

The schematic diagram illustrates the LED driver section of the PCB. It features a series of LEDs (RX0, TX0, RX2, TX2, PWR, BOOT, KLED, CH2, CH3, CH5, CH6) connected to a +3.3V supply through resistors (R21, R28, R29, R30, R31, R32, R92, R93, R94, R95, R97, R98). The LEDs are connected to ground through various components including diodes (D2), capacitors (C1, C2, C3, C4, C5, C6), and other LEDs (KLED, CH2, CH3, CH5, CH6). The diagram also shows the connection of a Fan motor (Q25) and a 24V Heater (Q24) to the PCB.

[illegible]

U17 MCP9701T-E/TT

+5V

VDD

GND

VOUT

1 2 3

i1

U16 MCP9701T-E/TT

+5V

VDD

GND

VOUT

1 2 3

i2

U15 MCP9701T-E/TT

+5V

VDD

GND

VOUT

1 2 3

i3

RESET
TS6634TP-4P

R33
470

R41
12K

EN

+3.3V

BOOTLOADER
TS6634TP-4P

R35
470

R42
12K

D0

+3.3V

GND

The image displays three circuit diagrams for voltage converters, each utilizing the TPS54540DDAR integrated circuit. The diagrams are labeled 15V CONVERTER, 12V CONVERTER, and 5V CONVERTER.

- 15V CONVERTER:** This circuit takes a +24V input and converts it to +15V. Key components include resistors R114 (44.2k), R115 (150k), R69 (10k), R68 (5k), R50 (44.2k), and R52 (215k). It features capacitors C42 (4.7uF), C43 (7.5uF), C44 (1.5nF), and C40 (47uF). The output is labeled 12.3 - 17.7V.
- 12V CONVERTER:** This circuit takes a +24V input and converts it to +12V. Key components include resistors R119 (44.2k), R118 (150k), R48 (56.2k), R44 (147k), R70 (10k), and R66 (5k). It features capacitors C22 (100nF), C31 (2.2uF), C30 (2.2uF), C32 (1000pF), and C83 (1nF). The output is labeled 8.6 - 12.5V.
- 5V CONVERTER:** This circuit takes a +24V input and converts it to +5V. Key components include resistors R116 (18.7k), R117 (51k), R65 (10k), R64 (5k), R58 (60.4k), and R56 (18.7k). It features capacitors C23 (100nF), C27 (2.2uF), C26 (2.2uF), C28 (22pF), and C38 (47uF). The output is labeled 4.0 - 5.6V.

All three circuits share a common pin configuration for the TPS54540DDAR, with pins 1 through 9 labeled: 1. BOOT, 2. VIN, 3. EN, 4. RT/CLK, 5. COMP, 6. FB, 7. SW, 8. EP, 9. GND.