



Vout can be from 30V - 36V
Depending on PI Designer
values

LHA SYSTEMS
1 INNOVATION CENTRE II
TECHNOPARK
STELLENBOSCH
7600
SOUTH AFRICA
+27-21-880-1886

| Changes at this Issue | | | | | | DATE |
|--|---------|--------|---------|-------|-------|---------------|
| APPROVED | CHECKED | DRAWN | ECP No. | ISSUE | BUILD | 27/08/2021 |
| Louis | Martin | Martin | None | B | (1) | |
| TITLE: PSU IPSU eSOP | | | | | | |
| VARIANT: [No Variations] #NAME? | | | | | | |
| Doc No: Switch_PSU.SchDoc | | | | | | |
| File Name: Switch_PSU.SchDoc | | | | | | |
| | | | | | | Sheet: 1 OF 1 |

| Comment | Description | Designator | Footprint | LibRef | Quantity |
|--------------------------------|---|----------------------|---------------------------------------|----------------------------|----------|
| KBP206G | Diode Bridge | B1 | KBP | BRIDGE3 | 1 |
| 100nF | Cap Ceramic 10% | C1, C2, C7, C15, C18 | 0805_OCTAL | CAP | 5 |
| 220nF | Cap Polyester | C3 | Y2/X2 CAP 15MM | CAP | 1 |
| 1nF | Cap Ceramic 10% | C4 | 1206 - OCTO | CAP | 1 |
| 2.2nF | Cap Polyester | C5 | RAD_H15.5mmxP10mm | CAP | 1 |
| 3.9nF | Cap Ceramic 10% | C6 | 1210 HIGH | CAP | 1 |
| 330uF LOW ESR | Electrolytic Capacitor | C8, C9 | RAD-5R-21H-5P | CAP POL | 2 |
| 100uF LOW ESR | Electrolytic Capacitor | C10 | RAD-4R-13H-3.5P | CAP POL | 1 |
| 120uF | Aluminium Electrolytic Cap | C11 | RAD-9.5R-42H-7.5P | CAP POL | 1 |
| 22uF LOW ESR | Electrolytic Capacitor | C12 | RB5-D6.3mmxH12mmxP5mm | CAP POL | 1 |
| 5.6nF | Cap Ceramic 10% | C13 | 0805_OCTAL | CAP | 1 |
| 10uF | Cap Ceramic 10% | C14 | 1206 - OCTO | CAP | 1 |
| 100uF LOW ESR | Electrolytic Capacitor | C16 | RB5-D6.3mmxH12mmxP5mm | CAP POL | 1 |
| 22uF | Cap Ceramic 20% | C17 | 1210 | CAP | 1 |
| 22nF | Cap Polyester | C19 | RADIAL H11.5xL15xW5xP1ch1.2.5 | CAP | 1 |
| 1uF | Cap Ceramic 10% | C20, C21, C22, C23 | 1206 - OCTO | CAP | 4 |
| CAP200DG | IC AUTOMATIC DISCHARGE BSO | CP1 | SO-8 | CAP200DG | 1 |
| LL4148 | DIODE | D1, D5 | MLL34 | DIODE | 2 |
| LTL1631PR-H102 | RED LED RA | D2 | SUNLED | LED | 1 |
| ES3D | DIODE | D3, D8 | DO-214AB-SMC | DIODE_1N4007 | 2 |
| SMB150A | Zener Diode DO-35 | D4 | SMB/P4.5 | D Zener | 1 |
| RS3MB | DIODE | D6 | SMB/P4.5 | DIODE | 1 |
| SS15 | Schottky Barrier Rectifier, 40 V Maximum DC Blocking Voltage, -65 to 125 degC, 2-Pin SMA Case, RoHS | D7 | DO-214AC-2 | CMP-0549-00004-1 | 1 |
| DH4247-B | See LHADescription | DH3211-B | PCB_NAME | PCB_NAME_SYSTEM_PARAMETERS | 1 |
| FUSE BRD MNT 1.6A 250VAC/63VDC | Fuse | F4 | RSTA 1.6 AMMO | Fuse 2 | 1 |
| 3004-441 | Connector RJ9 | JP2 | RJ9 THL (95003-2441) | 4 HEADER | 1 |
| 740-72-04TS03 | 2x2 Minifit Jr RA | JP4, JP6 | MINIFIT-4P | 4 HEADER | 2 |
| JR-201SEB(PCA) | Figure 8 Power Connector | JP5 | JR-201SEB(PCA) | HEADER 2 | 1 |
| 0039300020 | Header 4.20mm, dual row, RA, pcb lock, 2w | JP7 | MINIFIT JR 2 WAY NO PEG | HEADER 2 | 1 |
| PI0503-330M | Power Inductor | L1 | PI0503 | INDUCTORS | 1 |
| SSRH7H-M11081 | | L2 | SSRH7H-M | SSRH7H-M11081 | 1 |
| RL622-3R3K-RC | Inductors, Coils, Chokes | L4 | RLB0914 | INDUCTOR | 1 |
| CNR-20N431K | MOV | MOV1 | CNR-20D431K | VARISTOR | 1 |
| PPTC041FBN-RC | Male Header, Pitch 2.54mm, 1 x 3 Position, Height 8.38mm, Tail Length 3.18mm, RoHS, Bulk | P1, P2 | Pin Header Female Straight 2.54mm 1x4 | Header 4x1 | 2 |
| MF72-010D9 | PTC | PTC1 | LEADED DISK 7.5mm pitch | PTC | 1 |
| 15kR | Resistor 1% | R1, R11 | 1206 - OCTO | RES1 | 2 |
| 1.6kR | See LHADescription | R2, R4 | 1206 - OCTO | RES5 | 2 |
| 1kR | Resistor 1% | R5 | 1206 - OCTO | RES1 | 1 |
| 33R | Resistor 1% | R6, R20, R25 | 1206 - OCTO | RES1 | 3 |
| 43kR | Resistor 1% | R8 | AXIAL-FMP200-STANDUP | RES1 | 1 |
| 5.1R | Resistor 1% | R9 | 1206 - OCTO | RES1 | 1 |
| 2.2kR | Resistor 1% | R10, R14 | 1206 - OCTO | RES1 | 2 |
| 7.5kR | Resistor 1% | R12 | 1206 - OCTO | RES1 | 1 |
| 2.74kR | Resistor 1% | R13 | 1206 - OCTO | RES1 | 1 |
| 1kR | Resistor 1% | R16 | 0805_OCTAL | RES1 | 1 |
| 137kR | Resistor 1% | R17 | 1206 - OCTO | RES1 | 1 |
| 6.8R | Resistor 1% | R18 | 1206 - OCTO | RES1 | 1 |
| 10.2kR | Resistor 1% | R19 | 1206 - OCTO | RES1 | 1 |
| 15kR | Resistor 1% | R21 | 1206 - OCTO | RES1 | 1 |
| 1kR | See LHADescription | R22 | 0603_OCTAL | RES5 | 1 |
| 27kR | See LHADescription | R23 | 0603_OCTAL | RES5 | 1 |
| 1.8kR | See LHADescription | R24 | 0603_OCTAL | RES5 | 1 |
| 12kR | Resistor 1% | R26, R27 | 1206 | RES1 | 2 |
| 0R | See LHADescription | R28, R29 | 0603_OCTAL | RES5 | 2 |
| EF32_36V2A_Trafotek | | T1 | EF32_36V2A_TRAFOT EK | EF32_36V2A_Trafotek | 1 |
| PS2561AL-1-F3-A | 4-Pin Phototransistor Optocoupler | U1 | 4SMD-GULL-WING | Optoisolator1 | 1 |
| TOP270KG | IC OFFLINE SW 50W 73W 12ESOP | U2 | eSOP-12B-K-Package | TOP268KG | 1 |
| MP2456GJ-Z | Step-Down Converter in a TSOT23-6 | U3 | TSOT23-6 | MP2456 | 1 |
| TL431AIDBVR | IC VREF SHUNT PREC ADJ SOT23-5 | U4 | SOT23-5 | TL431AIDBVR | 1 |