

www.nxp.com/documents/data_sheet/TDA8569Q.pdf

Fun to see what the specs are. Basically 4x 25 watts at 10% THD. You can see more details in the datasheet.

The other IC mounted on the heat sink is a power supply.

My purpose was to find the pinouts, however I decided to look at other places to access the signals as there are several resistors and capacitors before the PA inputs.

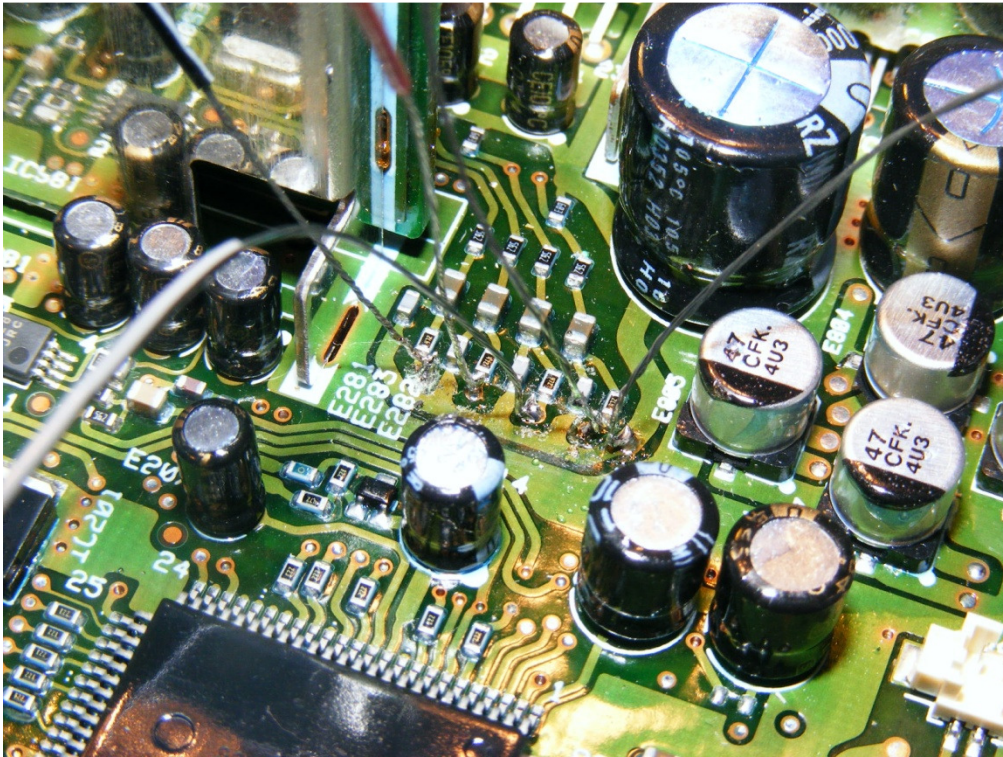


The large IC is the DSP, also a Philips device SAA7706H www.nxp.com/documents/data_sheet/SAA7706H.pdf

It is a very powerful device, even with a 5 band equalizer but the Audio 20 does not make us of this.

From the pinout diagram it is easy to find the analog output from the 4 channel DAC. Now we are in business. The specs say output is 1v RMS.

This is the PCB where I needed to pick off the signals from the DSP DACs. The only place I could find was some via pads after 2.2K resistors... good enough. On the bottom of the picture you see 5 smt resistors. Starting lower right the 4 2.2K resistors are directly on the DAC outputs and are, from right to left pin 6: Rear Right, pin 9: Rear Left, pin 13 Front Right and pin 16 Front Left. The lines continue up and connect to 4 4.7K resistors. You will see the via pads I used to solder the wires on, plus a very convenient signal ground on the top right. The Radio PCB has a coating on top that I had to scrape off in order to be able to solder on the via pads. I do have a Weller temperature controlled iron that I also filed down a bit to a very fine tip. Note however that the 2 inner conductors cross over on inner layers of the pc board so that at the solder points they are from right to left: RR, FR, RL and FL. This caused me some grief as I had not checked it completely and then scratched my head sometime after the wires where soldered to the pc board. I was wondering where I went wrong.. did I break something?



Then I made a PC board to mount 1uF DC blocking caps and solder the RCA cables to. I chose 1uF because that with the input impedance of 30Kohms of my power amp gave a 3dB down point of about 5 Hz. Those caps may or may not have been necessary but are cheap protection against any DC offsets. This is the PCB I made. Easy to do, just use a marker to draw the circuit and etch in ferric chloride.

