
uln-amp_NPN_v1

circuit board documentation

May 2, 2007

Figures

- Figure 1 on the following page shows the project schematics.
- Figures 2 to 6 on pages 3–4 show various placeplan views of the circuit board to assist in populating it with components.
- Figures 7 to 8 on pages 4–5 show plans for manually drilling circuit board holes with the following diameters:

\varnothing [μm]	\varnothing [mm]	\varnothing [in]	Count
812	0.8	0.032	76
2692	2.7	0.106	4
Total			80

Table 1: *Drill diameters used in the board*

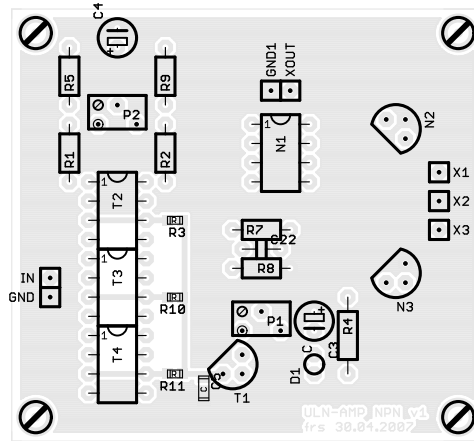


Figure 2: Board top view showing placeplan with component names

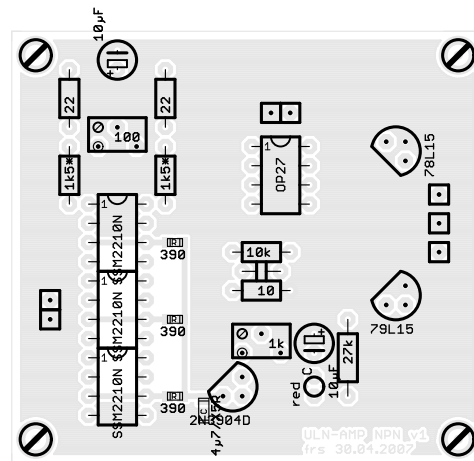


Figure 3: Board top view showing placeplan with component values

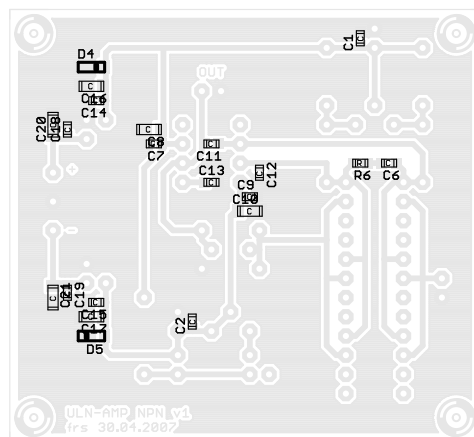


Figure 4: Board bottom view showing placeplan with component names

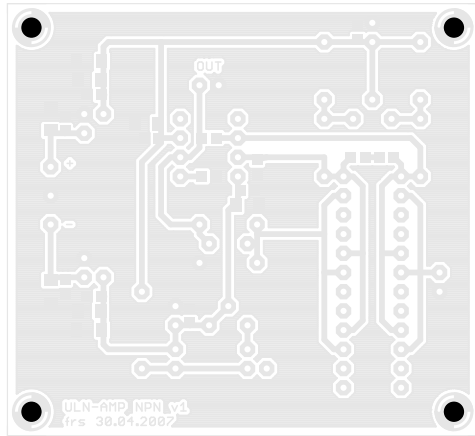


Figure 8: Board bottom view showing drills with 2.7 mm (0.106 in) diameter

Circuit lists

Value list: The following list shows all components available on the board (sorted by part *values*) and can be used to quickly gather components. Additional information can possibly be found directly on board (or in the schematics).

```
1 EAGLE Version 4.16 Copyright (c) 1988-2005 CadSoft
2 Board value list of 'uIn-amp_NPN_v1.brd'
3 Exported at 2007-05-02 14:54
4 Created with macro 'plot.ulp' (c) Andreas Weidner
5 Shown are: Value,Package,Number,Names (Library)
6
7 ---C---
8         C02N      (1*)    C22 (DIVERS)
9 *       C0805     (1*)    C6 (DIVERS)
10 4u7     C1206     (6*)    C8,C10,C16,C17,C20,C21 (DIVERS)
11 4u7/X5R C1206     (1*)    C5 (DIVERS)
12 10uF    CE01A      (2*)    C3,C4 (DIVERS)
13 68p     C0805     (1*)    C13 (DIVERS)
14 100nF   C0805     (8*)    C1,C2,C7,C9,C14,C15,C18,C19 (DIVERS)
15 470p    C0805     (2*)    C11,C12 (DIVERS)
16
17 ---D---
18 BAT43   DMINIMELF (2*)    D4,D5 (DIVERS)
19 red     DL03N     (1*)    D1 (DIVERS)
20
21 ---GND---
22         XP01N     (2*)    GND,GND1 (connectors)
23
24 ---IN---(1*)    ,IN (connectors)
25
26 ---N---
27 78L15   T092D     (1*)    N2 (ic)
28 79L15   T092D     (1*)    N3 (ic)
29 OP27    DIP08N    (1*)    N1 (opamps)
30
31 ---P---
32 1k      PT01N     (1*)    P1 (DIVERS)
33 100     PT01N     (1*)    P2 (DIVERS)
34
35 ---R---
36 *       R0805     (1*)    R6 (DIVERS)
37 1k5*    R03N     (2*)    R1,R2 (DIVERS)
38 10      R03N     (1*)    R8 (DIVERS)
39 10k     R03N     (1*)    R7 (DIVERS)
40 22      R03N     (2*)    R5,R9 (DIVERS)
41 27k     R04N     (1*)    R4 (DIVERS)
42 390     R0805     (3*)    R3,R10,R11 (DIVERS)
43
44 ---T---
45 2N3904D T092D     (1*)    T1 (transistors)
46 SSM2210N DIP08N    (3*)    T2,T3,T4 (transistors)
47
48 ---X---
49         XP01N     (3*)    X1,X2,X3 (connectors)
50
51 ---XOUT---(1*)    ,XOUT (connectors)
```