BLINK PAGE 1

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

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3 ; Author : ADI - Apps

4 ;

5 ; Date : February 2001

6 ;

7 ; File : Blink.asm

8 ;

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

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

12 ;

13 $MOD814 ; 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

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

25

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

27 ; 100mSec based on 2.097152MHZ

28 ; Core Clock

29 ; i.e. default ADuC814 Clock

30

004B F8 31 MOV R0,A ; Acc holds delay variable

004C 7922 32 DLY0: MOV R1,#022h ; Set up delay loop0

004E 7AFF 33 DLY1: MOV R2,#0FFh ; Set up delay loop1

0050 DAFE 34 DJNZ R2,$ ; Dec R2 until R2 is zero

0052 D9FA 35 DJNZ R1,DLY1 ; Dec R1 & Jump DLY1 until R1 is 0

0054 D8F6 36 DJNZ R0,DLY0 ; Dec R0 & Jump DLY0 until R0 is 0

0056 22 37 RET ; Return from subroutine

38 ;======================================================================

39

0057 40 MAIN: ; (main program)

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0057 7401 42 MOV A,#01H ; Set up delay = A\*100mSecs.

0059 B2B3 43 BLINK: CPL P3.3 ; blink LED using compliment instruction

005B 114B 44 CALL DELAY ; Call Software delay 100mS

005D 80FA 45 JMP BLINK ; Jump to Blink

46

47 END

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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