

This is the revision B version of the Tether RoboBrick. The status of this project is that it has been replaced by the revision C version.

Tether Robobrick (Revision B)

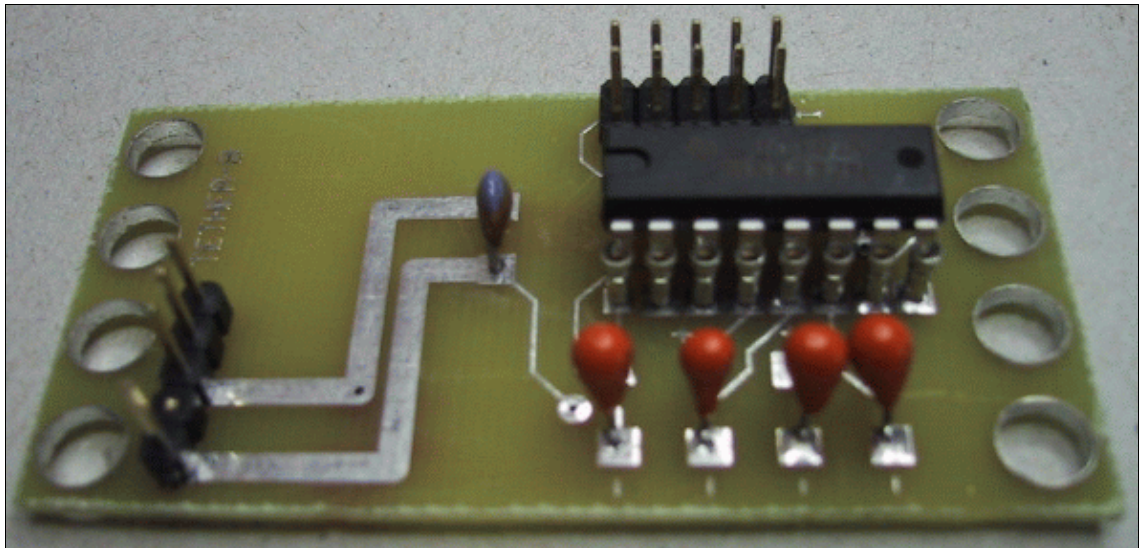
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1. Introduction

The Tether RoboBrick is a RoboBrick that connects a master RoboBrick to a computer via a standard 4–wire telephone cord extension.



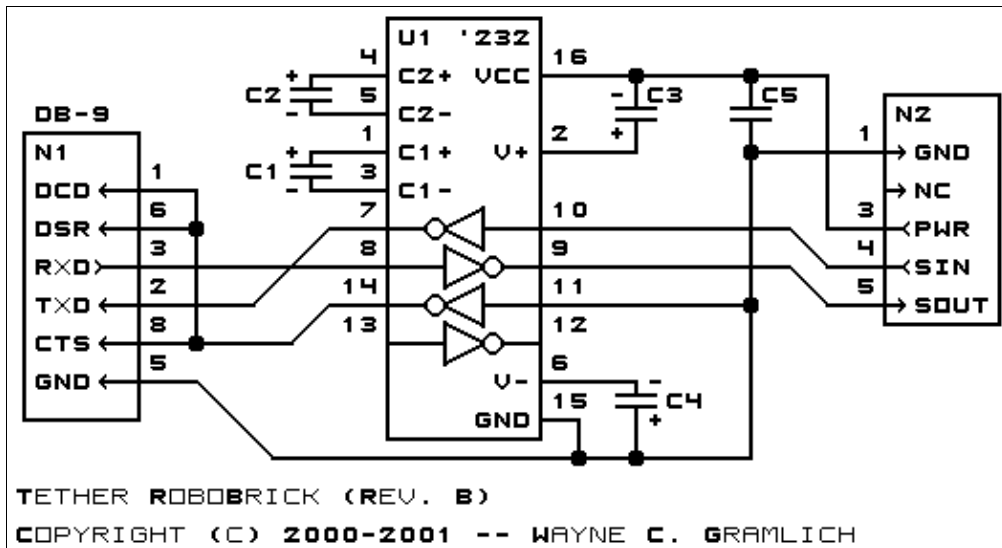
2. Hardware

The hardware consists of a circuit schematic and a printed circuit board.

2.1 Circuit Schematic

The schematic for the Tether RoboBrick is shown below:

Tether RoboBrick (Revision B)



The parts list kept in a separate file -- [tether.ptl](#).

2.2 Printed Circuit Board

The printed circuit board files are listed below:

[tether_back.png](#)

The solder side layer is shown below:

[tether_front.png](#)

The component side layer is shown below:

[tether_artwork.png](#)

The optional artwork layer is shown below:

[tether.gbl](#)

The RS-274X "Gerber" back (solder side) layer.

[tether.gtl](#)

The RS-274X "Gerber" top (component side) layer.

[tether.gal](#)

The RS-274X "Gerber" artwork layer.

[tether.drl](#)

The "Excellon" NC drill file.

[tether.tol](#)

The "Excellon" NC drill rack file.

3. Issues

The following fabrication issues came up:

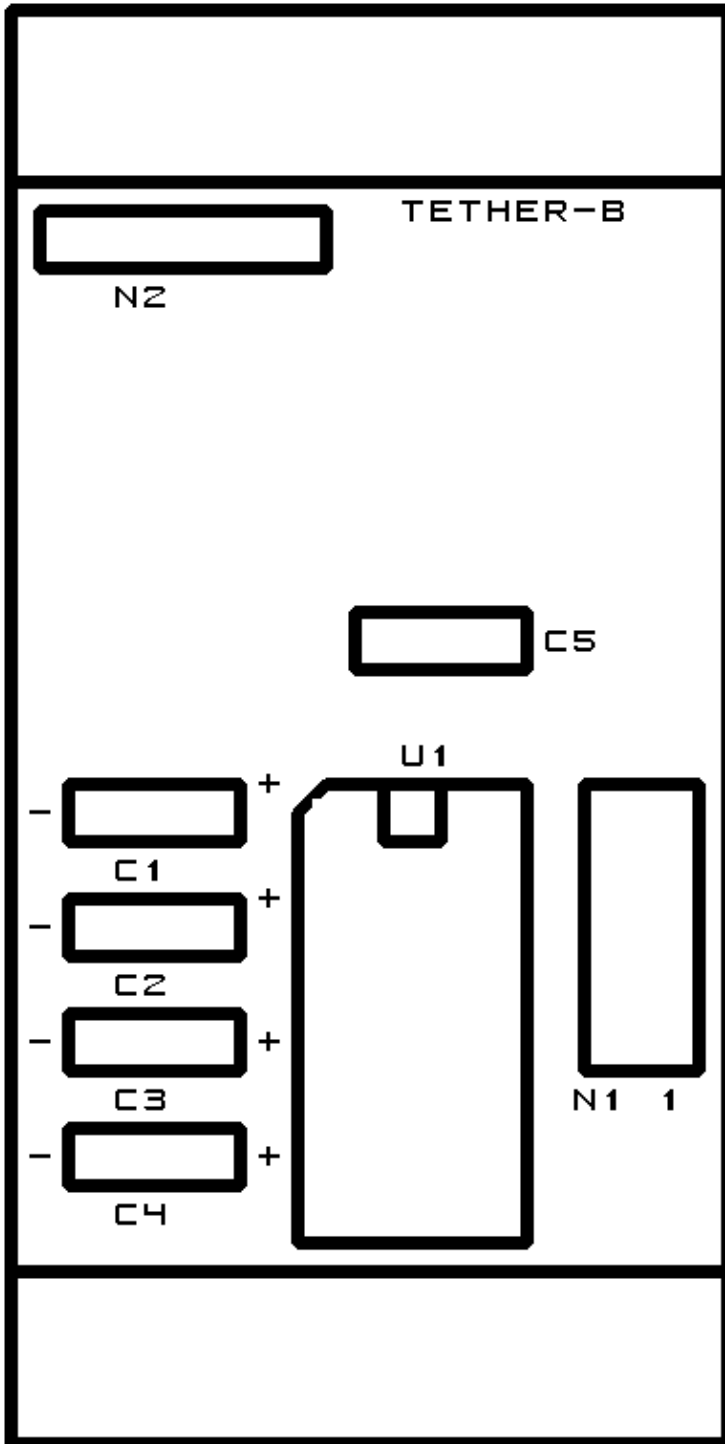
- The holes for N2 (size 3) are too large and need to be made smaller (size 2).
- Think about rotating the chip 90 degrees.

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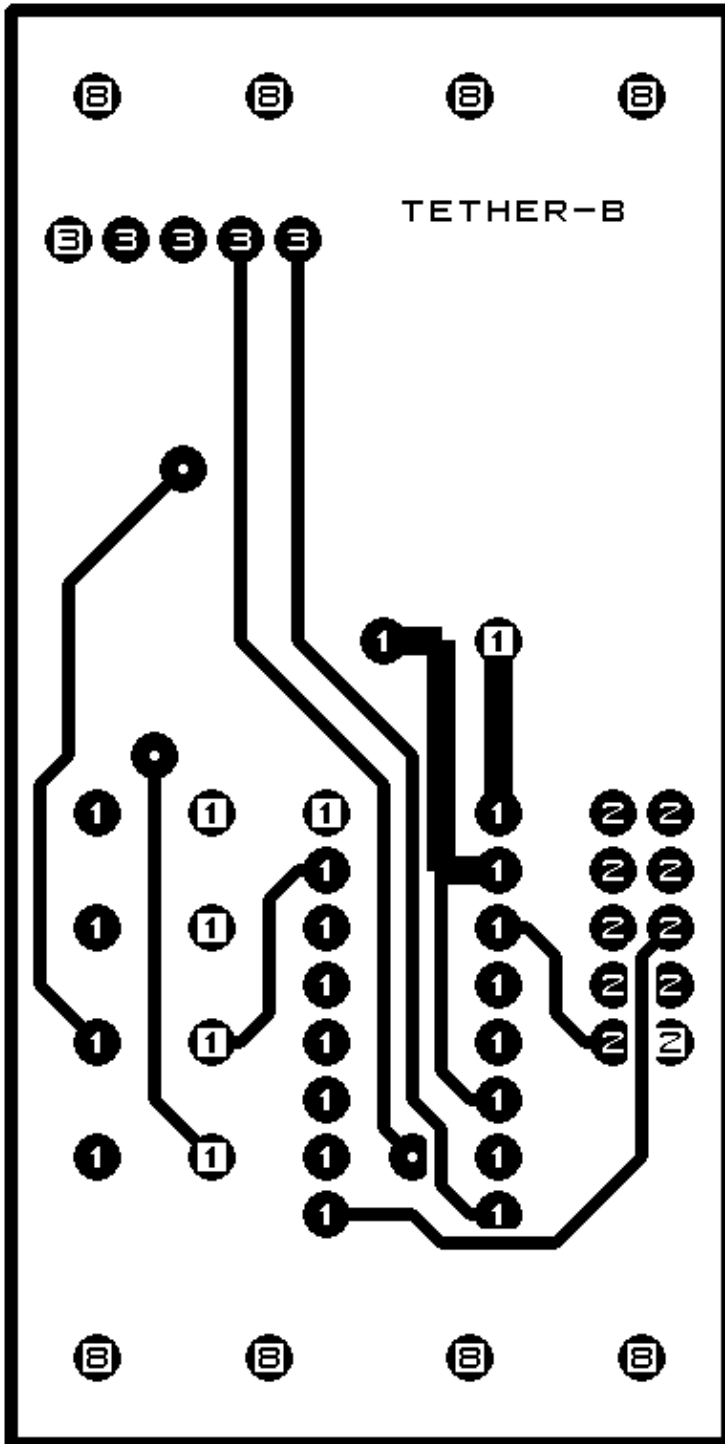
A. Appendix A: Parts List

```
# Parts list for Tether (Rev. B)
#
C1-4: Capacitor100nF - 100 nF (.1 uF) Tantalum Capacitor [Jameco: 25524]
C5: Capacitor10pF - 10 pF Ceramic Capacitor [Jameco: 15333]
N1: Header2x5.DB9 - 2x5 Header [10/80 Jameco: 117196]
N2: Header1x5.RBSlave - 1x5 Male Header [5/40 Jameco: 160881]
U1: MAX232CPE - RS-232 Level converter [Jameco: 24811]
```

B. Appendix B: Artwork Layer



C. Appendix C: Back (Solder Side) Layer



D. Appendix D: Front (Component Side) Layer

