

GOPLCP
USER'S MANUAL
V 0.9

OHO-Elektronik
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However the main changes are listed in the revision table at the end of this document.

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The products of OHO-Elektronik - Michael Randelzhofer are intended for use in a laboratory test environment only. They can generate radio frequency energy (depending on the downloaded design and application), which can disturb local radio or TV equipment, and so they have not been tested to be CE compliant.

If you encounter any technical problems or mistakes in this document, please contact mrandelzhofer@oho-elektronik.de, serious hints are very appreciated.

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1. Table of contents:

1. Table of contents:	3
2. GOPLCP - GOPxxx Low Cost Programmer	5
3. Schematics	6
4. Module Layout Top View	7
5. Literature.....	8
6. USER'S MANUAL Revisions.....	9

2. GOPLCP - GOPxxx Low Cost Programmer

The GOPLCP is a Xilinx download cable III [1] compatible download cable for the GOPxxx family of OHO-Elektronik.

Some modifications to the original schematics were made.
The buffers of the download cable are feed back buffers to incorporate Schmitt Trigger functionality.

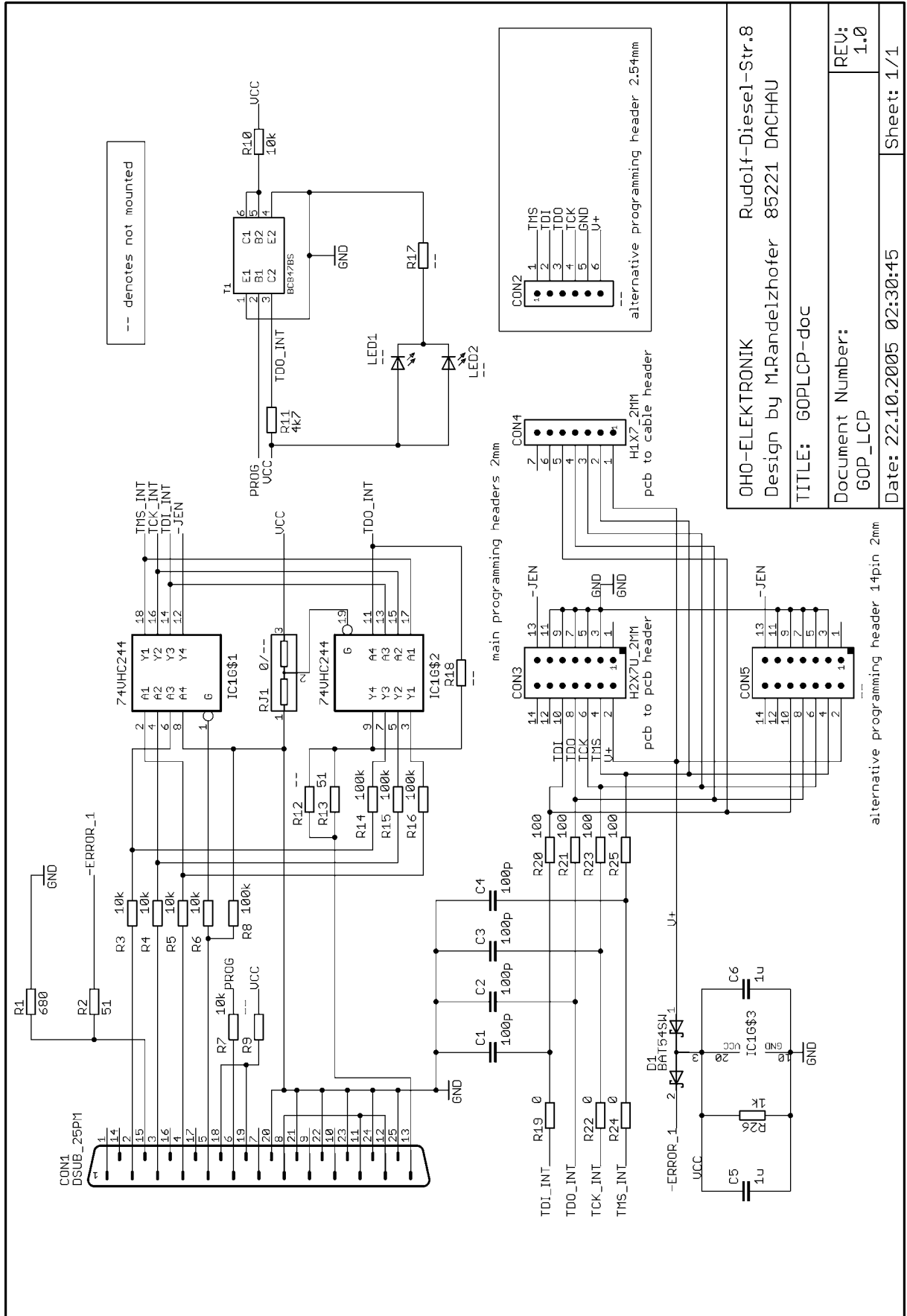
Printer port pin 15 has a pulldown (R1).
Without this pulldown, VCC sense is always sensed OK.
This is a design mistake of the original Xilinx download cable.

The GOPLCP JTAG port is connected via a 2mm cable to a 2mm IDC connector.
The red color trace of the IDC cable denotes that on this side of the IDC connector is pin 1.
This connector is compatible to [2] and [3] but pin 13.

Pin 13 of the connector is a buffered CTRL signal of pin 5 of the printer port.
This signal is low active, and enables the buffers.
However the download software IMPACT never disables this signal.

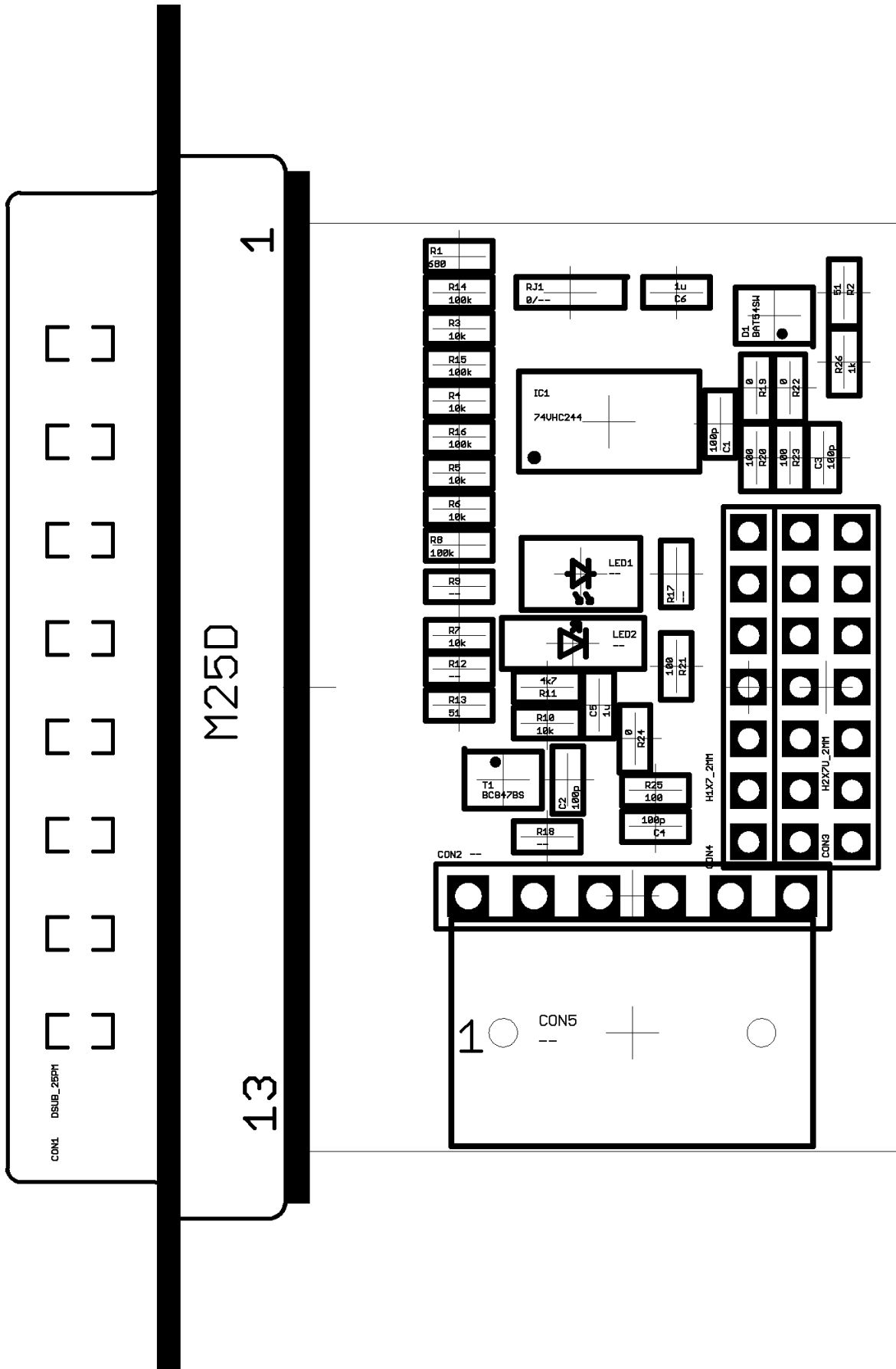
The GOPLCP cable is tested to operate in the voltage range of 2,8 to 5,5 V.
GOPxxx devices always operate the cable at voltages between 3,3 and 5,5V.

3. Schematics



OHO-ELEKTRONIK	Rudolf-Diesel-Str.8
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4. GOPLCP Layout Top View



5. Literature

- [1] XILINX Parallel Download Cable
<http://toolbox.xilinx.com/docsan/data/alliance/jtg/fig26.htm>
- [2] DS097 Xilinx Parallel Cable IV
<http://direct.xilinx.com/bvdocs/publications/ds097.pdf>
- [3] DS300 Platform Cable USB
<http://direct.xilinx.com/bvdocs/publications/ds300.pdf>

6. USER'S MANUAL Revisions

Version	Date	Comments
V0.9	23/10/2005	Prerelease