

embedded adventures

Device: WRL-3002

This document Version: 1.0

Date: 26 October 2013

Description: 5V converter for WRL-3000 WiFi module

Matches module hardware version: [8 Sep 2013 v1]

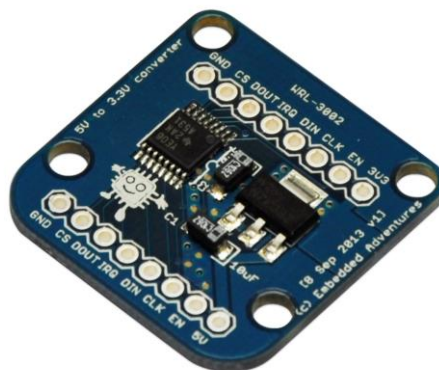


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Introduction

The WRL-3002 module makes your WRL-3000 WiFi module available to 5V systems.

Features

With a 1A voltage regulator, the WRL-3002 has a 6 way fast level converter to make your 5V device such as an Arduino or other 5V system work perfectly well with the 3.3V CC3000.

Construction

Just populate it with headers to match your WRL-3000 and away you go.

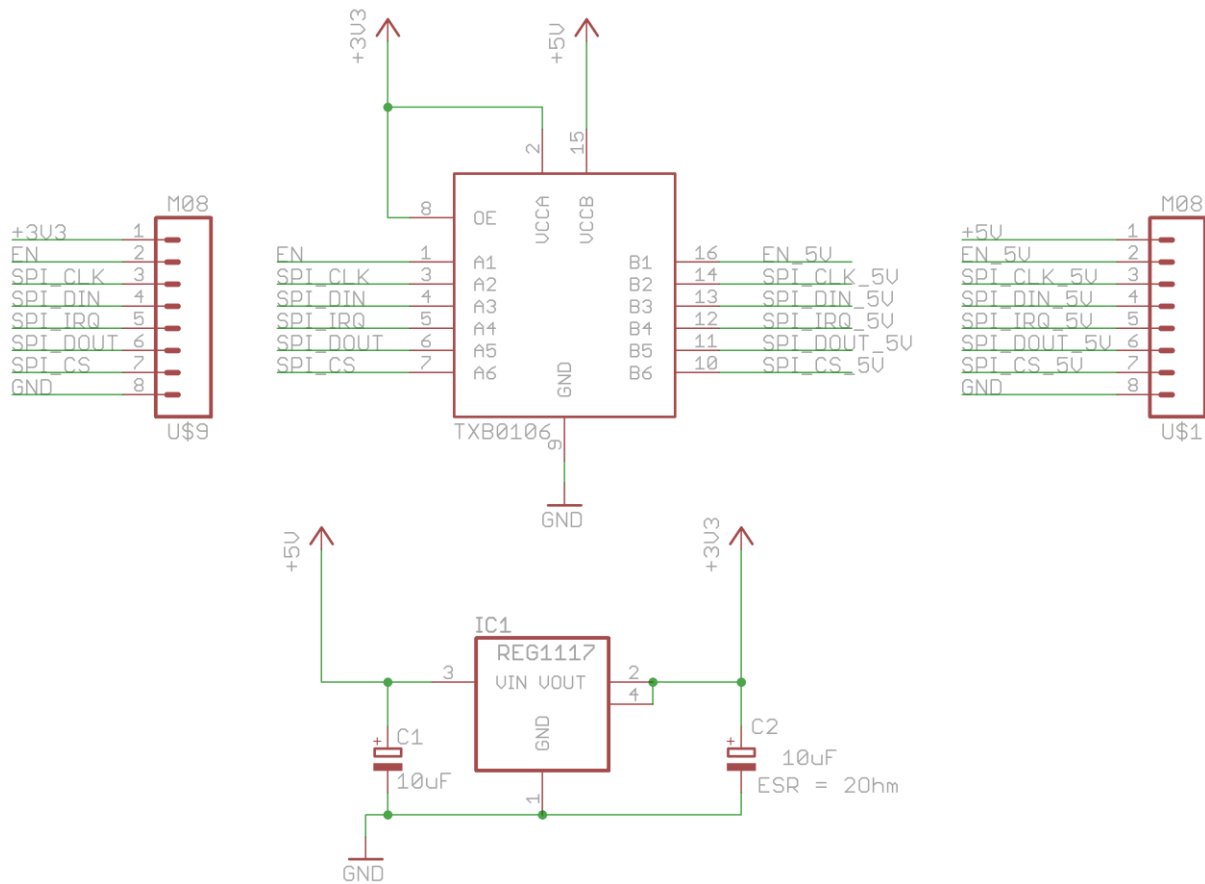
Connections

The WRL-3002 has two ports. The port at the bottom of the board interfaces to your 5V system. The port at the top of the board interfaces with your WRL-3000. For more information on the pins used, see the WRL-3000 datasheet.

Power

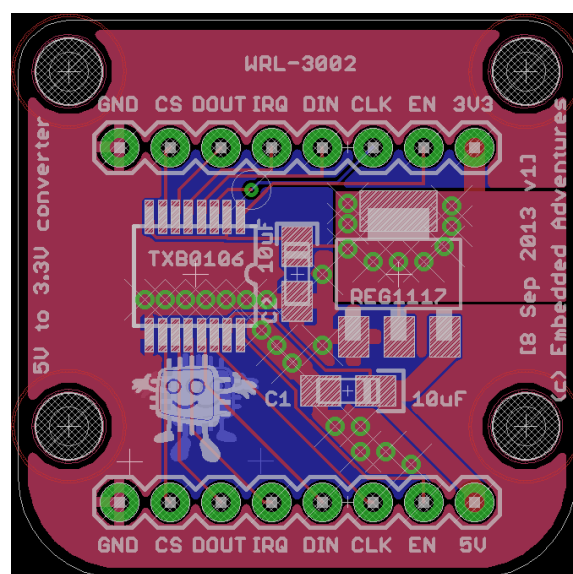
The WRL-3000 itself needs a chunky 300mA supply. So you need to make sure your 5V system can supply this. Otherwise, the WRL-3000 will fail to initialise and will generally misbehave.

Schematic



The WRL-3000 uses TXB0106 to convert between 3.3V and 5V, both ways.

PCB



Versions

Version	Date	Comments
Version 1.0	26 Oct 2013	Initial Version for board [8 Sep 2013 v1]