File   Edit   View   Project   Flash   Debug   Peripherals   Tools   SVCS   Window   Help

Target 1

Project

- Project: keypad
  - Target 1
    - Source Group 1
      - STARTUP.A51
      - lcd.h
      - keypad2.c
      - reg51.h

keypad2.c | lcd.h | STARTUP.A51

```c
56      ROW2 = 1;
57      ROW3 = 1;
58
59      // Columns are inputs with pull-ups (they should be high when not pressed)
60      // This is handled by the hardware as mentioned in the PDF
61 }
62
63
64 unsigned char scan_keypad(void) {
65      unsigned char row;
66
67      if((COL0 == 1) && (COL1 == 1) && (COL2 == 1) && (COL3 == 1)) {
68          return 0;
69      }
70
71      delay_ms(20);
72
73      for(row = 0; row < 4; row++) {
74          ROW0 = 1;
75          ROW1 = 1;
76          ROW2 = 1;
77          ROW3 = 1;
78
79          switch(row) {
80              case 0: ROW0 = 0; break;
81              case 1: ROW1 = 0; break;
82              case 2: ROW2 = 0; break;
83              case 3: ROW3 = 0; break;
84          }
85
86          if(COL0 == 0) return keypad_map[row][0];
87          if(COL1 == 0) return keypad_map[row][1];
88          if(COL2 == 0) return keypad_map[row][2];
89          if(COL3 == 0) return keypad_map[row][3];
90      }
91
```
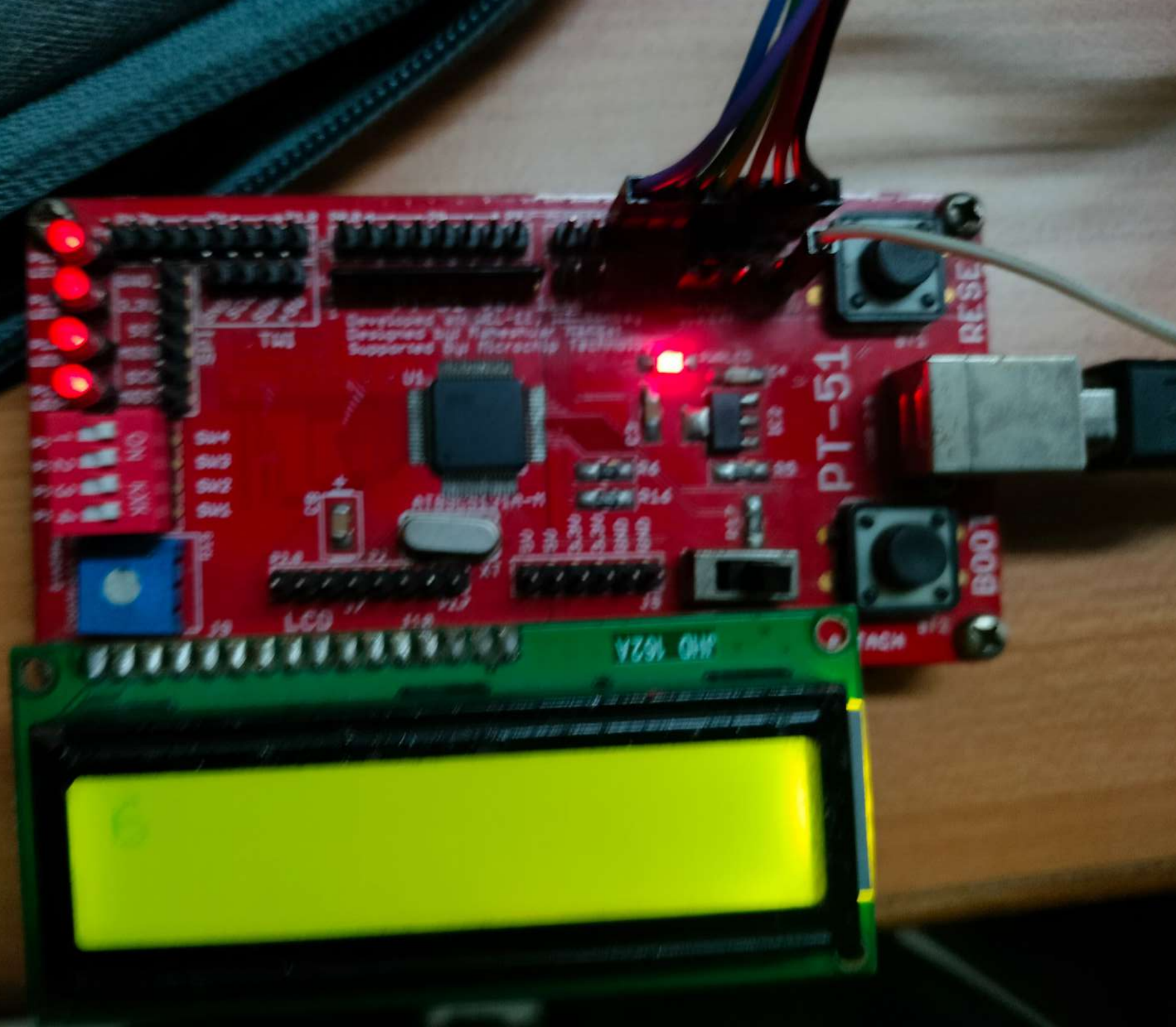
Build Output

```
Rebuild started: Project: keypad
Rebuild target 'Target 1'
assembling STARTUP.A51...
```

Simulation   L:36 C:21   CAP NUM SCRL OVR R/W

PT-51

RESE

BOOT

JHD 162A

PT-51 Ver 1.3

Developed at: WEL-EE, IIT-Bombay
Designed by: Maheshwar Mangat
Supported by: Microchip Technology

U1
AT89C5131A-M

PT-51

GND
3.3
SCL
MISO
SCK
SS

SPI
TWI
SCL
SDA
5V

ON
1 2 3 4
KXK

SW4
SW3
SW2
SW1

P462412
R19

C8
+

P2.0
P2
XT
P2.7
J7

5V
5V
3.3V
3.3V
GND
GND
T8

R6
152
27R0
R16

R17
27R0

PWRLED
782J
N058
IC2

C4
IC

C3

R5

vUSB 2.0

RESET
BT

BOOT
BT2

TACH

LCD

JHD 162A