

4 x 45 W Quad Bridge Audio Amplifier

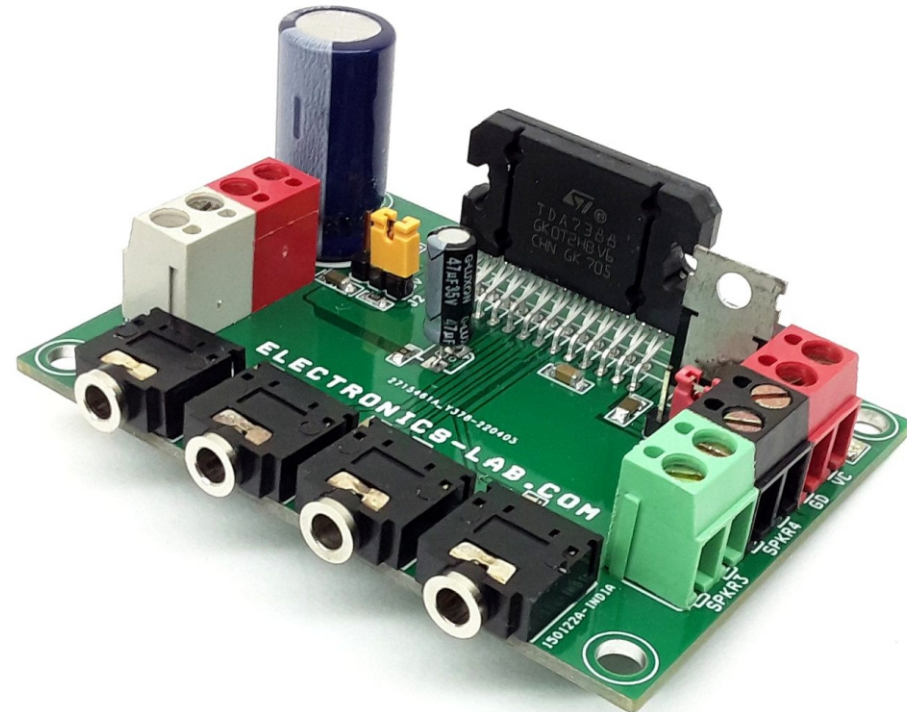
This is an AB class audio amplifier based on the TDA7388 chip and it is a great choice for car audio applications. This compact board has 4 channels each 26W with 4 ohms speaker. Then IC consists of a fully complementary PNP/NPN configuration and the TDA7388 allows a rail-to-rail output voltage swing with no need for bootstrap capacitors. The extremely reduced boundary components count allows very compact sets. The TDA7388's inputs are ground-compatible and can stand very high input signals (± 8 Vpk) without any performance degradation. The standard value for the input capacitors (0.1 μ F) is adopted, and the low-frequency cut-off amount to 16 Hz. 4 x 3.5 mm stereo EP socket helps to feed audio signals, and the onboard screw terminal makes life easy for speaker connections, and the power supply input. Onboard jumpers are provided to select the standby and mute function. D1 indicates power present. Mounting a proper heatsink is very important for chip health.

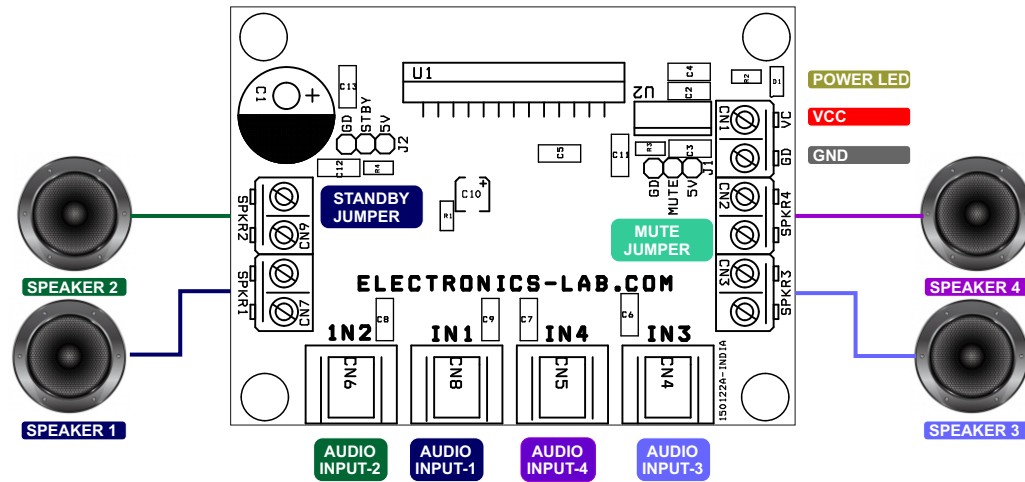
Features

- Power Supply 12V DC to 15V DC
- 4 x 45 W / 4 Ω max.
- 4 x 26 W / 4 Ω @ 14.4 V, 1 kHz, 10 %
- Low distortion
- Low output noise
- Frequency Response 20Hz to 20 KHz
- Standby function – On Board Jumper
- Mute function – On Board Jumper
- Automate at min. supply voltage detection (8V)
- Low external component count:
- Internally fixed gain (26 dB)
- No external compensation
- No bootstrap capacitors
- Standby Current 100uA (Chip)
- 4 x 3MM Mounting Holes
- PCB Dimensions 73.82 x 55.09 mm

Connections and Other Details

- CN1: DC Supply Input Pin1 = VCC, Pin2 GND
- CN2: Speaker 4, CN3: Speaker 3, CN7: Speaker 1, CN9: Speaker 2
- CN4: Audio Signal Input 3
- CN5: Audio Signal Input 4







BOM						
NO.	QNTY.	REF.	DESC.	MANUFACTURER	SUPPLIER	SUPPLIER PART NO
1	5	CN1,CN2,CN3,CN7,CN9	2 PIN SCREW TERMINAL PITCH 5.08MM	PHOENIX	DIGIKEY	277-1247-ND
2	4	CN4,CN5,CN6,CN8	STEREO EP SOCKET 3.5MM FEMALE	CUI AUDIO	DIGIKEY	CP1-3525N-ND
3	1	C1	2200uF/25V ELEKTROLYTIC	NICHICON	DIGIKEY	493-15830-ND
4	6	C2,C3,C6,C7,C8,C9	0.1uF/50V SMD SIZE 1206	YAGEO/MURATA	DIGIKEY	
5	3	C4,C11,C12	1uF/25V SMD SIZE 1206	YAGEO/MURATA	DIGIKEY	
6	1	C5	0.47uF/25V SMD SIZE 1206	YAGEO/MURATA	DIGIKEY	
7	1	C10	47uF/25V ELECKTROLYTIC	NICHICON	DIGIKEY	493-10997-1-ND
8	1	C13	10uF/6.3V SMD SIZE 1206	YAGEO/MURATA	DIGIKEY	
9	1	D1	LED-RED	LITE ON INC	DIGIKEY	475-1278-1-ND
10	2	J1,J2	3 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5316-ND
11	1	R1	0E	YAGEO/MURATA	DIGIKEY	
12	1	R2	2.2K 5% SMD SZE 0805	YAGEO/MURATA	DIGIKEY	
13	1	R3	47K 5% SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
14	1	R4	10K 5% SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
15	1	U1	TDA7388	ST	DIGIKEY	497-11754-5-ND
16	1	U2	LM7805C/TO	TI	MOUSER	926-LM7805CT/NOPB
17	1	J1,J2-SHUNT	SHUNT	SULINS INC	DIGIKEY	S9001-ND

