Schematic for A/D Board to Interface Radios to Raspberry Pi

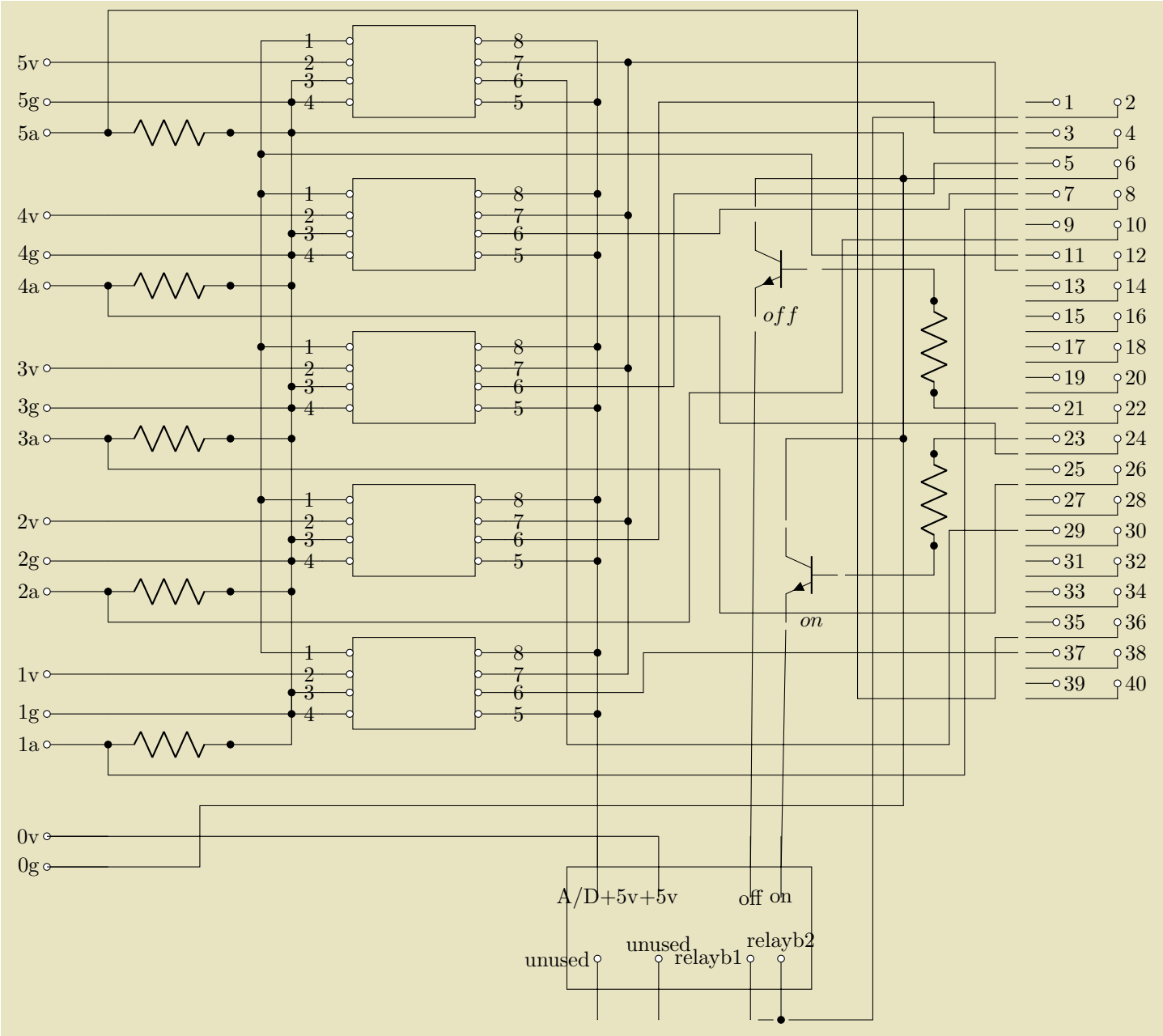

Figure 1: A/D interface board between radios and RaspberryPi header

We plan to etch a circuit board to attach to the GPIO header on the Raspberry Pi computer, which will convert analog signal strength voltages coming from the radios to digital values.

The first stage of this project is to document an authoritative circuit schematic diagram for the board. We plan to then use the open-source KiCad software to layout the etched board, from which the board can be produced.

The components for this circuit board, other than headers for the incoming radio signals and the A/D and relay power, are:

1 Latching Relay HFE8-5-1HD-L2 1 RPi Raspberry Pi 2 Model B V1.1 (/copyright 2014) 4 A/D converters ADC0831CCN National Semiconductor (also Texas Instruments) 2 npn transistors PN2222 2 resistors @1KOhm (for the transistors) 5 resistors @10KOhm (for the A/D converters)