

Infrared Controlled Buggy

Design Brief

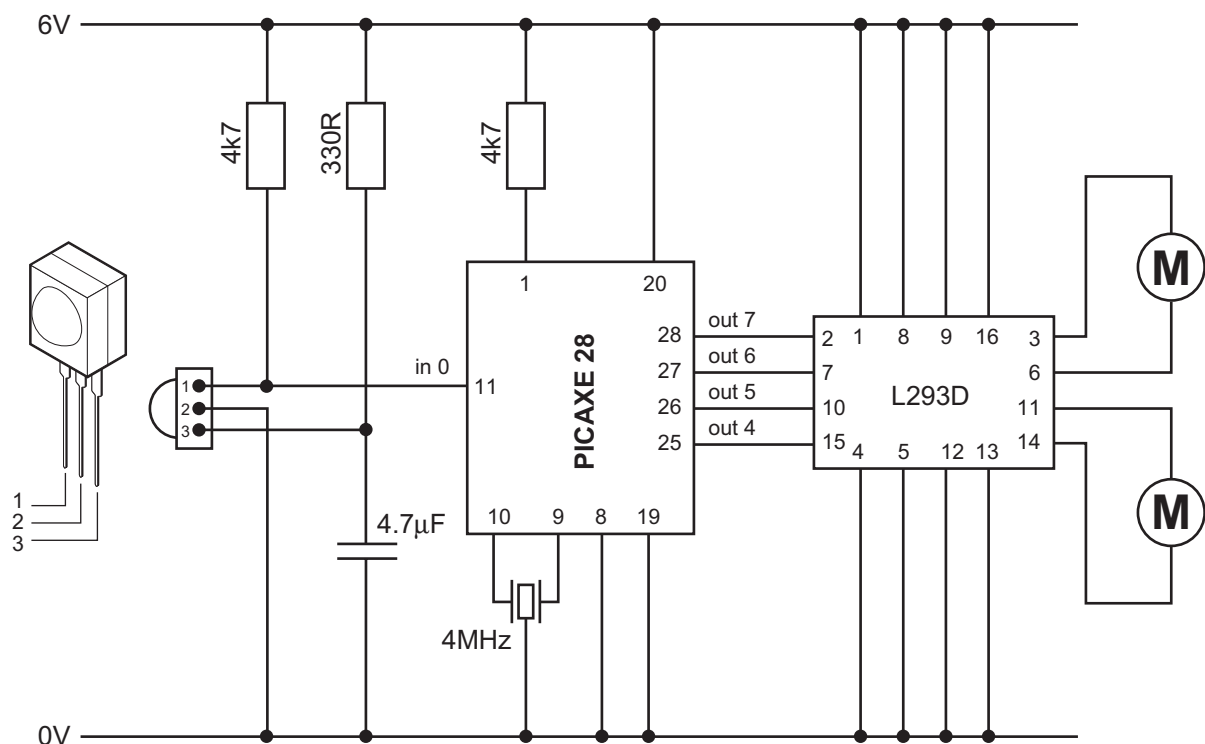
Design a remote controlled vehicle that can follow certain preset manoeuvres when triggered.

Circuit Explanation

This circuit makes use of the infrared detection capabilities of the PICAXE-28 microcontroller. The two motors of the buggy are controlled via a L293D motor driver chip to give the buggy full forward-reverse motion control.

Program Explanation

The program waits for an input from the infrared controller via the 'infrain' command. Then, depending on the button that was pressed on the transmitter, a different sequence of movement events is followed.



Program Listing

```
` Infrared Controlled Buggy
` For PICAXE-28

` main loop - get an infra signal
` and then process according to key
main:infrain
    if infra = 1 then do1
    if infra = 2 then do2
    if infra = 3 then do3
    if infra = 4 then do4
    goto main

` action number 1
do1:
    for b0 = 1 to 4
        let pins = %01010000
        pause 3000
        let pins = %01100000
        pause 1000
    next b0
    goto main

` action number 2
do2:
    for b0 = 1 to 4
        let pins = %01010000
        pause 3000
        let pins = %10010000
        pause 1000
    next b0
    goto main

` action number 3
do3:
    let pins = %01010000
    pause 3000
    let pins = %10100000
    pause 3000
    goto main

` action number 4
do4:
    for b0 = 1 to 6
        let pins = %01010000
        pause 3000
        let pins = %10100000
        pause 1000
    next b0
    goto main
```