.def entry

.def INT4\_R

.text

clock\_period .set 0x03567E00 ;56million cycles count = 1sec

timer0\_cntr .set 0x01940000 ;timer0 control register address

timer0\_per .set 0x01940004 ;timer0 period address

timer0\_init .set 0x3C1 ;timer0 initialization values

entry: .include "arxiko.asm"

;load addresses

MVKL timer0\_cntr,B1 ;timer0control(addr) => B1

MVKH timer0\_cntr,B1

MVKL timer0\_per,B2 ;timer0 period(addr) => B2

MVKH timer0\_per,B2

MVKL 0x90080000,B10 ;LED Byte Address => B10

MVKH 0x90080000,B10

;load constants to registers

MVKL clock\_period,B3 ;timer0 period => B3

MVKH clock\_period,B3

MVK 0x1,B11 ; B11 = 1 gia XOR sto INT4\_R

MV B11,B12 ; B12 = 1 arxika (arxika grafetai sto LED0 na einai ON)

STB B12,\*B10

;initialize timer control registers 0

ZERO B0

SET B0,8,9,B0 ;set CLKSRC kai C/P pedio tou timer0 cntrl register

STW B0,\*B1

B start\_0

nop 5

start\_0: STW B3,\*B2 ;save period to per\_address

MVK timer0\_init,B0

STW B0,\*B1 ;save timer0 initialization values to timer control

register

B loop

nop 5

loop: [B1]B loop

nop 5

INT4\_R: XOR B12,B11,B12

STB B12,\*B10

B IRP

nop 5