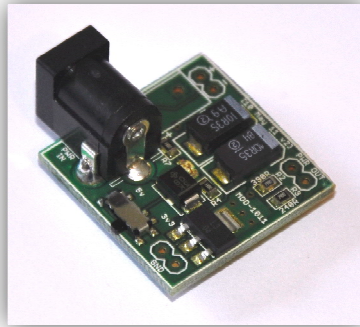
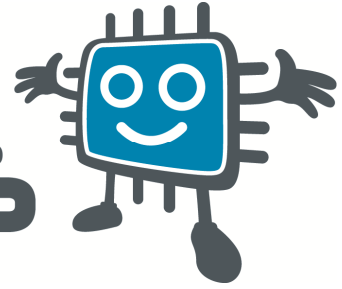


embedded adventures



Device: MOD-1011

This document Version: 1.0

Matches module version: v2

Date: 12 June 2011

Description: Power Supply

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Introduction

The MOD-1011 is an LM317 based power supply designed to give you 1A of current at 3.3V or 5V to run your projects.

Features

The MOD-1011 features a cheerful green LED to let you know power is being supplied, switch selectable voltage output, and a diode on the input to prevent reverse polarity mishaps.

Hackability

The MOD-1011 is 100% hackable.

At Embedded Adventures, we believe you have the most fun when you have the most control over your hardware. For the MOD-1011 we provide a datasheet, and complete schematic. After that, it's all up to you. We'd love to hear about the projects you're using it for – send us information and photos to myproject@embeddedadventures.com

Construction

It's all pre-built! Just add female or male header pins, or solder directly to the board, and away you go.

A two way screw terminal is provided, which can be soldered to the board or alternatively a 0.1" female or male header pins can be used to provide power. There's not quite enough room on the board to use both!

Connections

The MOD-1011 has power input connections, and regulated power output connections.

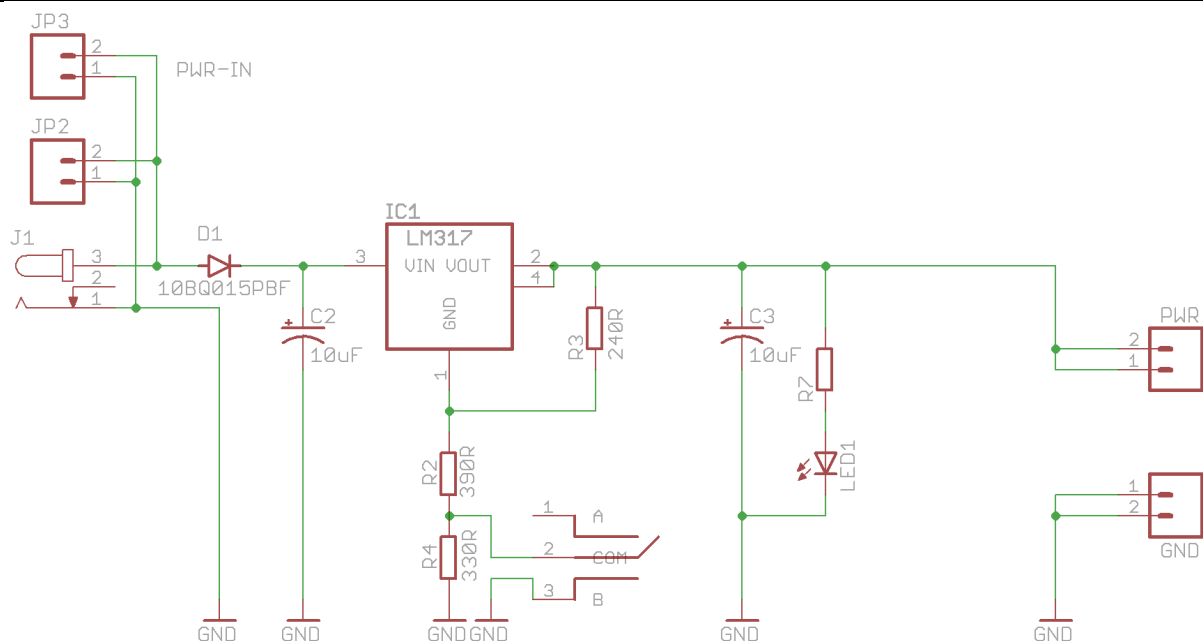
Power can be provided by a 2.1mm plug, optional screw terminal block or headers soldered to the board.

Regulated output is provided on two pins each of GND and VCC (at 3.3V or 5V depending on the switch selection) on the right hand side of the board.

Power

The MOD-1011 needs at least 1.5V above the required regulated output voltage, up to 30V. It will supply up to 1Amp of current.

Schematic

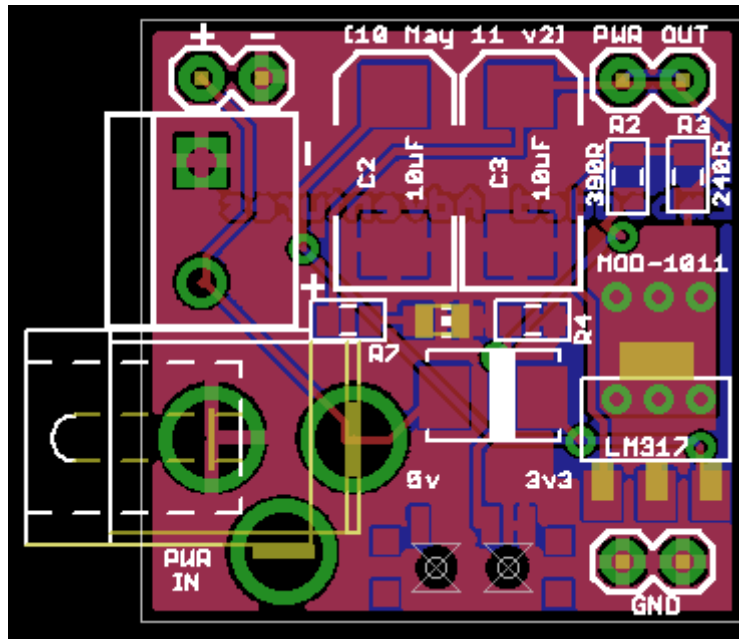


The MOD-1011 schematic basically involves protecting everyone with an input diode, low ESR tantalum capacitors to ensure low-ripple output, a LM317 adjustable voltage regulator giving 1A of current, and a LED to show power connection.

Programming

You don't program it. You plug it in and power something you *can* program.

PCB



Versions

Version	Date	Comments
Version 1.0	12 June 2011	Initial Version for board v1