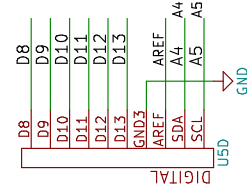
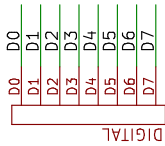
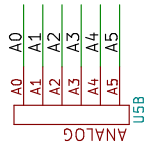
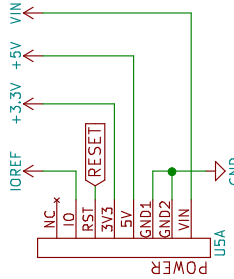


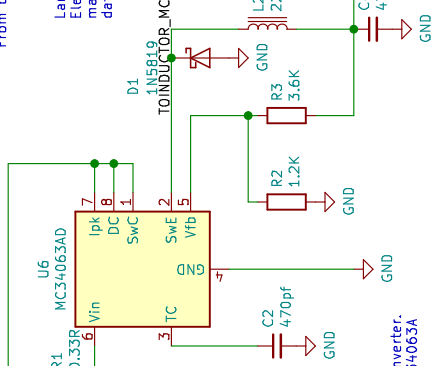
Arduino Uno

Arduino 101 Shield Mounting Holes



D0 - D6
Not on
Shield

MC34063



Step Down Converter.
Figure 11 MC34063A
Onsemi.
Optional Filter Included.

Resistors Metal Film.
globally

Efficiency 83%
Output Ripple w/out Filter: 120mVpp
Output Ripple w/Filter 40mVpp

This inductor is the symbol which refers to a magnetic core, i.e. either ferrite or crystal radio (this type of inductor has more inductance than an air coil - the normal symbol).
From data sheet Figure 11.

Large Value Caps Electrolytic (as marked as polarized on data sheet).

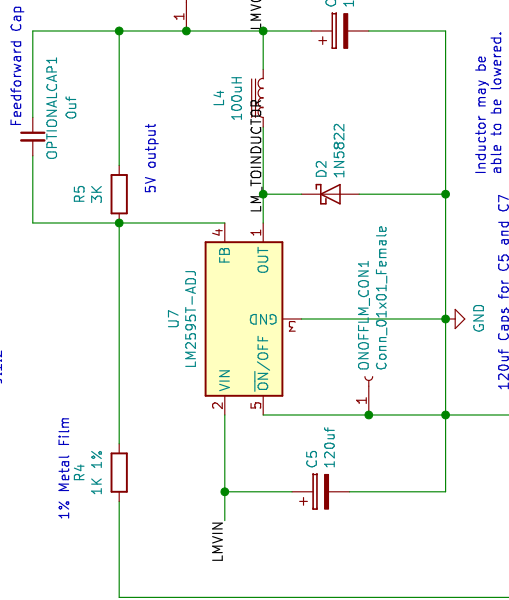
LM2595

LM2594, LM2596 are Different Output Currents

Air Coil Shown on LM Data sheet, yet there is a section on ripple possibly being an issue, and mentioning magnetic core. Note that LM inductor is lower than MC.

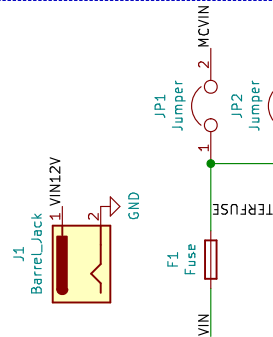
Feedforward Cap only req'd when Vout >= 10V per LM2595 9.1.2

Internal Vref = 1.235



Inductor may be able to be lowered. 120uF Caps for C5 and C7 changed to 100uF to make BOM easier

Barrel Plug



Jumpers are right angle 0.5" headers. To fit under shield. Don't enable both regulators....!

Motion Sensor built for Zoneminder for GNU/Linux

Steak Electronics Company

Sheet: /
File: uno.sch

Title: ZMHW Modector

Size: USLetter Date: 2019-12-02
KiCad E.D.A. kicad 5.0.2+dfsg1-1bpo9+1

Rev: 1.8
Id: 1/1