Device: MOD-1004

This document Version: 1

Date: 1 April 2013

Description: TTL Serial to RS232 converter

Matches hardware version: 3

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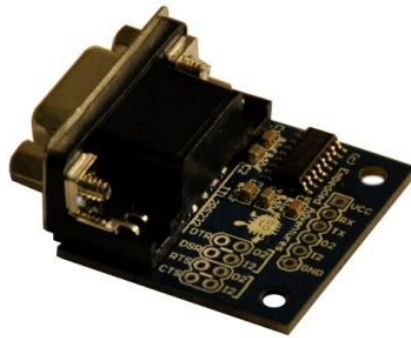
Introduction

The MOD-1004 is a MAX3232 based TTL serial to RS232 level converter.

Features

Able to function at 3.3V or 5V, this module also allows you to translate two other signals besides Transmit and Receive.

Connections

The MOD-1004 has one connection port.

VCC	Positive supply. 3.0V – 5.5V.
RX	Receive data (into the board)
TX	Transmit data (out of the board)
O2	Optional second output (either DTR or RTS)
I2	Optional second input (either DSR or CTS)
GND	Ground (Vss) connection.

Jumper connections

The MOD-1004 has two jumpers that can be connected to select which two of the four possible signals are translated.

O2 can be connected to DTR or RTS

I2 can be connected to DSR or CTS

Usually these are used in pairs (eg, RTS and CTS) however there's nothing stopping you connecting RTS and DSR for example.

These signals aren't often used any more, at least, in modern embedded circles. However two of them are available to you if you need them.
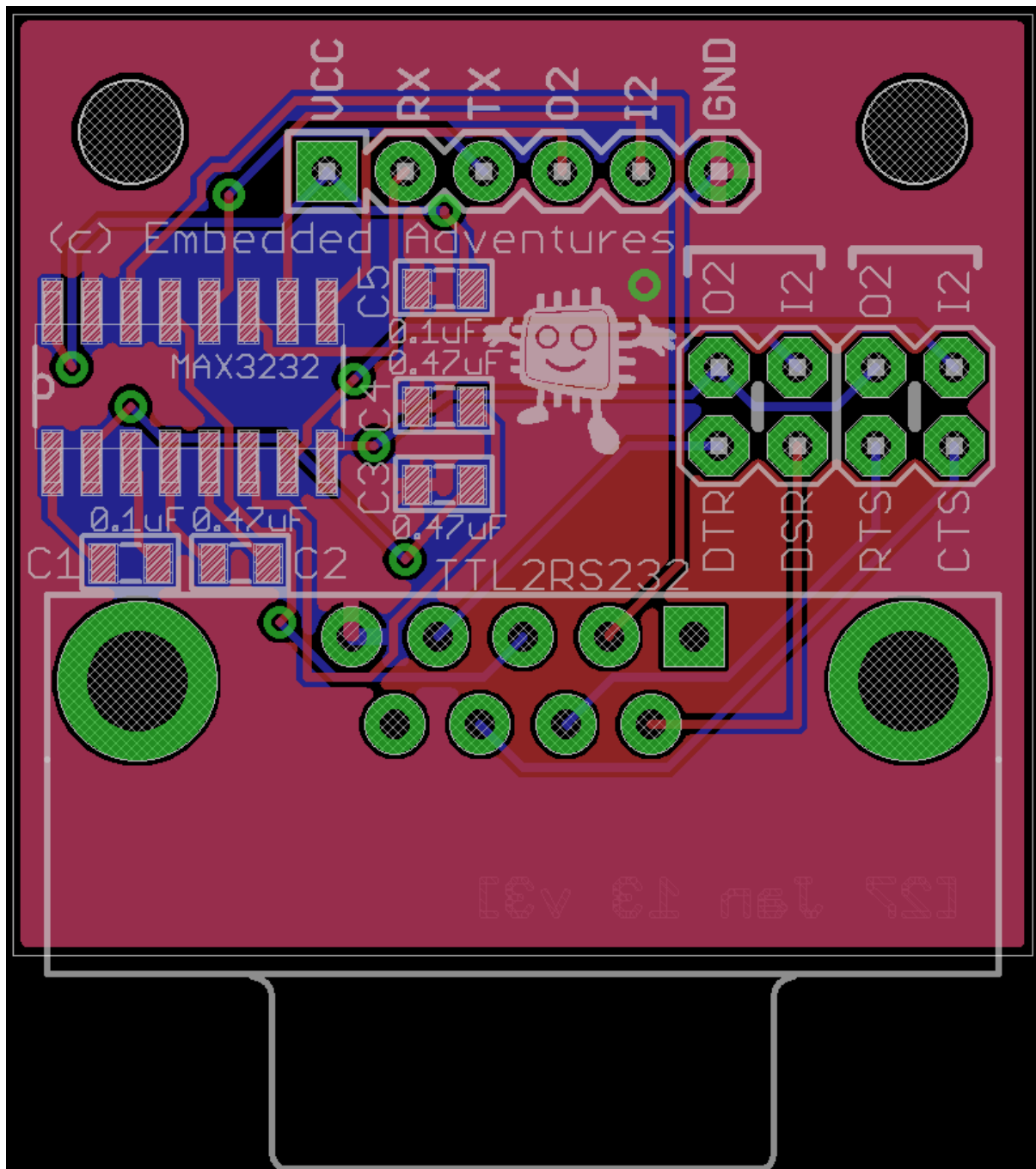
Power

The MOD-1001 can be powered from 3.0V – 5.5V. For more information on power consumption, etc, see the MAX3232 datasheet (available on the Embedded Adventures website).

Schematic
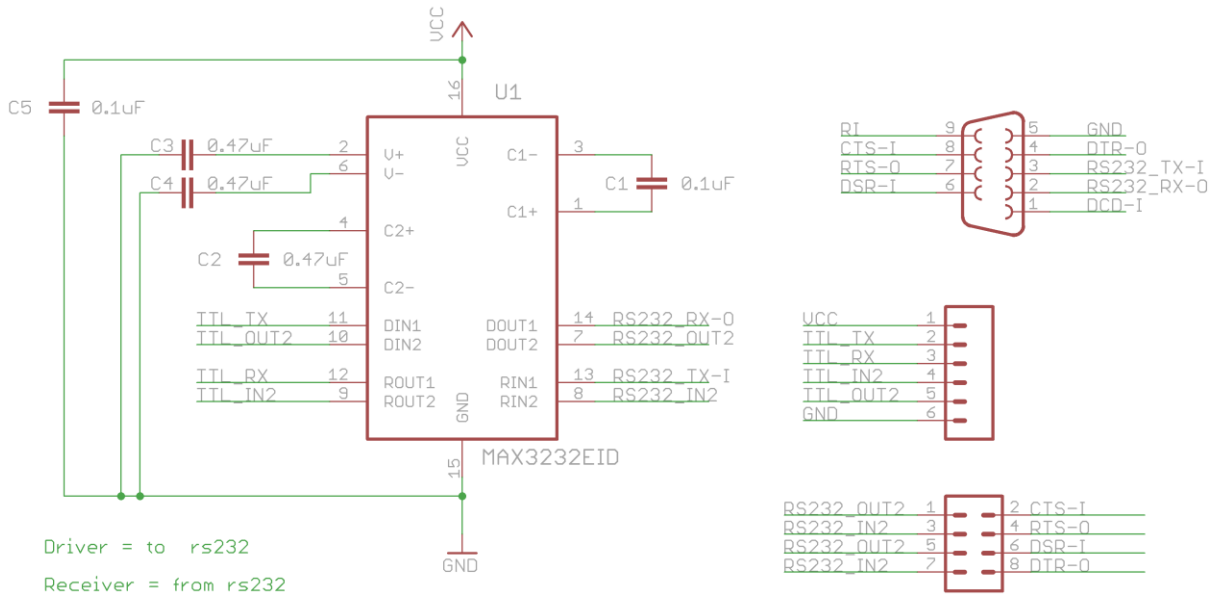
The MOD-1004 schematic is a pretty straightforward implementation of the MAX3232 reference circuit, with capacitor values selected so that it will work at 3.3V or 5.0V.

PCB

Versions

Version	Date	Comments
Version 1.0	1 April 2013	Initial Version for board v3