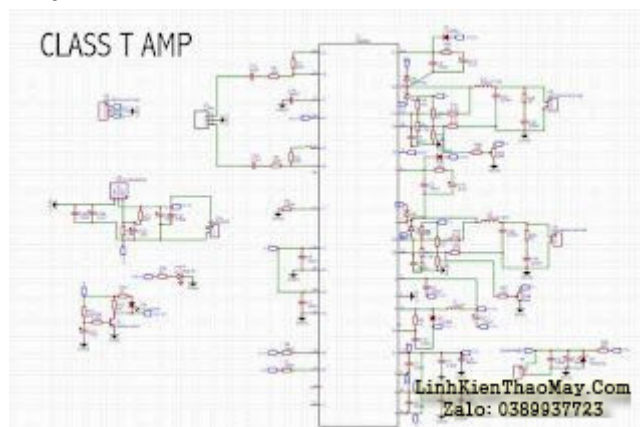




Hello friends, in this post I will share a little about Class-T power amplifiers, this Class-T power amplifier is as reinforcing as Class D power amplifiers that use switching modulation, combined with proprietary techniques by the Tripath manufacturer, where there is the difference in control time and switching frequency depends on the input signal and the amplified signal.

And I will share the Schematic and PCB layout for Stereo Class-T power amplifiers that use the TA2022 chip with the following scheme, you can also download the pdf version at the end of the post.

Stereo Class T Tripath TA2022



In the above scheme, I have completed the start delay to prevent pop when it is first turned on, the timing delay can be adjusted by replacing R33 and C33, the greater the value of both, the longer the time on the amplifier, and vice versa.

I have also added the above circuit to 10V (VN10) also 5V, so you don't need to bother adding an external voltage. If you want to add an external voltage of 10V and 5V you don't need to fill in that part.

For 10V VN10 voltage I use the LM317 regulator which can reduce the power main supply voltage to 10V, -10V is reflected Main -Supply voltage.

I use a 5V voltage R Shunt and Zener regulator circuit, where the main voltage + is inhibited by Resistor R29 and stabilized by Zener 5V1 because R Shunt works to inhibit continuous current, then this R will be a little hotter.

The Shunt R R29 must adjust the main supply voltage, for the 30-35V DC symmetric voltage the value of R29 = 470-680R 3W, and for the 12V-18VDC stand, R29 = 68-150R 3W, voltage 18-30VDC, R29 = 220R-470R 3W.

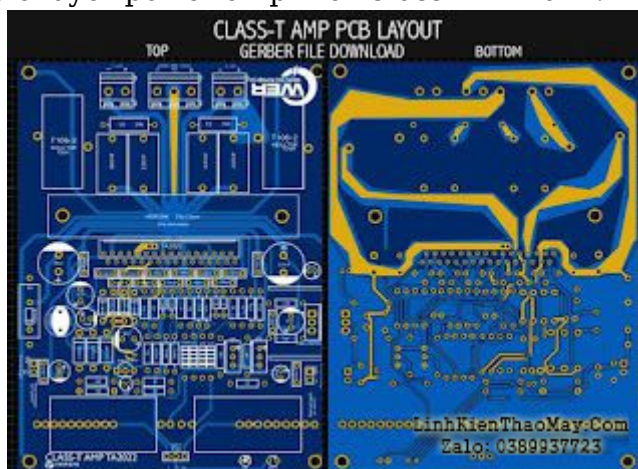
The main power supply you can use 12VDC -35VDC.

D1, D2, and D3 you can use Schottky diode 1-2A 100V

Your LPF inductor can use T106 core micrometals using a 0.5 double diameter copper cable, which is wrapped around 18-22 turns.

I also share the PCB layout design with the format. RAR (Gerber File) that you can download at the end of the post.

PCB Layout design double layer power amplifier Class-T TA2022.



Video Test

Download Schematic, Part list, and PCB Layout Gerber file.RAR :

[Power Amplifier Class-T TA2022 DIY .rar](#)

*Extract file before using it.

Các bài viết tương tự:

1. [200W HiFi Discrete UcD Class-D Amplifier](#)
2. [Âm li DIY - Em có cái âm li chạy thẻ nhớ dùng bo giải mã mp3, mạch chỉnh âm sắc 3 chiết áp\(loại không dùng nguồn\) và 1 mạch công suất class d công suất 60w](#)
3. [Cách điểm test để kiểm tra trước khi chạy Class-D Amplifier D2K Pro Dual Feedback](#)
4. [DIY - Chế và sửa sạc cho máy tính HP, Dell đầu kim](#)
5. [DIY 2kV Nguồn xung SMPS 90V 15A HB PFC with IR2110 Mosfet Driver](#)
6. [DIY Class-D Amplifier Fullbridge D2K 2500W RMS - Bản hoàn thiện](#)
7. [Diy máy cấp nguồn 0-25V 0-5A.](#)
8. [DIY máy hàn que tự chế 100A](#)
9. [High Power Class-D Amplifier D4K5](#)
10. [Mạch class D là gì ? Và Sơ đồ mạch Class D](#)
11. [Power Amplifier Class-AB AX-BLAME 90VDC](#)
12. [Power Amplifier Class-D UcD SuperLite v2 Final](#)