LED Matrix Character Display

http://picprojects.org
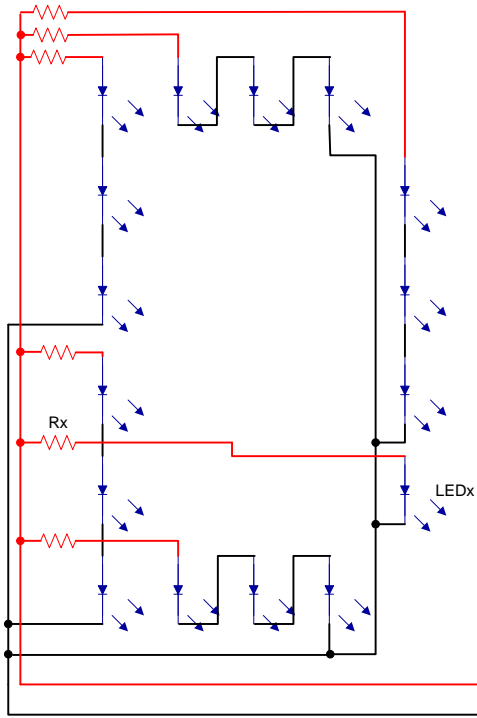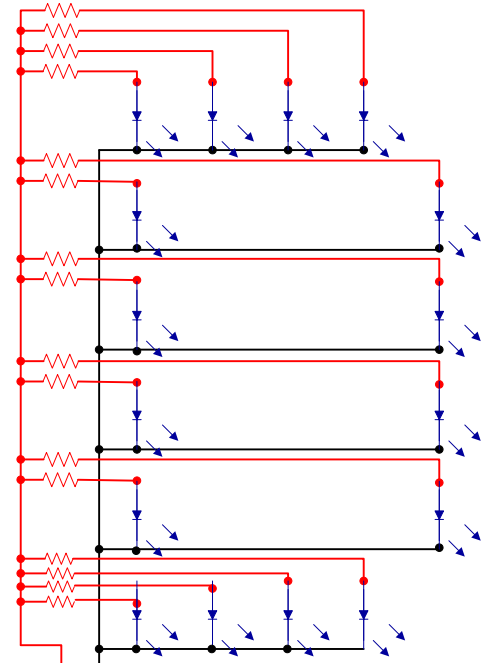
Design A

- Uses different value resistors depending on how many LEDs are in series.

- Uses less current since most LEDs are in series.

- Needs a power supply voltage greater than the sum of the forward voltages of the LEDs connected in series.

Design B

- Use same value resistor for all LEDs

- Requires more current since all LEDs are in parallel

Note:
Since current limit resistor Rx connects to only one LED it needs to be a different value from the other resistors that connect to three LEDs
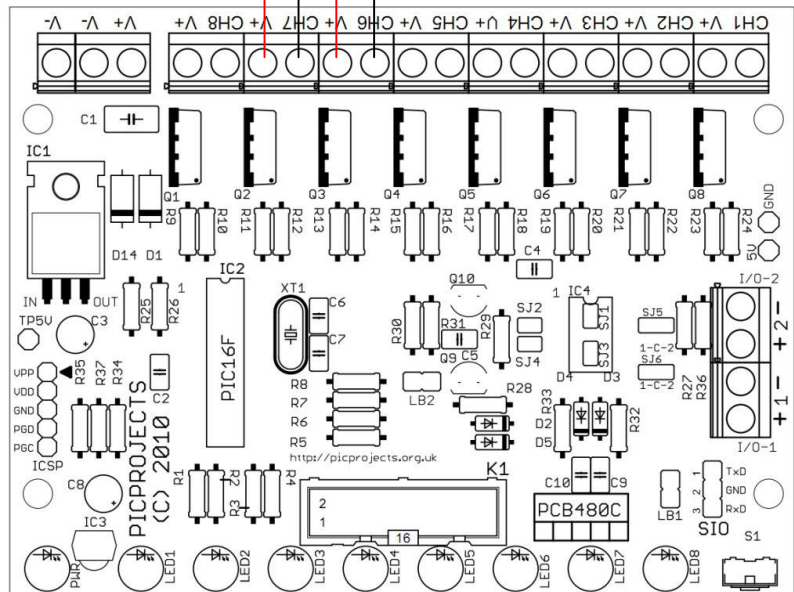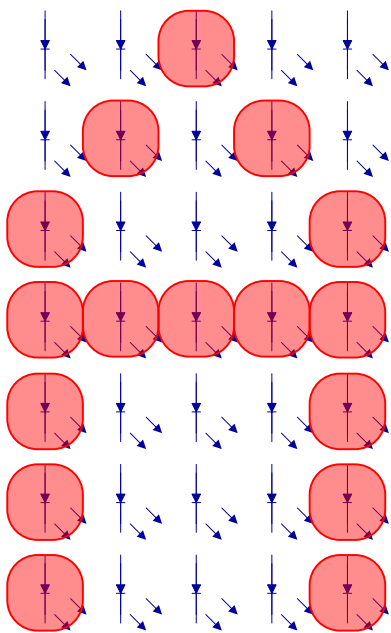
Rx

LEDx

Arrange LEDs in a 5 x 7 matrix

For letter I or digit 1, use 3 x 7

- For calculating the LED current limit resistors required see
  http://picprojects.org.uk/projects/inf/drivingLEDs.pdf

- Make sure the power supply used can deliver the required current to power all the LEDs attached to the controller

- For details of the controller PCB shown see

  http://picprojects.org.uk/projects/480/pro483/