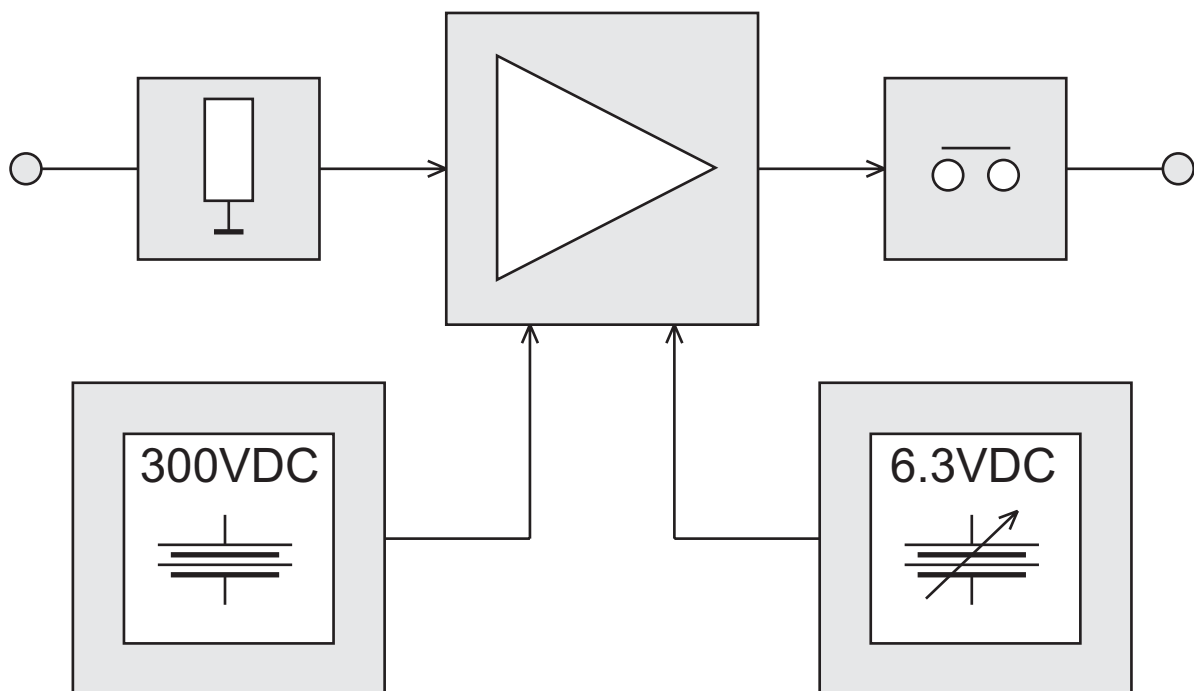




- A Block diagram and overview
- B Schematic
- C Bill of materials
- D Connection diagram
- E Board artwork

# TRIODE TUBE OUTPUT STAGE

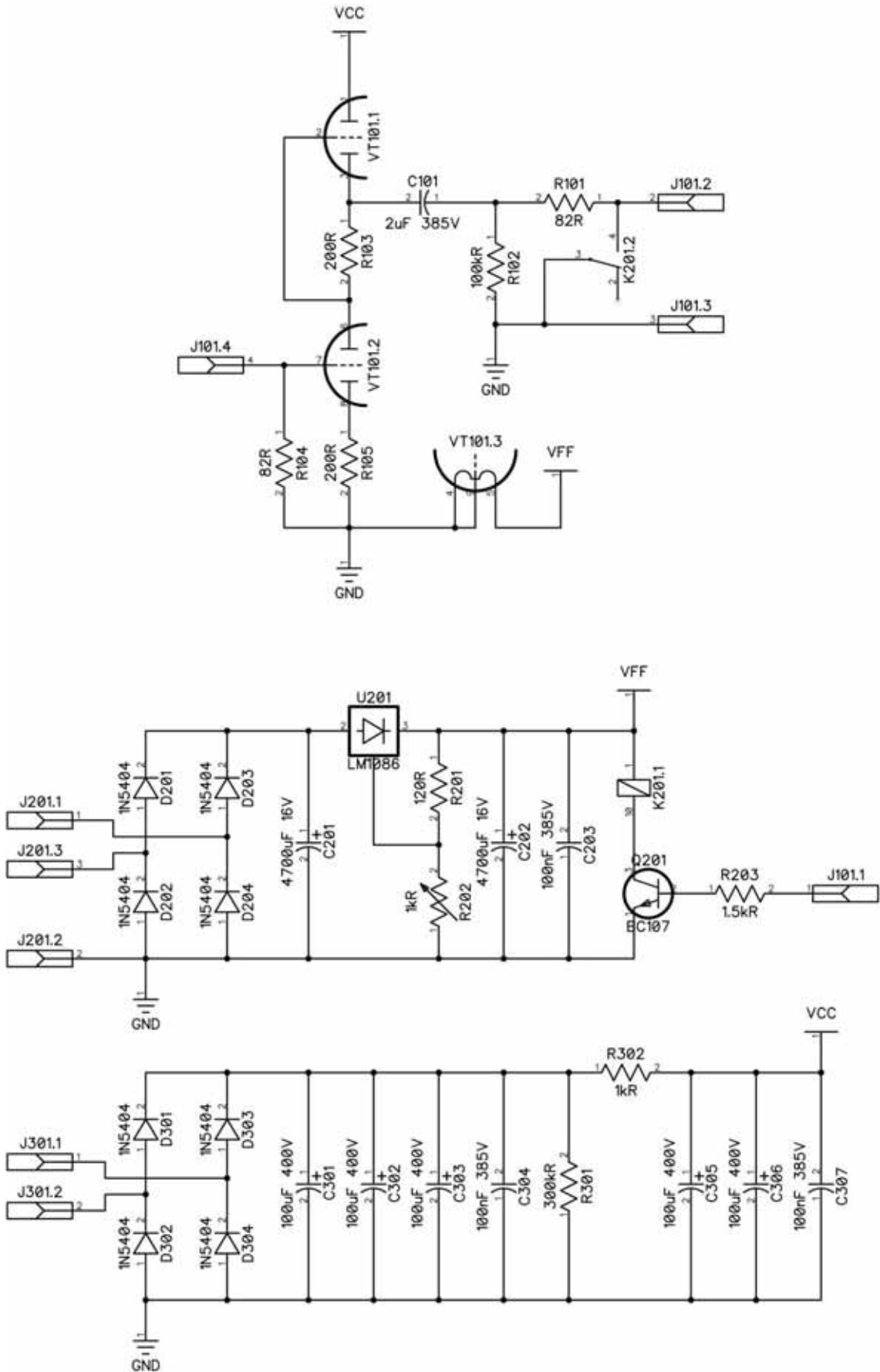
The TTO is intended to replace the original current to voltage converter and output buffer of a CD player using a current output DAC. It should be compatible with most DACs of this type, though passive component values may need alteration.



The TTO consists of the following five functional blocks:

- A passive resistor current to voltage stage.
- A gain stage, consisting of a double triode configured as a totem pole.
- A relay that grounds the output, to be used in place of the CD player's original transistor mute circuit.
- A 300V DC plate supply.
- An adjustable filament supply, set by default at 6.3VDC.

## TRIODE TUBE OUTPUT STAGE





# TRIODE TUBE OUTPUT STAGE

<b>Part No.</b>	<b>Description</b>
- C101, C203, C304, C307	Illinois Capacitor MKP
- C201, C202	Nichicon PS
- C301, C302, C303, C305, C306	Nichicon PT
- D201, D202, D203, D204, D301, D302, D303, D304	Motorola 1N5404
- J101, J201, J301	Multicomp PA001
- K201	Panasonic TQ2
- Q201	ST Micro BC107
- R101, R102, R104, R201, R203	Multicomp MCRC1/4
- R103, R105, R301, R302	Multicomp MCRC1/2
- R202	Bourns 3386W
- U201	National Semi LM1086CT-ADJ
- VT101	Voskhod 6N2P



Header	Connector Function
J101-1	Mute signal (active high)
J101-2	Audio output
J101-3	Shield ground*
J101-4	Audio input
J201-1	6.3VAC winding
J201-2	Ground
J201-3	6.3VAC winding
J301-1	220VAC winding
J301-2	220VAC winding

\* Connect only to cable shield, and do not ground opposite end of shield.



# TRIODE TUBE OUTPUT STAGE

