

Log Viewer

Steak Electronics

1 Log Viewer

1.1 LM317

As the viewfinder needs its own power supply, I need 7V from 12V.
Parts box has LM317.

Formula for LM317:

$$V_{out} = 1.25 * (1 + R2/R1)$$

R1 = vout to gndpin

R2 = gndpin to gnd

e.g. 720 R2, 240 R1 == 5V

1K R2 == 6.45V

1.1K R2 == 6.97V

Standard R1 is 240ohm, so let's keep to the standard.¹

Make sure to account for the drop out needed for Vin to LM317.

¹Check when looking through devices that use LM317, which adhere to that standard. They should, when possible. Standards should always be followed.

1.2 Power Board

Cutting dip switches in half, because they don't sell smaller than arrays of 4.

I built an adapter board. LM317, with svideo out signal split. There are two signals on svideo, and two grounds. The signals, can be viewed in a scope. Y and C. One is video (Y - Luminance and Sync). The other, doesn't look like ntsc video (chroma), and is put in series w/470pf cap to the video signal. Be careful that the picture is of the male connector, not female. Review signals in scope to be sure. If you get it backwards, as I did, it probably won't break anything. ²

1.2.1 Video Output Modes

At this point, with the Beagleboard, I have video outputting to the CRT but not at the right resolution. Hwinfo -framebuffer is empty on beagleboard (when X is not running). Seems the fb is not enabled.

I may try adjusting vga= kernel flag.

²Ref: https://www.linuxtv.org/wiki/index.php/Composite_to_S-Video