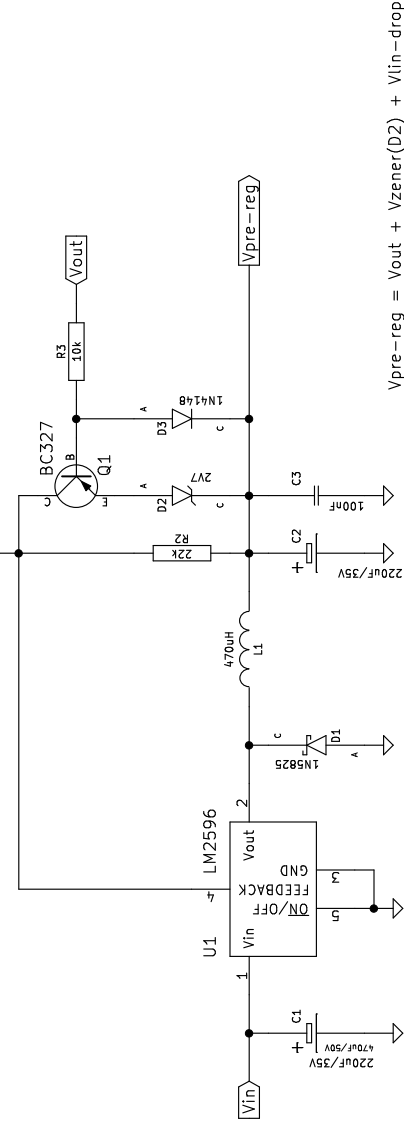


$$V_{ref} = 1.23V$$

$$V_{out} = V_{ref} * ( 1 + R2 / R1 )$$

$$R2 = R1 * ( V_{out} / V_{ref} - 1 )$$



$$V_{pre-reg} = V_{out} + V_{zener}(D2) + V_{in-drop}$$

Vin is from the input rectifier/capacitor.

Vout is taken from the output of the linear regulator.

Vpre-reg is fed to the input of the linear regulator.

Switching frequency = 150kHz

Max Load = 3A

Range = 1.2V – 37V

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Sheet: /

File: Pre-Reg Tracking.sch

**Title: Switchmode tracking pre-regulator.**

Size: User

Date: 09. februar 2014

KiCad E.D.A. KiCad (2015-07-11 BZR 5925, Git c291b88) –product

Rev: 0

Id: 1/1