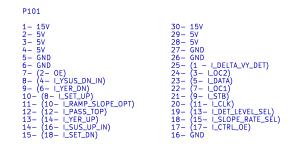
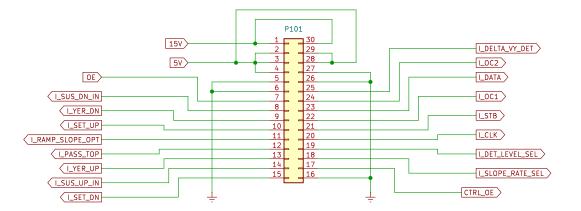


Input Control (Part 1 of 3)





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

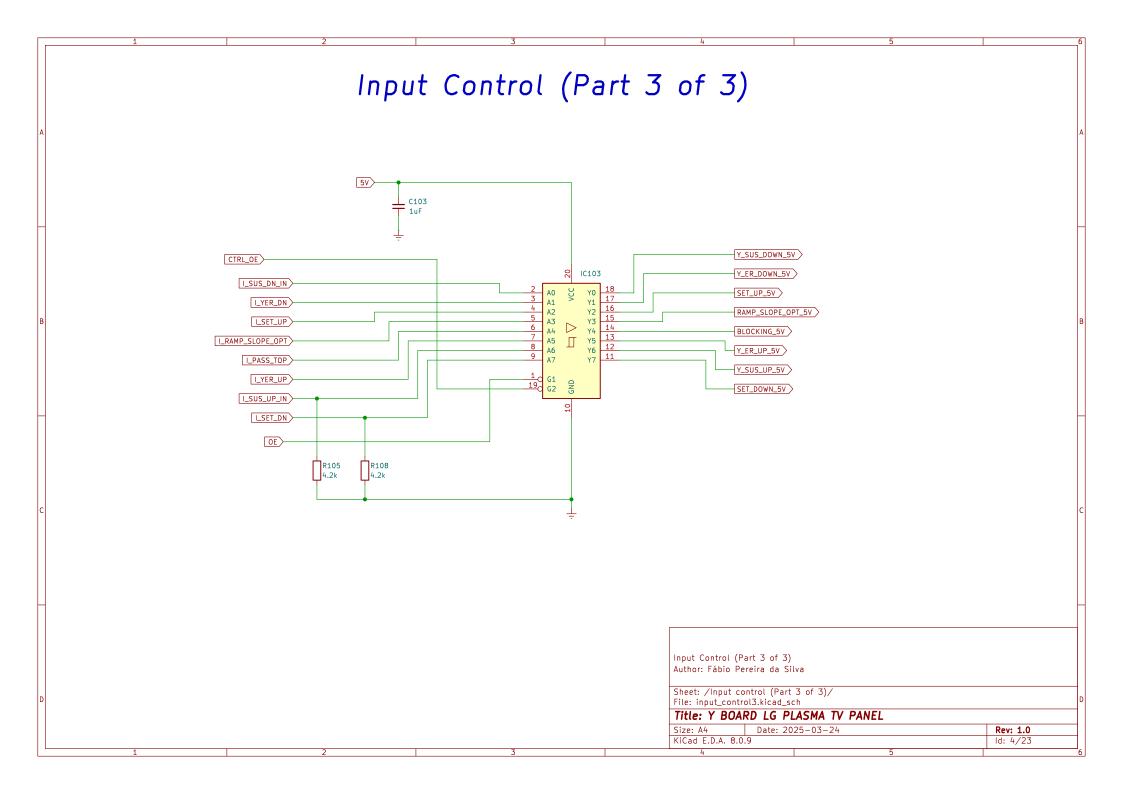
Sheet: /Input control (Part 1 of 3)/
File: input_control.kicad_sch

Title: Y BOARD LG PLASMA TV PANEL

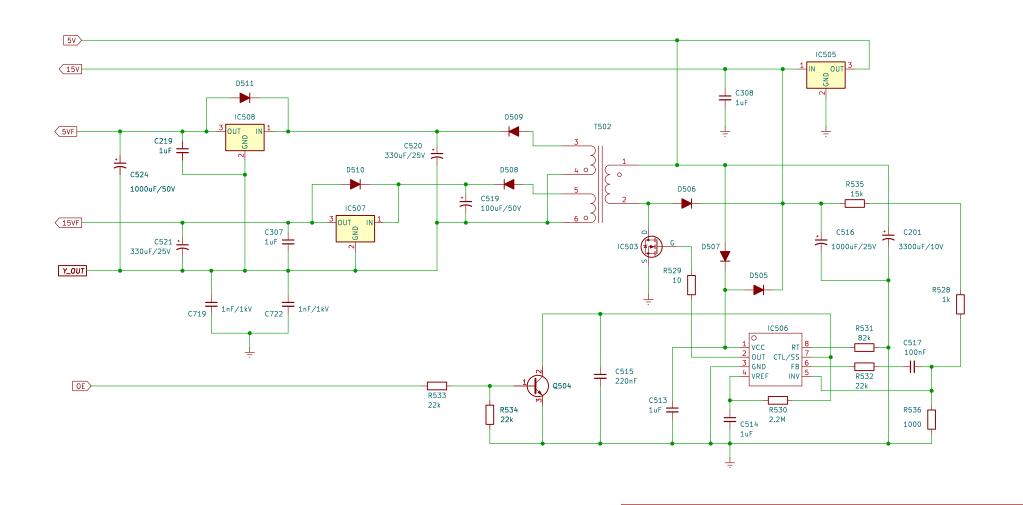
 Size: A4
 Date: 2025-03-24
 Rev: 1.0

 KiCad E.D.A. 8.0.9
 Id: 2/23

Input Control (Part 2 of 3) R129 C102 C104 I_SLOPE_RATE_SEL_5V I_DET_LEVEL_SEL_A CTRL_OE 15k I_CLK_5V R123 4.7k IC102 I_SLOPE_RATE_SEL Y0 Y1 Y2 Y3 Y4 Y5 Y6 I_DET_LEVEL_SEL I_CLK > R124 4.7k I_0C1_5V > I_STB R109 4.2k I_STB_5V I_OC1 I_0C2_5V > R125 4.7k I_DATA > 19 G2 I_OC2 I_DELTA_VY_DET OE> R111 4.7k R117 4.7k I_DATA_5V I_DELTA_VY_DET_5V 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 ld: 3/23



5VF, 15VF and 15V Supply



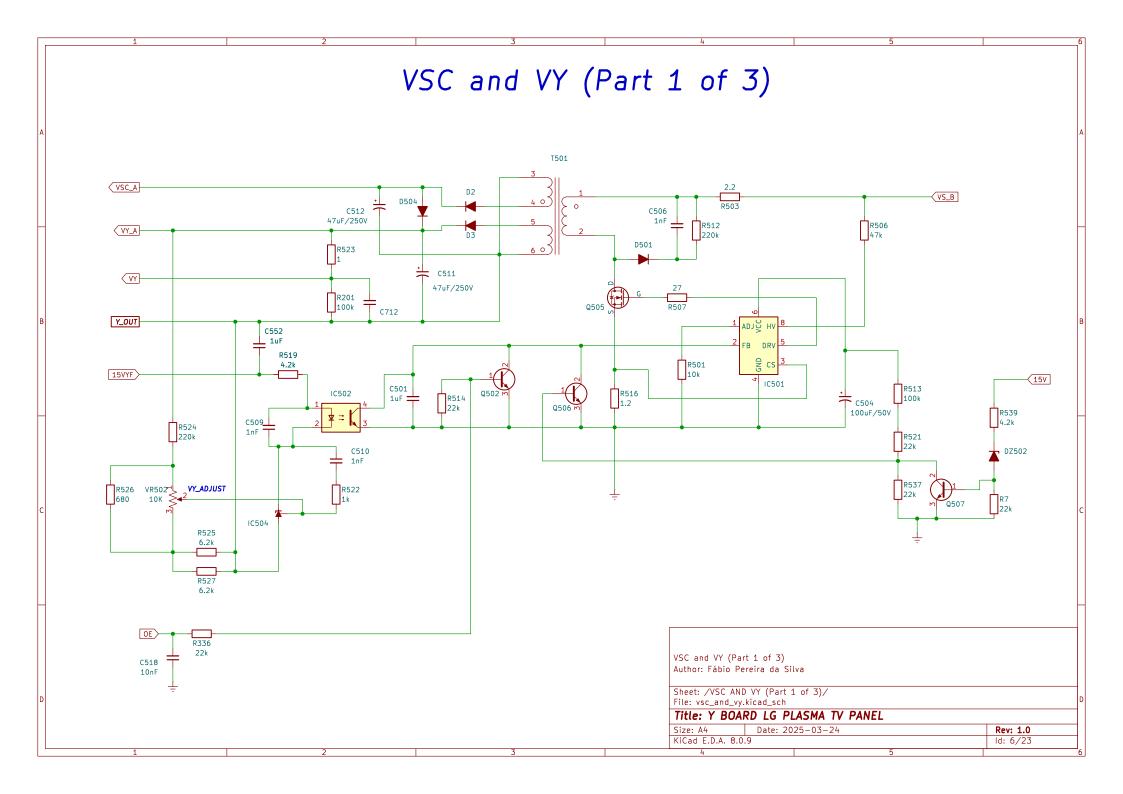
5VF, 15VF and 15V Supply Author: Fábio Pereira da Silva

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

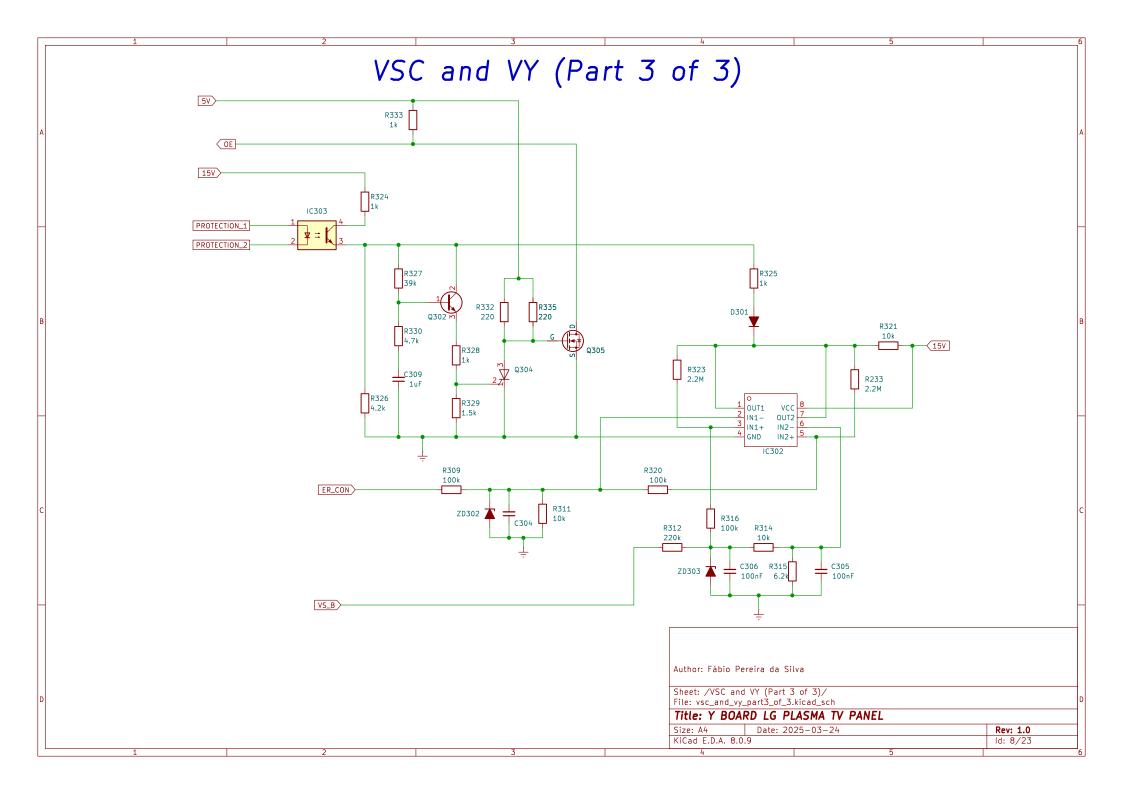
Title: Y BOARD LG PLASMA TV PANEL

 Size: A4
 Date: 2025-03-24
 Rev: 1.0

 KiCad E.D.A. 8.0.9
 Id: 5/23

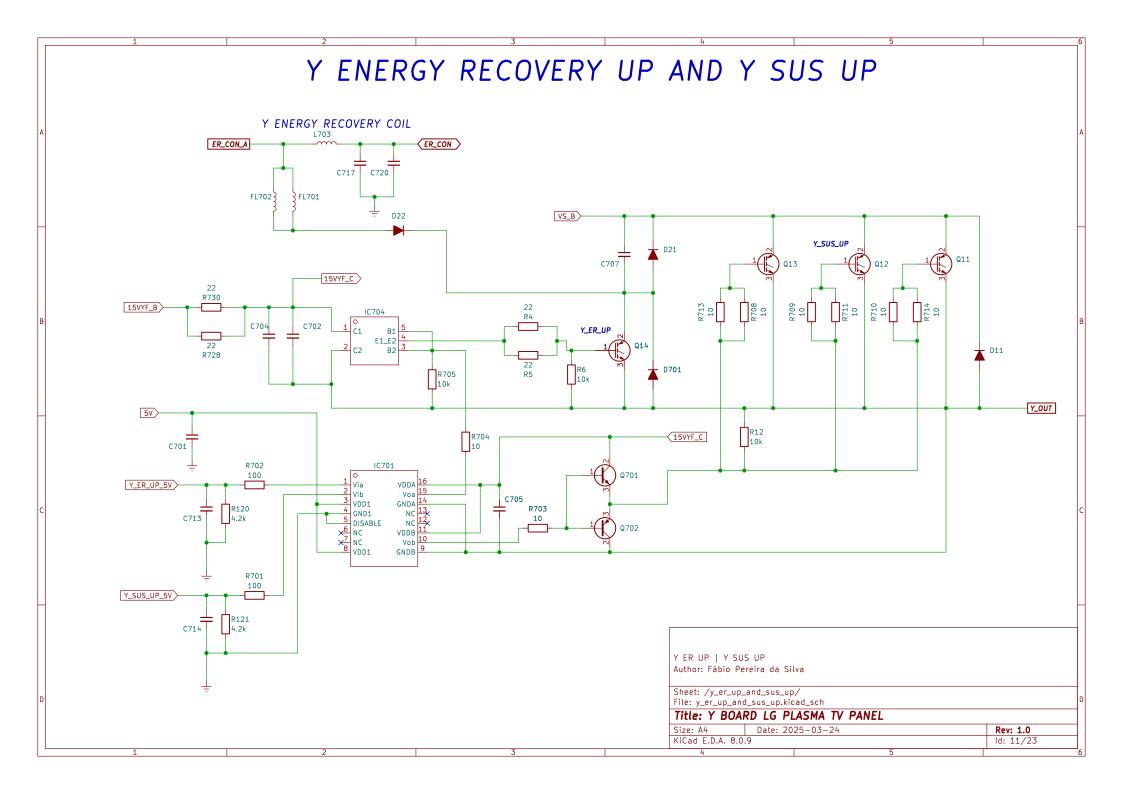


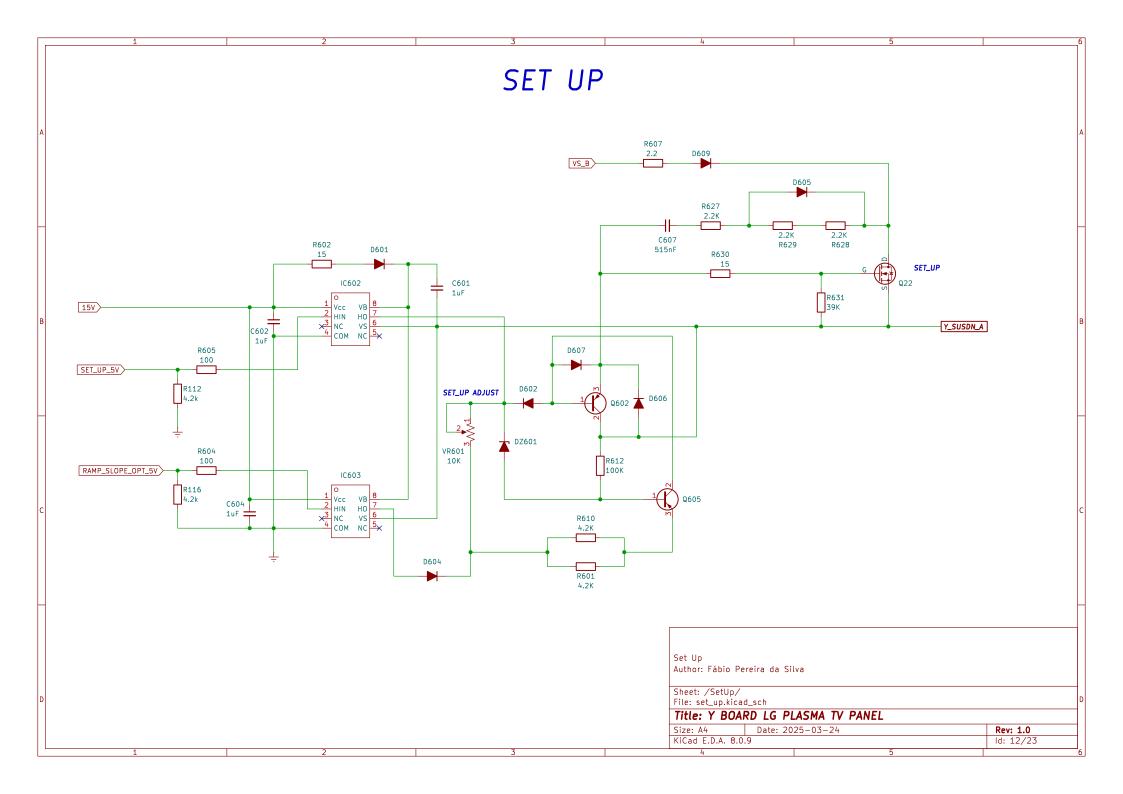
VSC and VY (Part 2 of 3) VY_A C525 == VSC_A R544 6.8k R505 470 R301 100k R510 VR501 10K R545 10k ZD501 C505 R508 VSC_ADJUST 1nF 1 k 15VYF R304 100k R317 4.7k R319 1k R520 C508 C507 R310 47uF/250V R517 47k =100nF 2.2M PROTECTION_1 VSC R313 ZD301 2.2M 0 0 UT1 VCC 2 IN1 - OUT2 3 IN1 + IN2 -GND IN2 + ZD304 C503 ___C213 R518 100k C301 R303 3.9k 1nF = 100nF PROTECTION_2 100nF Y_OUT IC301 R305 R308 100k 15k C220 T1uF C303 R318 R307 12k C302 = _____100nF 10k 100nF 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 ld: 7/23

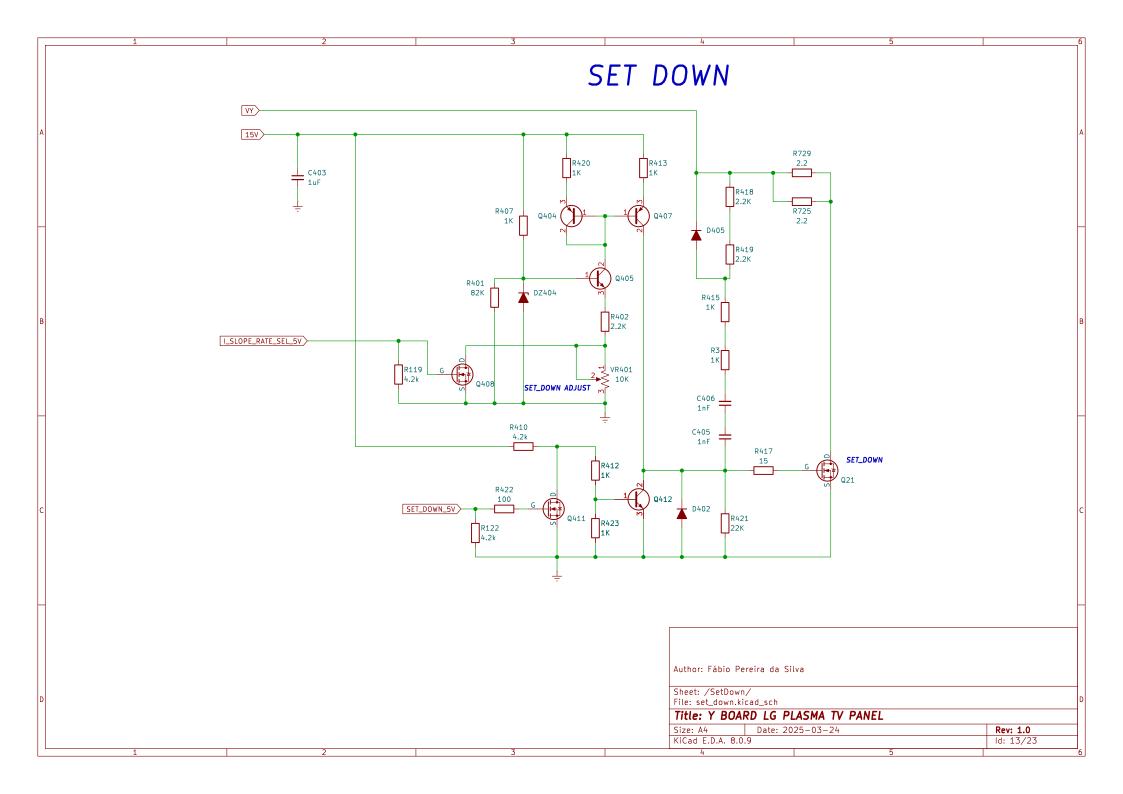


Y BLOCKING AND Y SUS DOWN 15VYF 15VYF_B 22 R614 22 R615 330 C603 R603 R540 R541 4.2k 4.2k R542 R543 4.2k R543 R722 15 IC601 Unknown IC R606 2.2k BLOCKING_5V 15V_A > C202 <u>L</u> C708 100 R609 100 R118 4.2k 15 Y_SUSDN_A IC703 R719 100 D603 Vcc VB 10 Q16 D12 + C16 1nF/1kV 2 HIN HO 7 NC VS 6 COM NC 5 Q15 R724 Y_SUS_DOWN_5V R611 BLOCKING S C724 Y_SUS_DOWN ★ D608 C710 R726 R114 4.2k R613 39k Q604 Y_OUT 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 Rev: 1.0 KiCad E.D.A. 8.0.9 ld: 9/23

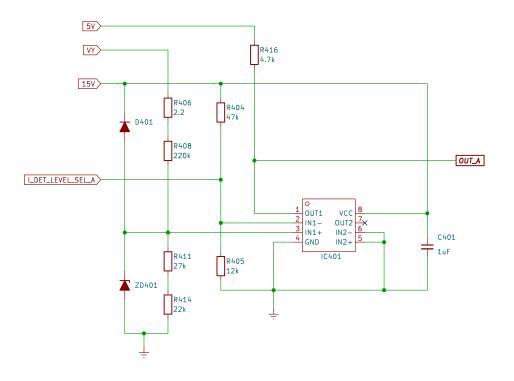
Y ENERGY RECOVERY DOWN Y_SUSDN_A FL706 FL705 } R721 2.2 R717 D711 10 Q23 → D710 ___ C711 15V_A Y_ER_DOWN IC702 R2 4.2k 10 + C709 1 Vcc VB 8 7 6 6 COM NC 5 5 R720 R723 100 Y_ER_DOWN_5V R115 4.2k C706 ____ D24 1nF/1kV ER_CON_A Y_ER_DOWN R742 C723 1nF/1kV Y ER DOWN Author: Fábio Pereira da Silva Sheet: /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 ld: 10/23







OUPUT CONTROL (Part 1 of 4)



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

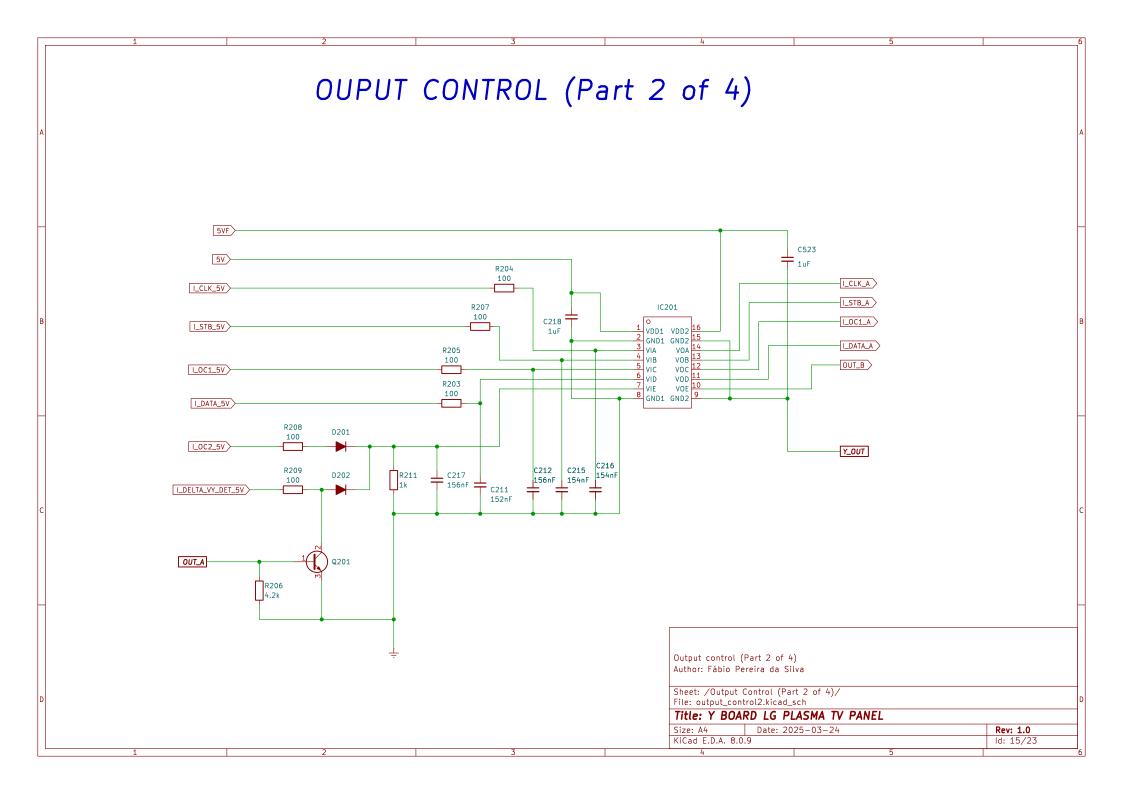
Sheet: /Output Control (Part 1 of 4)/

File: output_control.kicad_sch

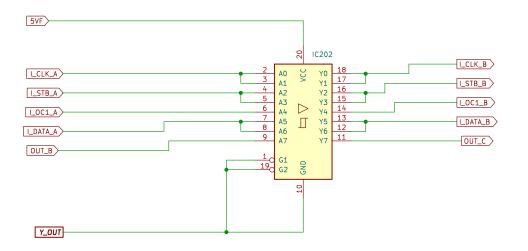
Title: Y BOARD LG PLASMA TV PANEL

 Size: A4
 Date: 2025-03-24
 Rev: 1.0

 KiCad E.D.A. 8.0.9
 Id: 14/23



OUPUT CONTROL (Part 3 of 4)



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

Sheet: /Output Control (Part 3 of 4)/

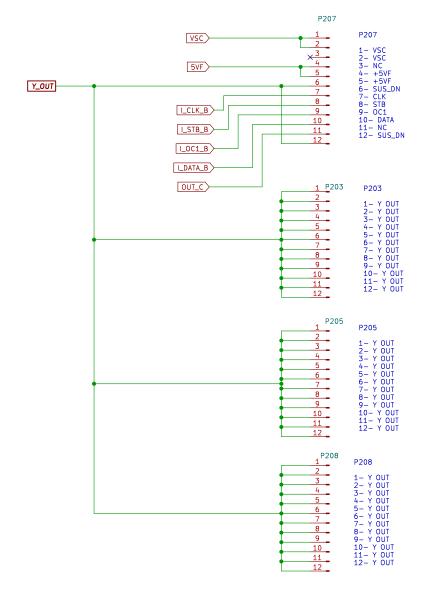
File: output_control3.kicad_sch

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

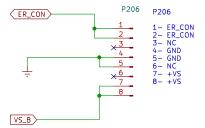
OUPUT CONTROL (Part 4 of 4)



NOTES:

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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) 1 > 200k2 > 200k6 - > 1 M7 - > 1 M8-0 9 - 2.2 k10 - 2.2 k

1 - 0.5512- 0.551 3 — — 4- 0 6-01 7- 01 8- 0 9-0.504 10 - 0.504 Foward bias (V) 1 - 012- OL 3- -4- 0 6 - 017- 01 8-0 9 - 1.1 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 ld: 18/23

Measurements (P206)

P206

1 - 110k 1 - 0.7692 - 110k3- OL 4- 0 6 - 017- OL 8- 01

Res (OHMS) Reverse bias (V) 2- 0.769 3-01 4- 0 6- OL 7- 0.550 8- 0.550

Foward bias (V) 1 - 0L2- 01 3- 01 4- 0 6 - 017- OL 8- 01

> 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 ld: 19/23

Measurements (P101) P101 Reverse bias (V) Res (OHMS) Foward bias (V) 1 - 0.4951 - 9171 - 0.9452 - 0.4952- 918 2 - 0.9443 - 0.5033 - 2.264k3 - 1.0894- 0.503 4 - 2.240k4 - 1.0905 - 0.5025 - 2.220k5 - 1.0896 - 0.5036 - 2.240k6 - 1.0897-0.503 7 - 2.242k7- 1.089 8 - 08 - 08 - 09 - 09 - 09-0 10 - 010 - 010 - 011 - 011 - 011 - 012 - 0.65812 - 0112 - 0113 - 0.61413 - 3.2k13 - 1.80414 - 0.65914 - 0114 - 0115 - 0.65015 - 2.72315 - 4.699k16 - 0.65916 - 0116- OL 17 - 0.65017 - 4.695k17 - 2.72218 - 0.66018- 01 18- OL 19-0.651 19 - 4.708k19 - 2.72420 - 0.66020 - 0120 - 0121 - 0.65721- 01 21 - 0122- 0.660 22- OL 22 - 0123 - 0.65023 - 4.689k23 - 2.72024 - 0.66024- 01 24 - 0125 - 0.65025 - 4.676k25 - 2.71826 - 0.66026 - 0126 - 0127 - 0.65027 - 4.699k27 - 2.723Measurements (P101) 28 - 0.617Author: Fábio Pereira da Silva 28 - 7.7k28 - 2.92629 - 0.649Sheet: /Measurements P101/ 29 - 4.685k29 - 2.720File: measurements p101.kicad sch 30 - 030 - 030 - 0Title: Y BOARD LG PLASMA TV PANEL Size: A4 Date: 2025-03-24 Rev: 1.0 KiCad E.D.A. 8.0.9 ld: 20/23

Measurements (P202)

P202

4- OL 5 - > 50M6 - > 50M 6 - OL7 - > 50M 7 - 01

Res (OHMS) Reverse bias (V) 1 - 0 2- 0 5- OL

Foward bias (V) 1 - 0 2- 0 6 - 017- 01

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 ld: 21/23

Measurements (P207)

NOTES:

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Measure is related to floating ground (Y OUT)

P207

Res (OHMS) Reverse bias (V) Foward bias (V) 1 - 3.2091 - 29.2 k2 - 29.2k2- 3.209 3-01 3-01 4 - 5.97k4- 0.590 5 - 5.97k5 - 0.5906 - 06 - 07-0.609 7 - 744k8 - 742k8 - 0.6009 - 795k 9 - 0.64110 - 740k10 - 0.60111 - 790k11- 0.659 12 - 012- 0

1 - 012 - 013-01 4- 1.916 5 - 1.9167-1.464 8- 1.466 9 - 1.57610 - 1.49011 - 1.56112 - 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 ld: 22/23

Measurements (P203, P208 and P205)

NOTES:

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All pins are Y Out connection (Floating ground)

1-> Y OUT related to Ground

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

2-> Y OUT related to +VS

Res (OHMS)

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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