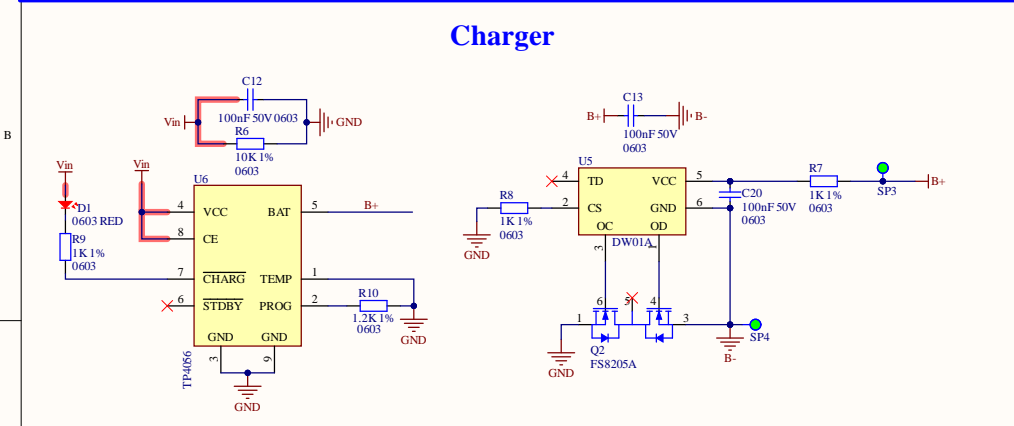


[illegible][illegible]

The diagram shows a USB-to-Speaker module. A USB cable provides power (V_{usb}) and data signals (D+ in green, D- in blue). The power is filtered by capacitors C3 (22μF 16V), C4 (1μF 50V), and C5 (100nF 50V) before reaching the HAA9811 IC (U1). The IC's VDD and AVDD pins are connected to the filtered power, while CP and CN pins are connected to ground. The CTRL pin is connected to ground through a 10K resistor (R5). The IC's CPOUT, OUTN, and OUTP pins are connected to the speaker terminals (SP1 and SP2). The IC's INN and INP pins are connected to ground through 20K resistors (R3 and R4). A 10nF capacitor (C11) is connected to the INN pin. The OUTN and OUTP pins are also connected to ground through 10nF capacitors (C10 and C11). The speaker is connected to the OUTN and OUTP pins. The module is powered by a 5V USB source.

3VDAC

The diagram shows the internal circuit of a 3VDAC module. It features a central integrated circuit (U4) labeled 'DE=A1D'. The circuit includes several capacitors for filtering and decoupling: C15 (100nF 50V 0603) connected to the VIN pin (pin 1) from a 5V supply; C17 (100nF 50V 0603) connected to the EN pin (pin 3) to ground; C16 (100nF 50V 0603) connected to the VOUT pin (pin 5) from a 3VDC supply; and C14 (10nF 50V 0603) connected to the BP pin (pin 4) to ground. The chip is also connected to ground at pins 2 and 6.

[illegible]

Boost

The diagram shows a boost converter circuit. The input is connected to a 100nF 50V capacitor (C21) to ground. The input voltage divider consists of a 73.2K 1% resistor (R11) and a 10K 1% resistor (R12) to ground. The input to the boost converter (U7, SX1308) is connected to the 5V pin. The output of the boost converter is connected to a 100nF 50V capacitor (C23) to ground and a 22uF 16V capacitor (C24) to ground. The output voltage is 5V.

3VESP

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