Bill Of Materials May 23,2012 15:55:48 Page1

```
Item Quantity Reference Part
1
     3
           C3,C22,C123 10uF
2
     2
           C7,C8 33pF
3
     19
           C9,C21,C27,C120,C121, 0.1uF
           C122,C136,C137,C139,C140,
           C141, C142, C143, C144, C145,
           C146,C147,C148,C149
4
           C10 luF
     2
5
           C26,C119
                       100uF
           C116,C117,C118 0.1uF 50v
6
     3
7
           C124,C125 0.01uF
     2
8
           C126 0.022uF
     1
9
          C127 100nf
     1
10
     3
          C128,C129,C132
                            2200uf 35v
11
     3
          C130,C131,C135
                           220uf 35v
12
     1
          D1 Power_LED
          D2
                LED_MF
13
     1
          D3 LED_TH1
D4 LED_TH2
14
     1
15
     1
16
     6
           D5,D6,D7,D9,D10,D14 1N4001
17
     1
           D8
                 1N4148
               LED_CC
18
     1
           D11
     2
          D12,D13 DIODE
19
20
     1
          D15 IN4004
21
    1
          ENCODER_IC1 74C922
22
    2
          LCD2, Edge HEADER 16
          F1,F2,F3 FUSE ISO1,ISO2 6N137
23
    3
     2
24
25
     2
           J1,J2 HEADER 2
     1
26
           J4 program
27
     2
           J5,J6 HEADER 1
           J7,J8,Serial_ISP HEADER 3
28
     3
29
     1
           KEYPAD_NUMERICAL1 Keypad_10
          Q1 2N2222
Q3 2N3053
30
     1
31
     1
32
     3
          RLY1_S2,RLY2_MF1,RLY3_S1
                                      RLY_DPDT
33
    1
          R1 SIL9_10K
34
    5
          R2,R3,R4,R5,R17
                            220
          R6 8.2K
35
     1
36
     3
           R7,R14,R16 3K
37
     2
           R8,R24
                      4.7K
38
     9
           R9,R25,R26,R27,R28,R29, 100R
           R30,R31,R32
39
     1
           R10 470R
40
     4
           R11,R35,R38,R39
                            1k
41
     2
          R13,R15
                     560R
42
     1
          R34
                5k
43
     2
          R36,R37
44
    1
          TX1 TRANSFORMER
45
          T1
                TRAN_ISDN_10
    1
46
     1
           U1 AT89C51RC2
```

```
47 1 U2 ULN2803

48 1 U7 74LS14

49 1 U8 EMI 02AA3 250V ac 2A

50 2 U13,U19 Reg7805

51 1 U14 Reg7812

52 1 U15 Reg7912

53 1 U17 AD420

54 1 U18 ADUM 1401

55 2 VAR1,VAR5 10K

56 1 VAR6 500R

57 1 Y1 24MHz

58 2 100V 2A,100V 2A2 BRIDGE
```