This is the Revision C version of the LCD32Holder module. The status of this project is work in progress.

LCD32Holder Module (Revision C)

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This document is also available in PDF format.

1. Introduction

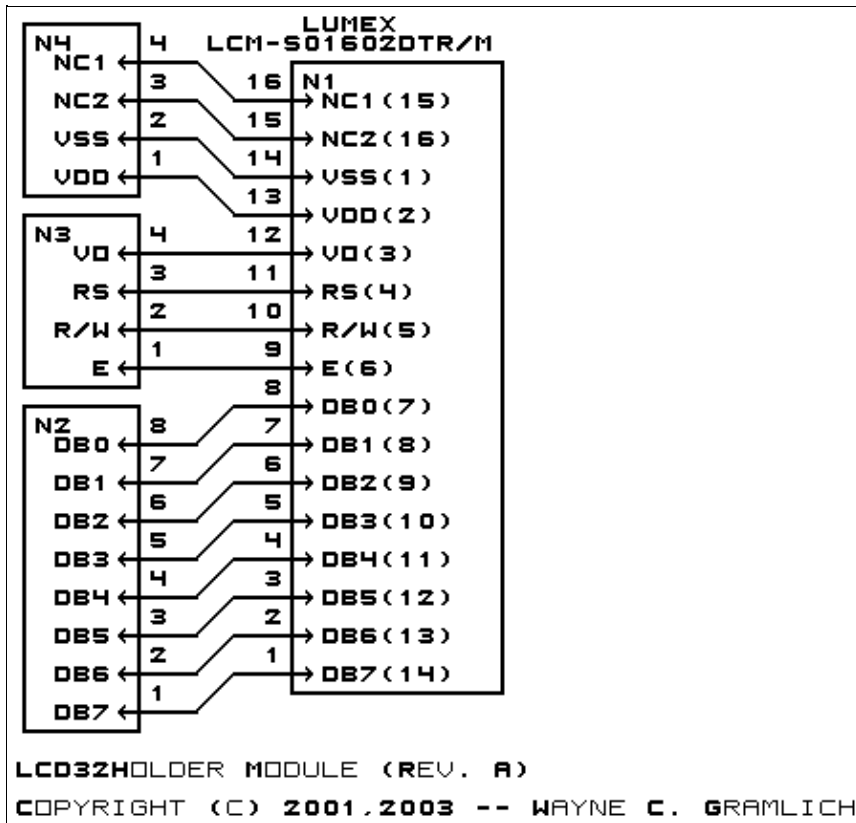The LCD32HOLDERHolder module adapts the Lumex LCM−S01602DTR/M to the LCD32HOLDER module.

2. Hardware

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

2.1 Circuit Schematic

The schematic for the LCD32HOLDERHolder module is shown below:

```
                    LUMEX
N4      4   LCM-S01602DTR/M
  NC1 ←  3                  16  N1
  NC2 ←  2                  15    → NC1(15)
  VSS ←  1                  14    → NC2(16)
  VDD ←                     13    → VSS(1)
N3      4                   12    → VDD(2)
   VO ←  3                  11    → VO(3)
   RS ←  2                  10    → RS(4)
  R/W ←  1                   9    → R/W(5)
    E ←                      8    → E(6)
N2      8                    7    → DB0(7)
  DB0 ←  7                   6    → DB1(8)
  DB1 ←  6                   5    → DB2(9)
  DB2 ←  5                   4    → DB3(10)
  DB3 ←  4                   3    → DB4(11)
  DB4 ←  3                   2    → DB5(12)
  DB5 ←  2                   1    → DB6(13)
  DB6 ←  1                         → DB7(14)
  DB7 ←

LCD32HOLDER MODULE (REV. A)
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```

The parts list kept in a separate file −− lcd32holder.ptl.

2.2 Printed Circuit Board

The printed circuit board files are listed below:

lcd32holder_back.png
    The solder side layer.
lcd32holder_front.png
    The component side layer.
lcd32holder_artwork.png
    The artwork layer.
lcd32holder.gbl
    The RS−272X "Gerber" back (solder side) layer.
lcd32holder.gtl
    The RS−272X "Gerber" top (component side) layer.
lcd32holder.gal
    The RS−272X "Gerber" artwork layer.
lcd32holder.drl
    The "Excellon" NC drill file.
lcd32holder.tol
    The "Excellon" tool rack file.

3. Issues

The following fabrication issues came up:

- The stand−off next to N3 just happens to land on top of a surface mount resistor on the LCD board. Move it up by .15".
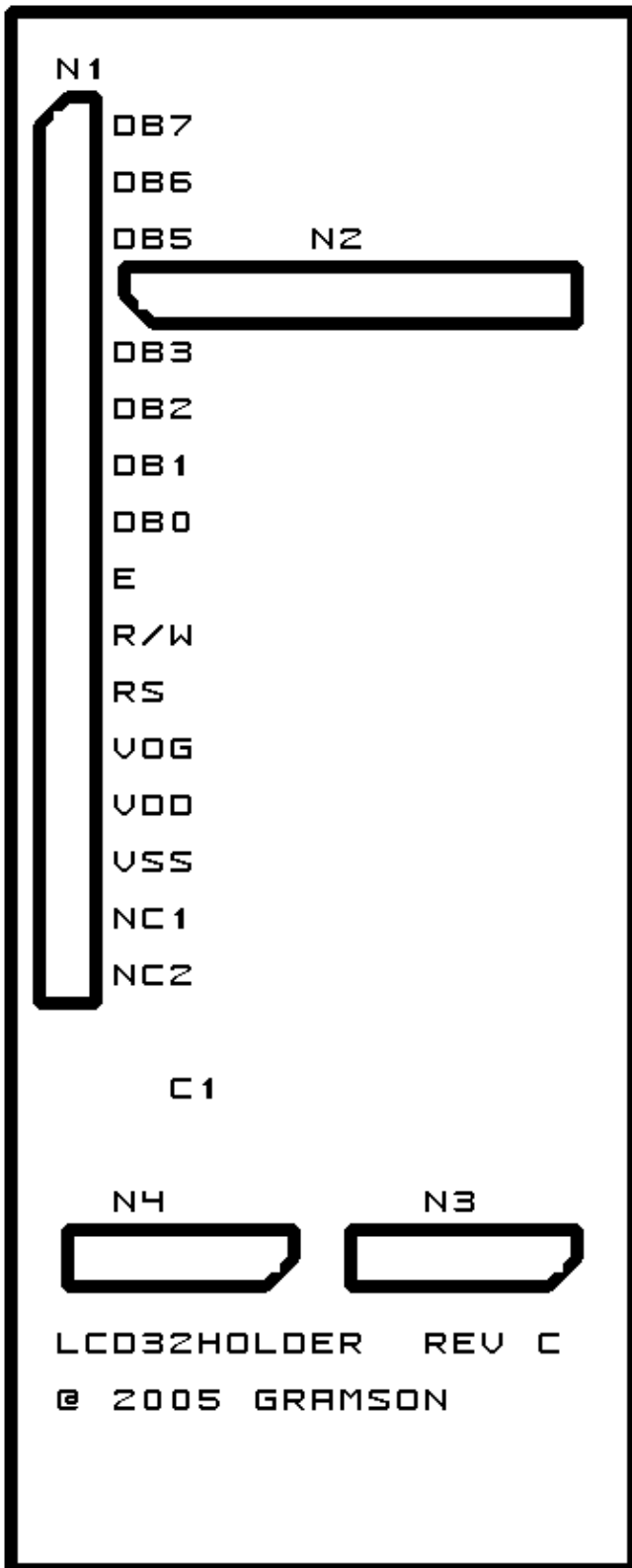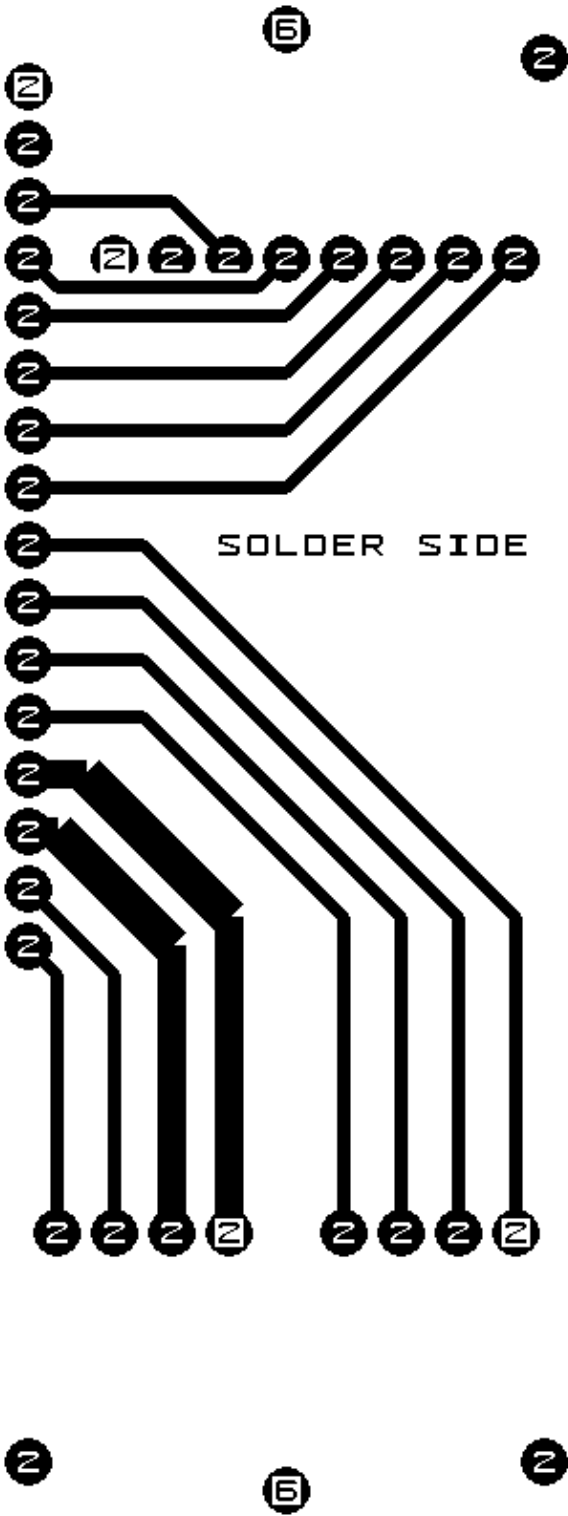
A. Appendix A: Parts List

```
# Parts list for LCD32Holder Module (Rev. C)
#
N1: Header1x16.LCD32Holder – 1x16 Male Header [16/40 Jameco: 160881]
N2: Header1x8.LCD32Holder – 1x8 Male Header [8/40 Jameco: 160881]
N3: Header1x4.LCD32Holder – 1x4 Male Header [4/40 Jameco: 160881]
N4: Header1x4.LCD32Holder – 1x4 Male Header [4/40 Jameco: 160881]
X1: LCM_S01602DTRM – Lumex LCM-S01602DTR/M 2x16 LCD Display [Digikey: 67-1781-ND]
```

B. Appendix B: Artwork Layer

N1

DB7

DB6

DB5   N2

DB3

DB2

DB1

DB0

E

R/W

RS

VOG

VDD

VSS

NC1

NC2

C1

N4   N3

LCD32HOLDER   REV C

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C. Appendix C: Back (Solder Side) Layer

SOLDER SIDE

D. Appendix D: Front (Component Side) Layer

COMP. SIDE