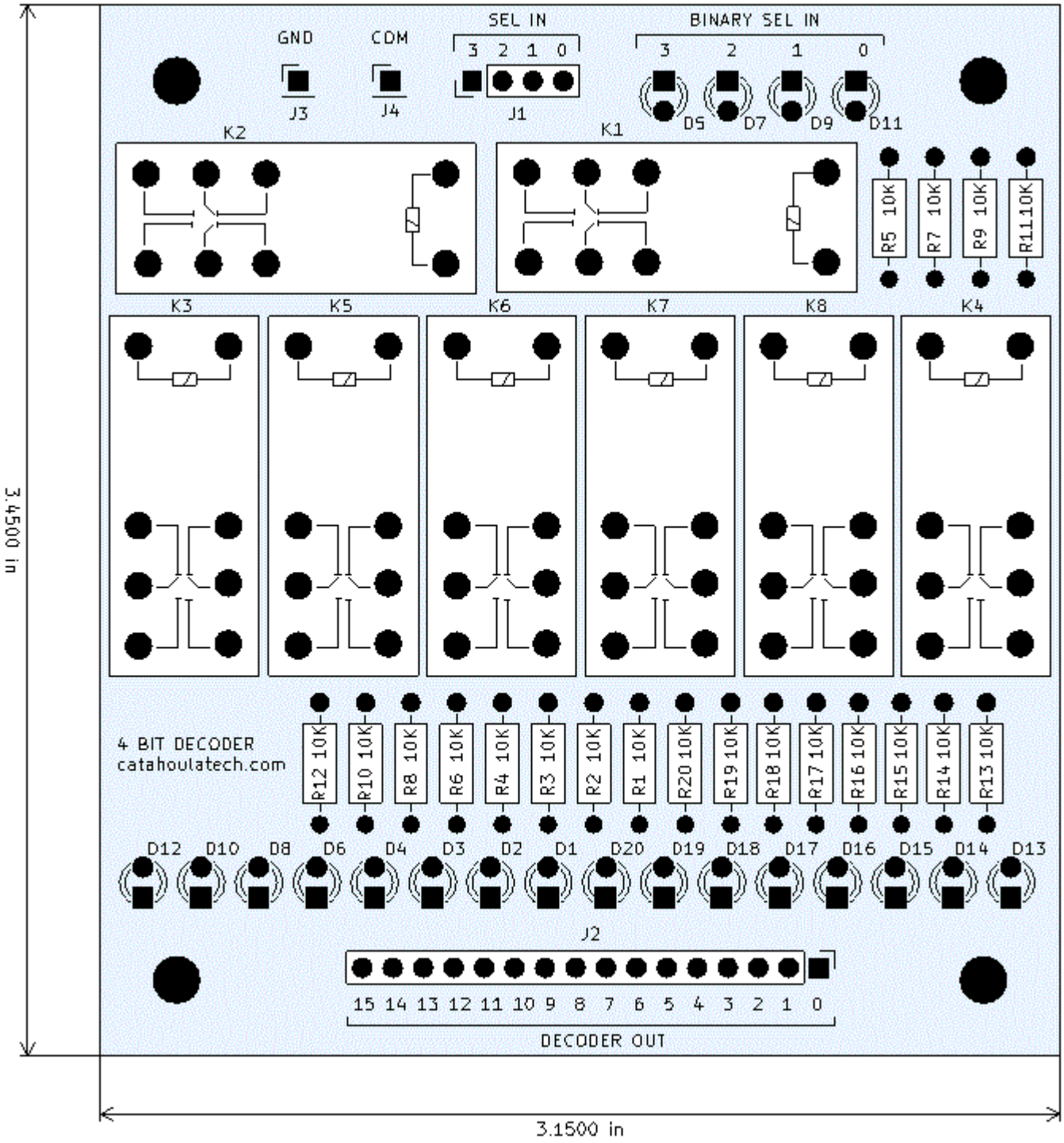
RL4067 – 4-bit to 16-channel mux/demux



Bill of Materials

Part	Value	Description
R1-R20	10K 1/4W	LED current limiting resistor (optional)
D1-D20	LED	3mm T-1 LED (optional)
K1-K8	G2R-2-12VDC	DPDT relay
J1-J4	Header	0.1” pitch header, right angle recommended

Mount holes are 4mm (#8 screw) diameter.

Input Ports

Name	Size	Description
SEL IN	4	Binary select input
GND	1	Power supply ground

Bidirectional Ports

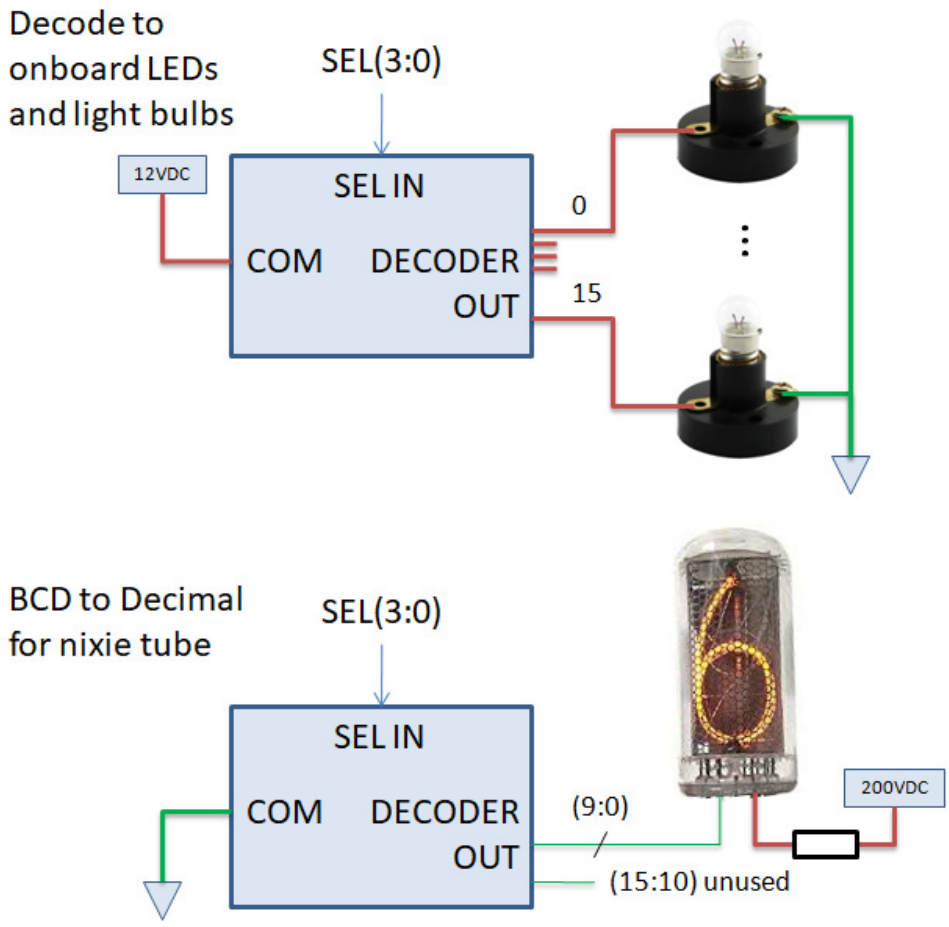
Name	Size	Description
COM	1	Common IO Input when used as a demux (decoder) Output when used as a mux
DECODER OUT	16	16-channel decoded IO Output when used as a demux (decoder) Input when used as a mux

Logic function

COM = DECODER OUT[SEL IN]

Typical Application

The RL4067 module could be used as a decoder to drive any load that draws less than 1 amp including AC and DC light bulbs, nixie tubes, and solenoids. The COM port may be connected to ground or a power supply output depending on design and load requirements.



Beware that all the onboard LEDs for DECODER OUT are active high assuming COM = 12VDC. It is recommended to not populate the LEDs if using the module with COM = Ground (i.e. active low outputs such as with a nixie tube) or voltages other than 12VDC.

The board could be populated with fewer relays to implement a smaller decoder. For example, a 3-bit binary to 8-channel mux/demux could be accomplished by not populating the relays and connectors illustrated in pink and bypassing relay K1 with a wire shown in green.