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; Author : ADI - Apps www.analog.com/MicroConverter

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; Date : 31 JAN 2002

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; File : blink.asm

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; Hardware : Any 8052 based MicroConverter (ADuC8xx)

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; Description : Blinks LED continuously.

; 200mSec period @ 50% duty cycle.

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$MOD52 ; use 8052 predefined symbols

LED EQU P3.4 ; P3.4 is red LED on eval board

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; MAIN PROGRAM

CSEG

ORG 0000h

BLINK: CPL LED ; flash (complement) the red LED

CALL DELAY ; call software delay

JMP BLINK ; repeat indefinately

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; SUBROUTINES

DELAY: ; delay 100ms

MOV R7,#200 ; 200 \* 500us = 100ms

DLY1: MOV R6,#229 ; 229 \* 2.17us = 500us

DJNZ R6,$ ; sit here for 500us

DJNZ R7,DLY1 ; repeat 200 times (100ms delay)

RET

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END