

## Brake Light Flasher Controller V2

where 'V2' is reduced component count version utilising a ULN2003 to replace discrete transistor stages.  
 PIC chip based controller for red LED tail light, giving two levels of brightness, as tail light, then brighter as brake light. On initial braking first time, and then if not used again within 15 seconds of last brake application, it can rapidly flash the brake light output from 1 to 3 times followed by steady lit. Four flash rates programmable by jumpers J1 and J2. 'IGN' (V+) = any circuit that is live when ignition switch is on. 'BRAKE' (RB0) = brake light circuit. 'OUT' (RC0) = output to LED array, negative side, positive side is connected to 'P3'. Low current output, 30 mA; high current output (brake), <300 mA. Components NOT USED are omitted from PCB.

