

Application Circuit

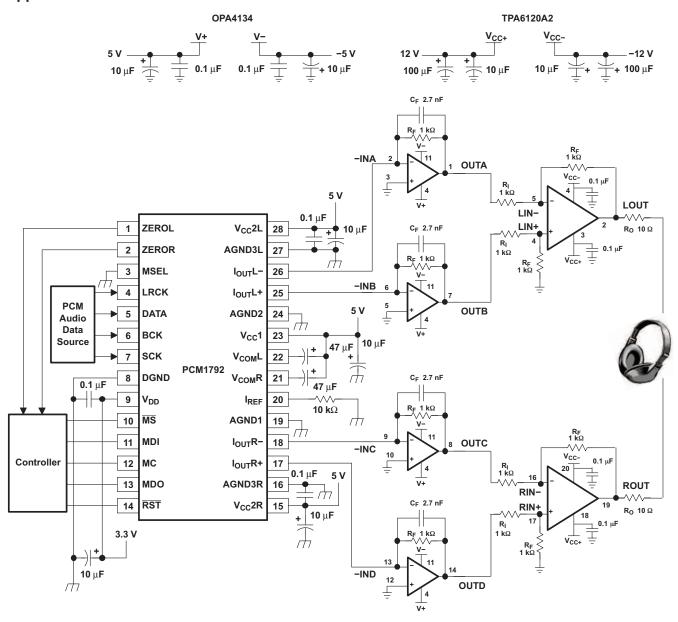


Figure 36. Typical Application Circuit

In many applications, the audio source is digital. It must go through a digital-to-analog converter (DAC) so that traditional analog amplifiers can drive the speakers or headphones.

Figure 36 shows a complete circuit schematic for such a system. The digital audio is fed into a high performance DAC. The PCM1792, a Burr-Brown product from TI, is a 24-bit, stereo DAC.

The output of the PCM1792 is current, not voltage, so the OPA4134 is used to convert the current input to a voltage output. The OPA4134, a Burr-Brown product from TI, is a low-noise, high-speed, high-performance operational amplifier. C_F and R_F are used to set the cutoff frequency of the filter. The RC combination in Figure 36 has a cutoff frequency of 59 kHz. All four amplifiers of the OPA4134 are used so the TPA6120A2 can be driven differentially.