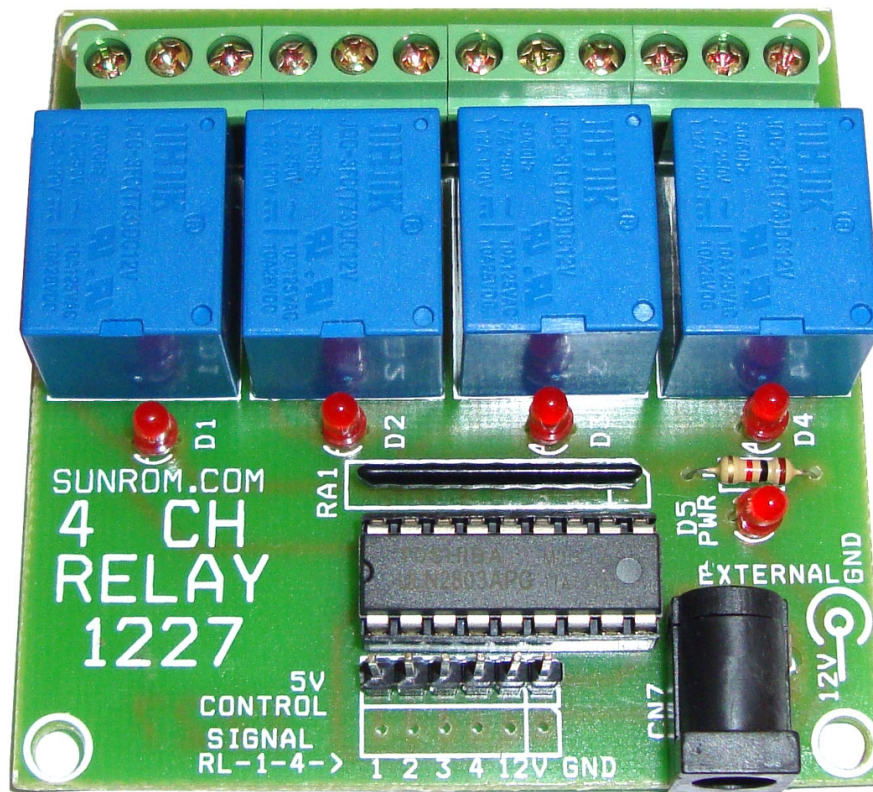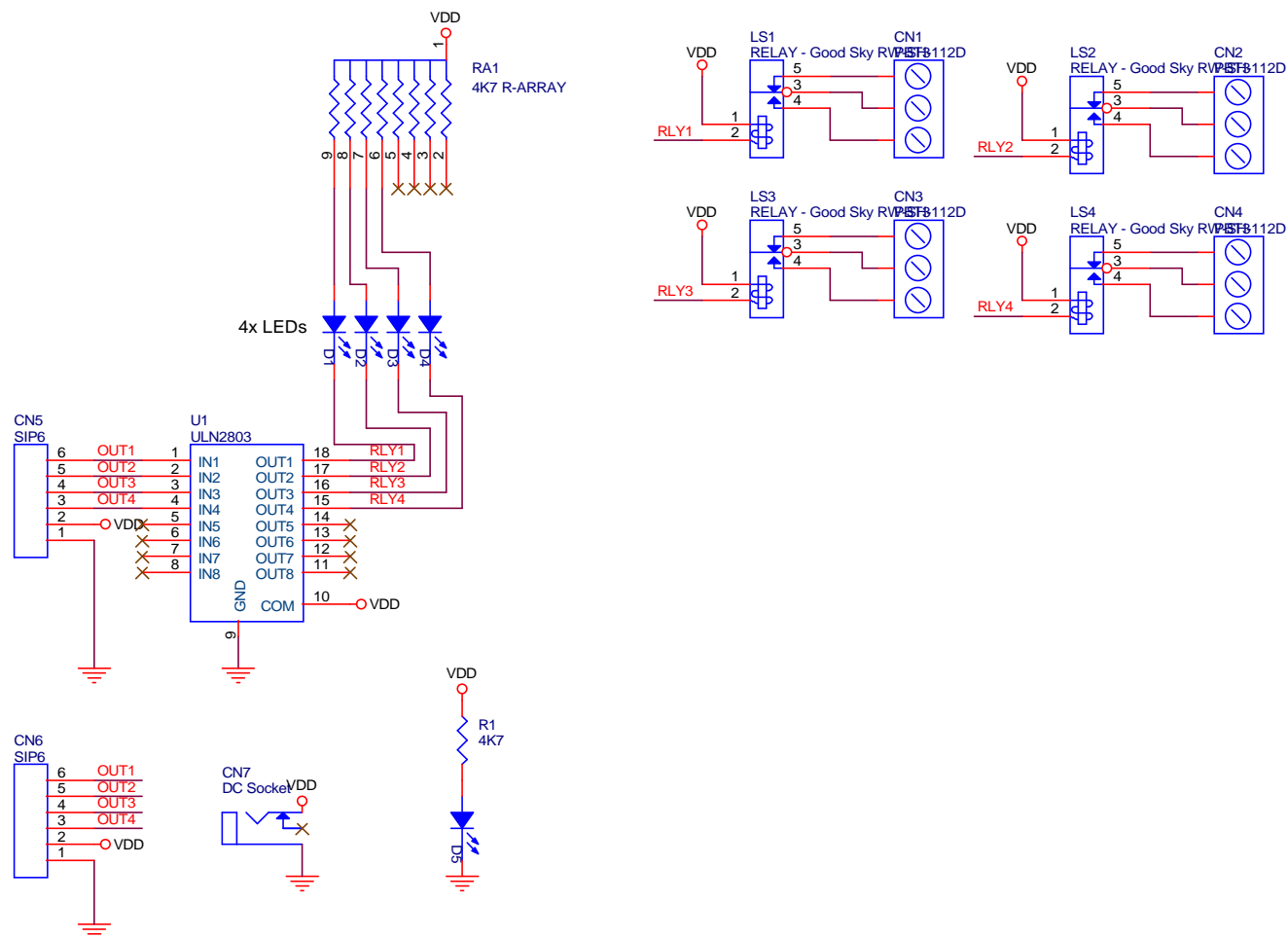# Relay Board - 4 Channel

The board has four relays driven by ULN2803 IC. The board works on 12V but the input signal can come directly from microcontroller output working at 3V or 5V to control relays. Each relay can switch varierty of AC or DC high voltage, high current loads working at 110V or 220V AC mains like lights, fans, motors and such. The status of relay is indicated by individual LEDs.

Features

- LED indication of relay on & power
- Design based on highly proven IC ULN2803 as driver
- Direct input from 3-5V microcontroller for relay control
- Output terminal for all relay contacts
- Provision for 6 pin Header and Wire connection
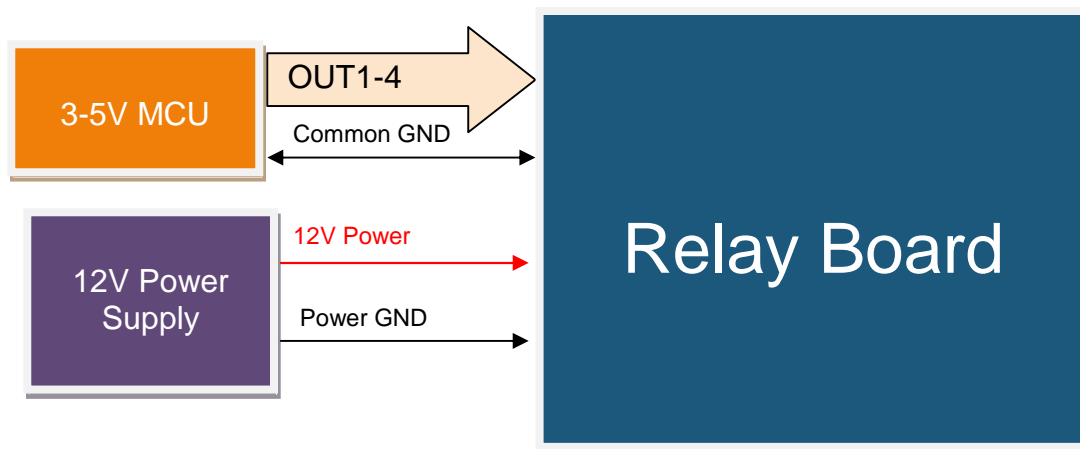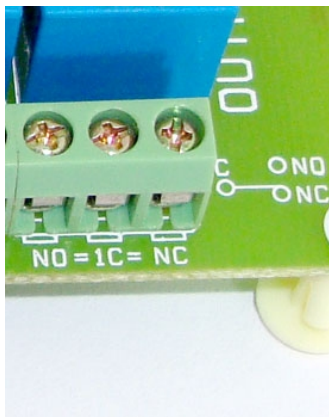- Powered from external 12V or from wire header

Board Schematic

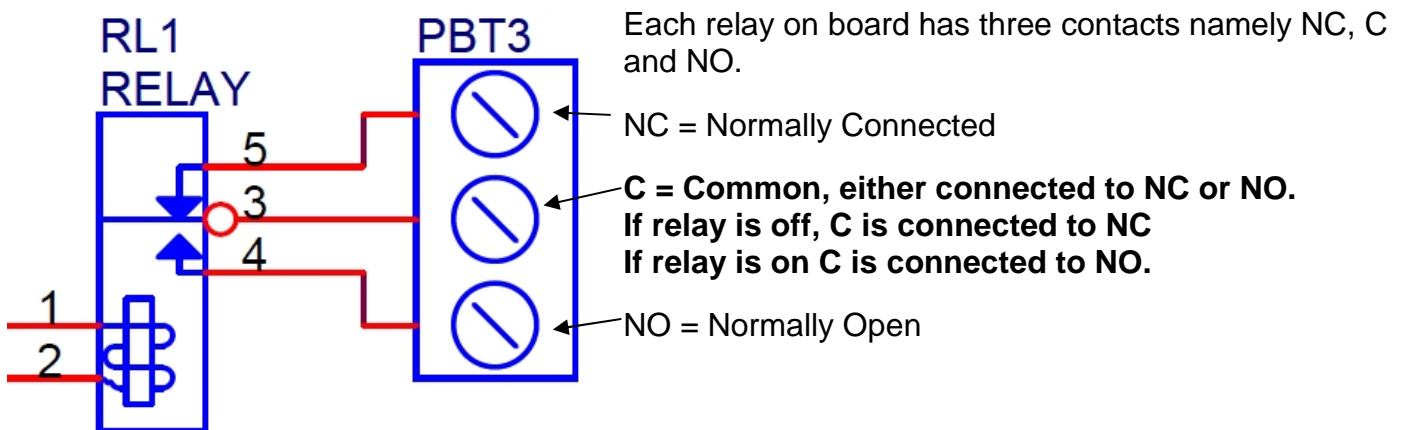Note: It is important that microcontroller share ground with relay board along with other control signals else it will not able to control relays.
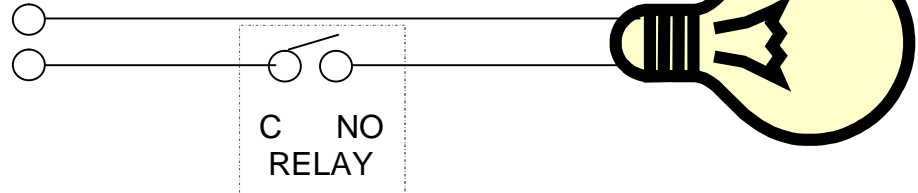
Output Relays

Relay can control any devices just like a switch contact. Its contact is isolated from driving circuit.

Each relay on board has three contacts namely NC, C and NO.

NC = Normally Connected

C = Common, either connected to NC or NO.
If relay is off, C is connected to NC
If relay is on C is connected to NO.

NO = Normally Open

For example, When you want to switch on light when relay comes on, then the light has to be powered through C and NO contacts. In this case NC will not be used.

AC MAINS 110/250V AC

C   NO
RELAY

Relay Used on Board

Equivalent of
Sealed Isolated Mechanical Relay: GoodSky RWH-SH-106D
Contact Rating
12A at 250VAC.(UL)
15 at 120VDC.
15A at 24VDC.
Rated Carrying Current.........: 15A.
Max. Allowable Voltage ....: .AC 240V, DC 110V.
Min. Switching Load..............: DC5V, 15mA
Relay Datasheet available at
http://www.sunrom.com/files/RWRWH.pdf