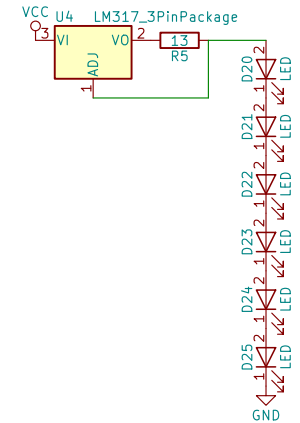
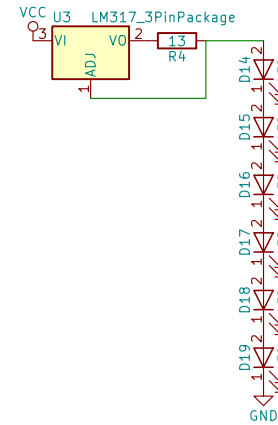
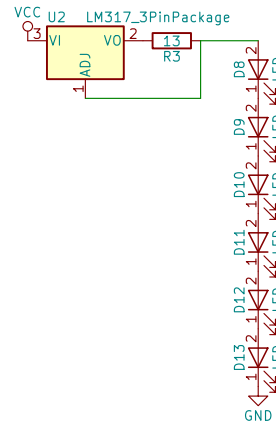
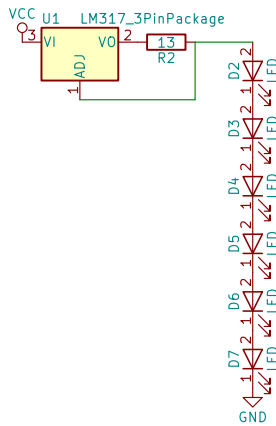


ON indicator LED
Other LEDs are invisible
but hazardous to eyes



LM317

LEDs
 $V_{dropMin}: 1.7V$
 Max LEDs per string: $(12 - 1.7) / 1.4 = 7.4$
 GCD vs 24 is 6

R selection
 $I_{out} = 1.25 / R$
 $R = 1.25 / 0.1 = 12.5$
 Choose 13 as closest standard value
 $I = 1.25 / 13 = 96 \text{ mA}$
 $R \text{ power: } I^2 * R = 0.096^2 * 13 = 0.12 \text{ W}$

Sheet: /

File: ilr-lm317_r1.sch

Title: IR LED illuminator (LM317 based), rev1

Size: A4

Date:

Rev:

KiCad E.D.A. kicad 4.0.7-e2-637658ubuntu16.04.1

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