;======================================================================

;

; Author : ADI - Apps

;

; Date : February 2001

;

; File : Blink.asm

;

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

;

;======================================================================

;

$MOD814 ; Use 8052 predefined Symbols

CSEG ; Defines the following as a segment of code

ORG 0000H ; Load Code at '0'

JMP MAIN ; Jump to MAIN

ORG 004Bh ; Subroutines

;------------------------------------------------------------------

DELAY: ; Delays by 100ms \* A

; 100mSec based on 2.097152MHZ

; Core Clock

; i.e. default ADuC814 Clock

MOV R0,A ; Acc holds delay variable

DLY0: MOV R1,#022h ; Set up delay loop0

DLY1: MOV R2,#0FFh ; Set up delay loop1

DJNZ R2,$ ; Dec R2 until R2 is zero

DJNZ R1,DLY1 ; Dec R1 & Jump DLY1 until R1 is 0

DJNZ R0,DLY0 ; Dec R0 & Jump DLY0 until R0 is 0

RET ; Return from subroutine

;======================================================================

MAIN: ; (main program)

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

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

CALL DELAY ; Call Software delay 100mS

JMP BLINK ; Jump to Blink

END