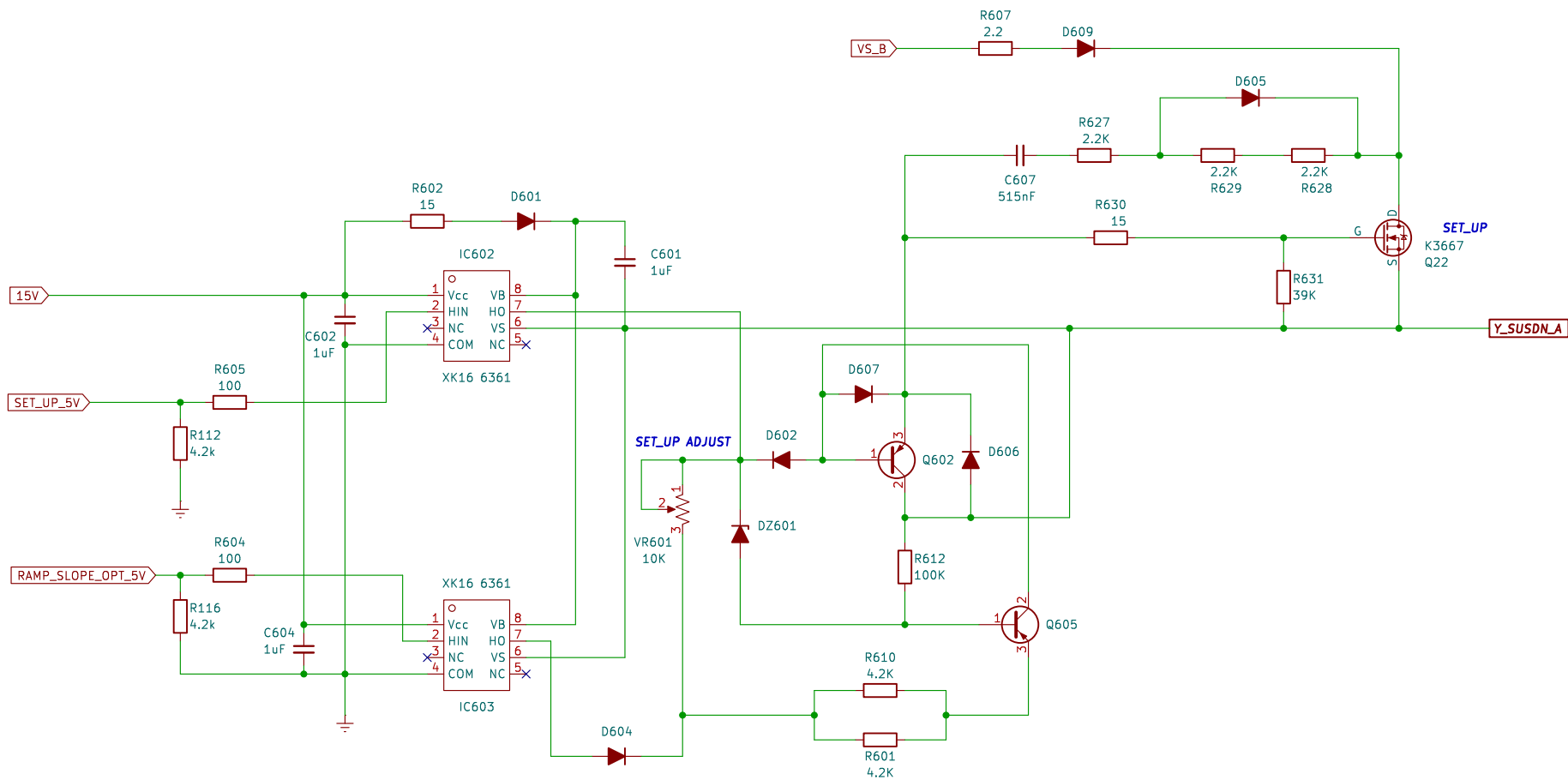
Date: 2025-03-24

KiCad E.D.A. 8.0.9

Rev: 1.0

Id: 11/23

SET UP



Set Up
Author: Fábio Pereira da Silva

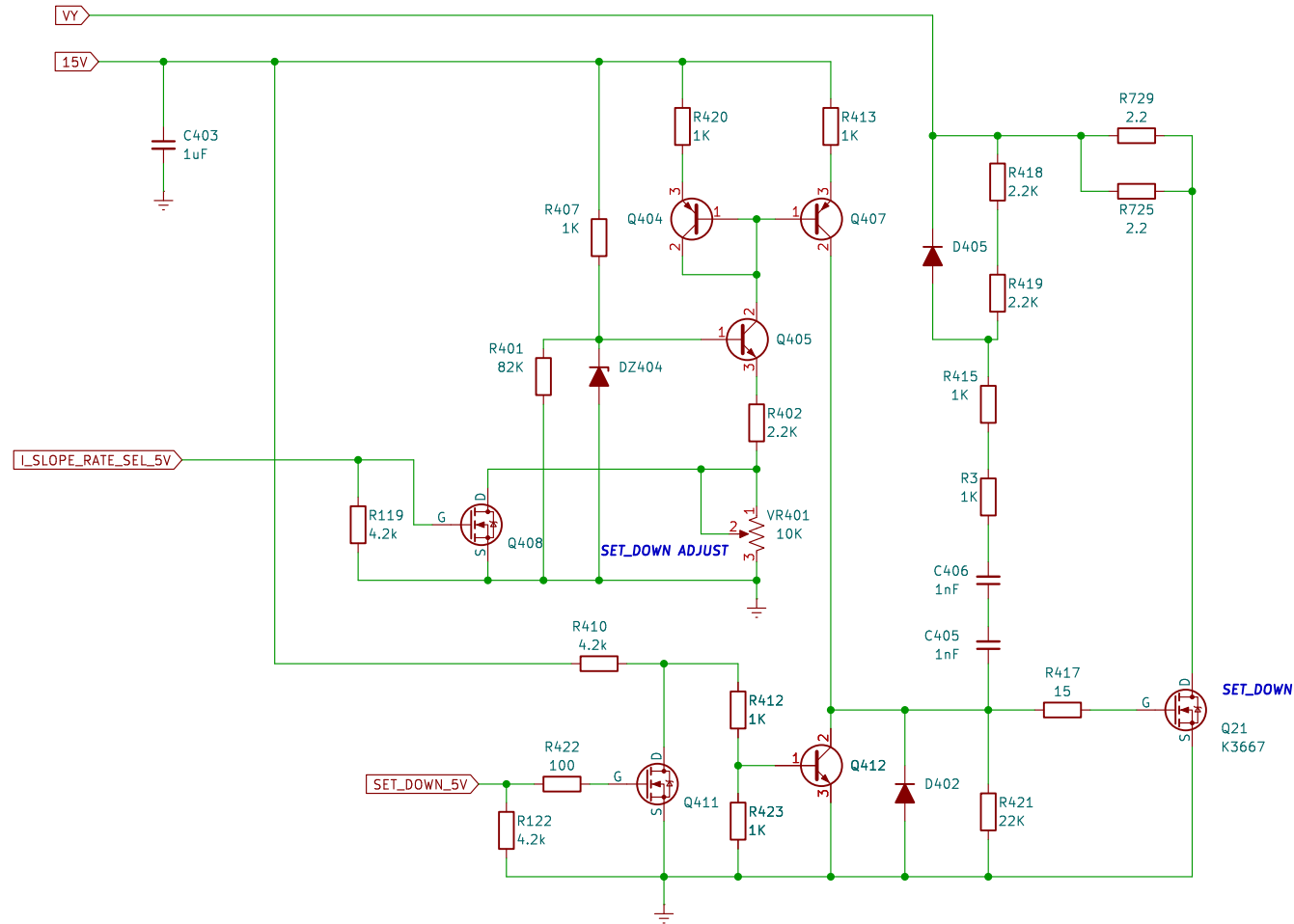
Sheet: /SetUp/
File: set_up.kicad_sch

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

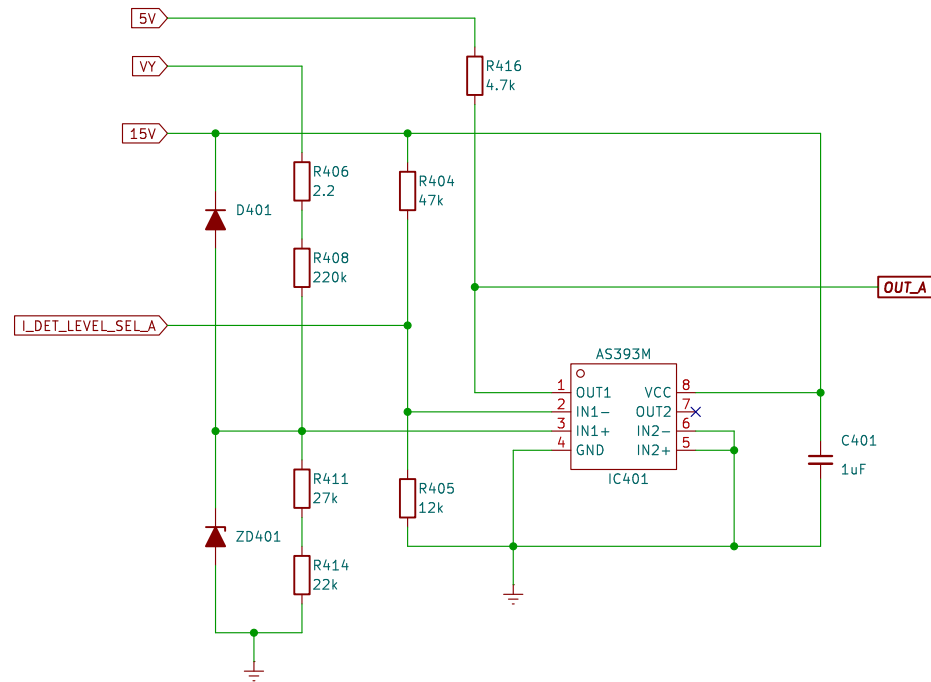
Sheet: /SetDown/
File: set_down.kicad_sch

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)



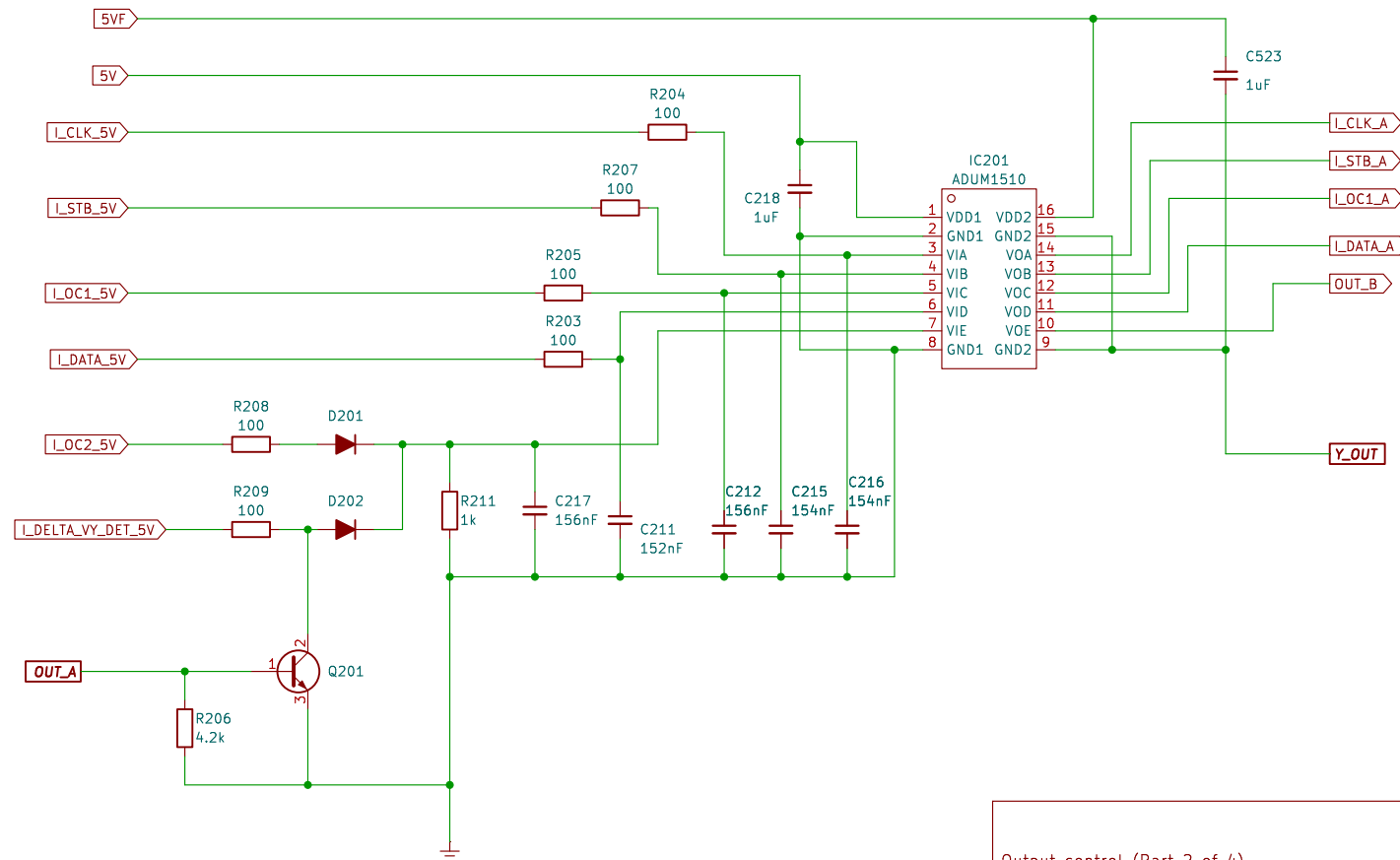
Output Control (Part 1 of 4)
Author: Fábio Pereira da Silva

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

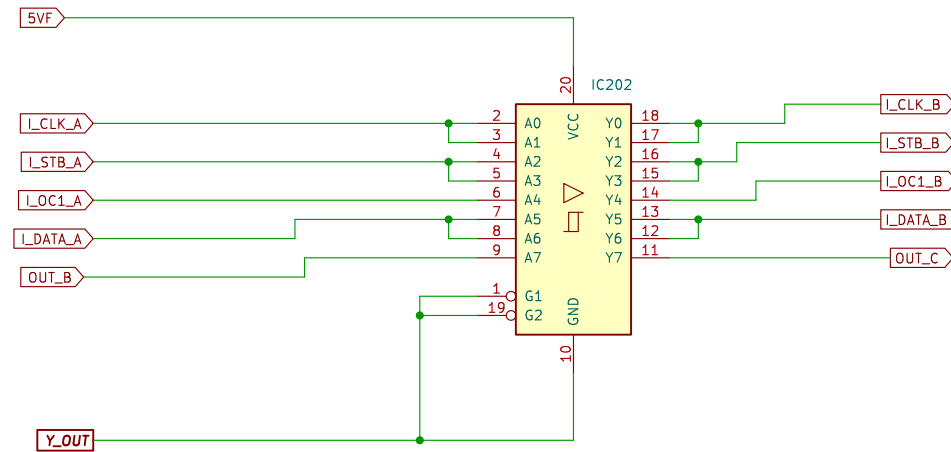
Sheet: /Output Control (Part 2 of 4)/
File: output_control2.kicad_sch

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

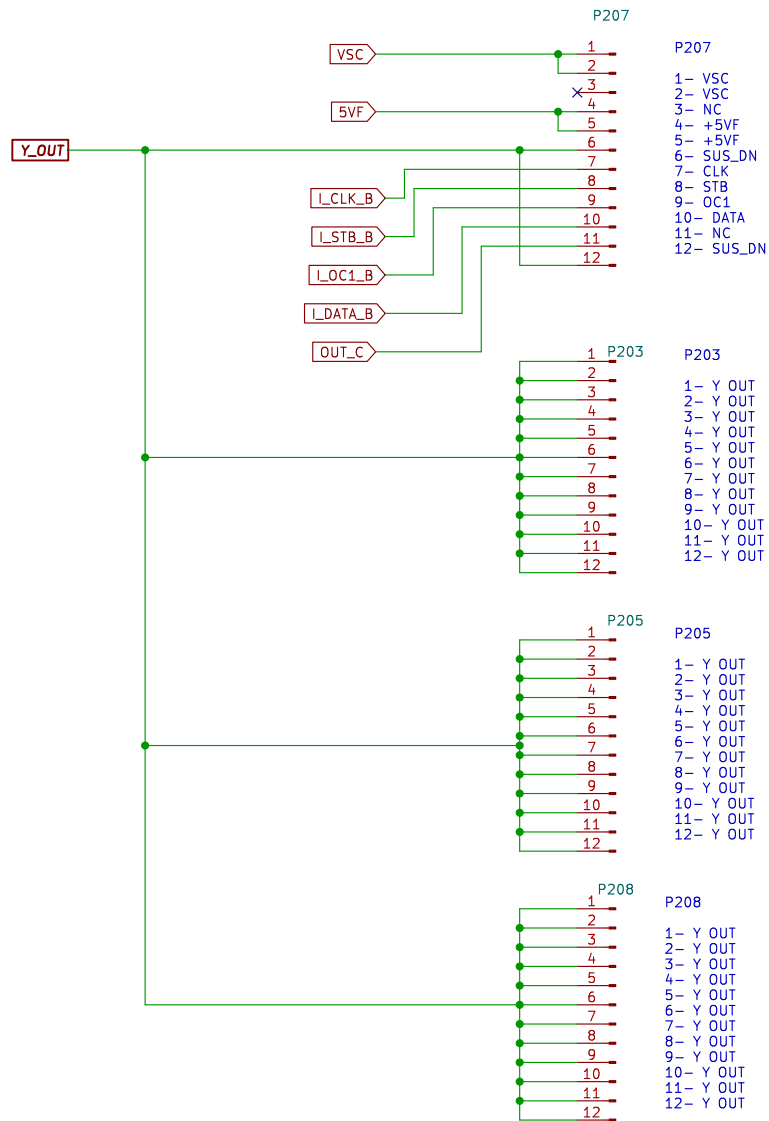
Date: 2025-03-24

Rev: 1.0

KiCad E.D.A. 8.0.9

Id: 16/23

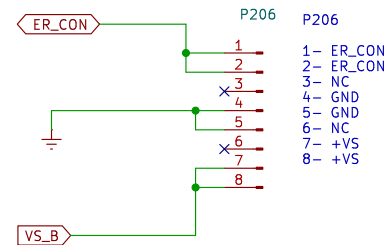
OUTPUT CONTROL (Part 4 of 4)



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