BLINK PAGE 1

1 ;======================================================================

2 ;

3 ; Author : ADI - Apps

4 ;

5 ; Date : 5 November 2001

6 ;

7 ; File : Blink.asm

8 ;

9 ; Description : Blink LED with 100mSec delay for MicroConverter DEMO

10 ;

11 ;======================================================================

12 ;

13 $MOD836 ; Use 8052 predefined Symbols

14

---- 15 CSEG ; Defines the following as a segment of code

16

0000 17 ORG 0000H ; Load Code at '0'

18

0000 020057 19 JMP MAIN ; Jump to MAIN

20

004B 21 ORG 004Bh ; Subroutines

22

23

24 ;------------------------------------------------------------------

25

004B 26 DELAY: ; Delays by 100ms \* A

27

28

004B F8 29 MOV R0,A ; Acc holds delay variable

004C 7919 30 DLY0: MOV R1,#019h ; Set up delay loop0

004E 7AFE 31 DLY1: MOV R2,#0FEh ; Set up delay loop1

0050 DAFE 32 DJNZ R2,$ ; Dec R2 & Jump here until R2 is 0

0052 D9FA 33 DJNZ R1,DLY1 ; Dec R1 & Jump DLY1 until R1 is 0

0054 D8F6 34 DJNZ R0,DLY0 ; Dec R0 & Jump DLY0 until R0 is 0

0056 22 35 RET ; Return from subroutine

36

37 ;======================================================================

38

0057 39 MAIN: ; (main program)

40

0057 7401 41 MOV A,#01H ; Set up delay = A\*100mSecs.

0059 B2B4 42 BLINK: CPL P3.4 ; blink LED using compliment instruction

005B 114B 43 CALL DELAY ; Call Software delay 100mS

005D 80FA 44 JMP BLINK ; Jump to Blink

45

46 END

47

48

49

VERSION 1.2h ASSEMBLY COMPLETE, 0 ERRORS FOUND

BLINK PAGE 2

BLINK. . . . . . . . . . . . . . C ADDR 0059H

DELAY. . . . . . . . . . . . . . C ADDR 004BH

DLY0 . . . . . . . . . . . . . . C ADDR 004CH

DLY1 . . . . . . . . . . . . . . C ADDR 004EH

MAIN . . . . . . . . . . . . . . C ADDR 0057H

P3 . . . . . . . . . . . . . . . D ADDR 00B0H PREDEFINED