```
        list p=16F84A

#include P16F84a.inc

    __CONFIG _CP_OFF & _WDT_OFF & _PWRTE_ON & _XT_OSC


RESET ORG 0x00

        GOTO Inicio

        ORG 0x04

        GOTO INTER

        ORG 0X05


    CBLOCK 0x0C

    C_Tempo

    R_ContA

    R_ContB

    R_ContC

    SAVE_W

    SAVE_STATUS

    ENDC


Inicio

    BSF STATUS, RP0

    MOVLW b'00001'

    MOVWF TRISA

    MOVLW b'00000001'

    MOVWF TRISB

    BSF OPTION_REG,6

    BCF STATUS,RP0

    MOVLW B'10010000'

    MOVWF INTCON
```

```
    CLRF PORTA

    CLRF PORTB


FairyTheme
;387ms BPM
    CALL RE4;  /////////// D4 ////////////
    CALL RE4;  /////////// D4 ////////////
    CALL RE4;  /////////// D4 ////////////
    CALL MI4;  /////////// E4 ////////////
    CALL MI4;  /////////// E4 ////////////
    CALL MI4;  /////////// E4 ////////////
    CALL SOL4; /////////// G4 ////////////
    CALL SOL4; /////////// G4 ////////////
    CALL SIb4; /////////// Bb4 ////////////
    CALL RE5;  /////////// D5 ////////////
    CALL MI5;  /////////// E5 ////////////
;       ================================================================
;       ================================================================
    CALL Retardo_1ms
    CALL LA5;  /////////// A5 ////////////
    CALL RE5;  /////////// D5 ////////////
    CALL SIb4; /////////// Bb4 ////////////
    CALL SOL4; /////////// G4 ////////////

    CALL SOL5; /////////// G5 ////////////
    CALL RE5;  /////////// D5 ////////////
    CALL SIb4; /////////// Bb4 ////////////
    CALL SOL4; /////////// G4 ////////////
```

```
        CALL SOLb5;  ///////////  Gb5  ///////////
        CALL RE5;    ///////////  D5  ////////////
        CALL SIb4;   ///////////  Bb4 ////////////
        CALL SOL4;   ///////////  G4  ////////////


        CALL SOL5;   ///////////  G5  ////////////
        CALL RE5;    ///////////  D5  ////////////
        CALL SIb4;   ///////////  Bb4 ////////////
        CALL SOL4;   ///////////  G4  ////////////
        CALL Retardo_1ms
;       ================================================================
;       ================================================================
        CALL SOL5;   ///////////  G5  ////////////
        CALL DO5;    ///////////  C5  ////////////
        CALL LA4;    ///////////  A4  ////////////
        CALL FA4;    ///////////  F4  ////////////


        CALL FA5;    ///////////  F5  ////////////
        CALL DO5;    ///////////  C5  ////////////
        CALL LA4;    ///////////  A4  ////////////
        CALL FA4;    ///////////  F4  ////////////


        CALL MI5;    ///////////  E5  ////////////
        CALL DO5;    ///////////  C5  ////////////
        CALL LA4;    ///////////  A4  ////////////
        CALL FA4;    ///////////  F4  ////////////


        CALL FA5;    ///////////  F5  ////////////
        CALL DO5;    ///////////  C5  ////////////
```

```
    CALL LA4;   /////////// A4 ////////////
    CALL FA4;   /////////// F4 ////////////
;       ================================================================
;       ================================================================
    CALL FA5;   /////////// F5 ////////////
    CALL SIb4;  /////////// Bb4 ////////////
    CALL SOL4;  /////////// G4 ////////////
    CALL MI4;   /////////// E4 ////////////

    CALL MI5;   /////////// E5 ////////////
    CALL SIb4;  /////////// Bb4 ////////////
    CALL SOL4;  /////////// G4 ////////////
    CALL MI4;   /////////// E4 ////////////

    CALL MIb5;  ////////// Eb5 ////////////
    CALL SIb4;  /////////// Bb4 ////////////
    CALL SOL4;  /////////// G4 ////////////
    CALL MI4;   /////////// E4 ////////////

    CALL MI5;   /////////// E5 ////////////
    CALL SIb4;  /////////// Bb4 ////////////
    CALL SOL4;  /////////// G4 ////////////
    CALL MI4;   /////////// E4 ////////////
;       ================================================================
;       ================================================================
    CALL MI5;   /////////// E5 ////////////
    CALL LA4;   /////////// A4 ////////////
    CALL FA4;   /////////// F4 ////////////
    CALL RE4;   /////////// D4 ////////////
```

```
CALL RE5;    /////////// D5 ////////////
CALL LA4;    /////////// A4 ////////////
CALL FA4;    /////////// F4 ////////////
CALL RE4;    /////////// D4 ////////////


CALL REb5;   /////////// Db5 ////////////
CALL LA4;    /////////// A4 ////////////
CALL FA4;    /////////// F4 ////////////
CALL RE4;    /////////// D4 ////////////


CALL RE5;    /////////// D5 ////////////
CALL LA4;    /////////// A4 ////////////
CALL FA4;    /////////// F4 ////////////
CALL RE4;    /////////// D4 ////////////
;       ================================================================
;       ================================================================
CALL Retardo_1ms
CALL LA5;    /////////// A5 ////////////
CALL RE5;    /////////// D5 ////////////
CALL SIb4;   /////////// Bb4 ////////////
CALL SOL4;   /////////// G4 ////////////


CALL SOL5;   /////////// G5 ////////////
CALL RE5;    /////////// D5 ////////////
CALL SIb4;   /////////// Bb4 ////////////
CALL SOL4;   /////////// G4 ////////////


CALL SOLb5;  /////////// Gb5 ////////////
```

```
    CALL RE5;   ///////////  D5 ////////////
    CALL SIb4;  ///////////  Bb4 ////////////
    CALL SOL4;  ///////////  G4 ////////////


    CALL SOL5;  ///////////  G5 ////////////
    CALL RE5;   ///////////  D5 ////////////
    CALL SIb4;  ///////////  Bb4 ////////////
    CALL SOL4;  ///////////  G4 ////////////
    CALL Retardo_1ms
;       ================================================================
;       ================================================================
GOTO FairyTheme

INTER
    MOVWF SAVE_W
    SWAPF STATUS,0
    MOVWF SAVE_STATUS
;ZELDA SARIAS SONG
;_____
    call Retardo_1s
    CALL FA4_;  ///////////  F4 ////////////
    CALL LA4_;  ///////////  A4 ////////////
    CALL SI4_;  ///////////  B4 ////////////
    call Retardo_20ms
    CALL FA4_;  ///////////  F4 ////////////
    CALL LA4_;  ///////////  A4 ////////////
    CALL SI4_;  ///////////  B4 ////////////
    call Retardo_20ms
    CALL FA4_;  ///////////  F4 ////////////
```

CALL LA4_; /////////// A4 ////////////

CALL SI4_; /////////// B4 ////////////

call Retardo_20ms

CALL MI5_; /////////// E5 ////////////

call Retardo_10ms

CALL RE5_; /////////// D5 ////////////

call Retardo_10ms

CALL SI4_; /////////// B4 ////////////

call Retardo_10ms

CALL DO5_; /////////// C5 ////////////

call Retardo_10ms

CALL SI4_; /////////// B4 ////////////

call Retardo_10ms

CALL SOL4_; /////////// G4 ////////////

call Retardo_10ms

CALL MI4_; /////////// E4 ////////////

call Retardo_50ms

CALL RE4_; /////////// D4 ////////////

call Retardo_10ms

CALL MI4_; /////////// E4 ////////////

call Retardo_10ms

CALL SOL4_; /////////// G4 ////////////

call Retardo_10ms

CALL MI4_; /////////// E4 ////////////

CALL MI4_; /////////// E4 ////////////

call Retardo_50ms

CALL FA4_; /////////// F4 ////////////

call Retardo_10ms

CALL LA4_; /////////// A4 ////////////

call Retardo_10ms

CALL SI4_; /////////// B4 ////////////

call Retardo_20ms

CALL FA4_; /////////// F4 ////////////

call Retardo_10ms

CALL LA4_; /////////// A4 ////////////

call Retardo_10ms

CALL SI4_; /////////// B4 ////////////

call Retardo_20ms

CALL FA4_; /////////// F4 ////////////

call Retardo_10ms

CALL LA4_; /////////// A4 ////////////

call Retardo_10ms

CALL SI4_; /////////// B4 ////////////

call Retardo_20ms

CALL MI5_; /////////// E5 ////////////

call Retardo_10ms

CALL RE5_; /////////// D5 ////////////

call Retardo_10ms

CALL SI4_; /////////// B4 ////////////

call Retardo_10ms

CALL DO5_; /////////// C5 ////////////

call Retardo_10ms

CALL MI5_; /////////// E5 ////////////

call Retardo_10ms

CALL SI4_; /////////// B4 ////////////

call Retardo_10ms

CALL SOL4_; /////////// G4 ////////////

```
CALL SOL4_;  ///////////  G4  ////////////
call Retardo_50ms
CALL SI4_;  ///////////  B4  ////////////
call Retardo_10ms
CALL SOL4_;  ///////////  G4  ////////////
call Retardo_10ms
CALL RE4_;  ///////////  D4  ////////////
call Retardo_10ms
CALL MI4_;  ///////////  E4  ////////////
CALL MI4_;  ///////////  E4  ////////////
call Retardo_50ms
CALL RE4_;  ///////////  D4  ////////////
call Retardo_10ms
CALL MI4_;  ///////////  E4  ////////////
call Retardo_10ms
CALL FA4_;  ///////////  F4  ////////////
call Retardo_10ms
CALL SOL4_;  ///////////  G4  ////////////
call Retardo_10ms
CALL LA4_;  ///////////  A4  ////////////
call Retardo_10ms
CALL SI4_;  ///////////  B4  ////////////
call Retardo_10ms
CALL DO5_;  ///////////  C5  ////////////
call Retardo_10ms
CALL SI4_;  ///////////  B4  ////////////
call Retardo_10ms
CALL MI4_;  ///////////  E4  ////////////
CALL MI4_;  ///////////  E4  ////////////
```

CALL MI4_; ////////// E4 ///////////

CALL RE4_; ////////// D4 ///////////
call Retardo_10ms
CALL MI4_; ////////// E4 ///////////
call Retardo_10ms
CALL FA4_; ////////// F4 ///////////
call Retardo_10ms
CALL SOL4_; ////////// G4 ///////////
call Retardo_10ms
CALL LA4_; ////////// A4 ///////////
call Retardo_10ms
CALL SI4_; ////////// B4 ///////////
call Retardo_10ms
CALL DO5_; ////////// C5 ///////////
call Retardo_10ms
CALL RE5_; ////////// D5 ///////////
call Retardo_10ms
CALL MI5_; ////////// E5 ///////////
CALL MI5_; ////////// E5 ///////////
call Retardo_50ms

CALL MI4_; ////////// E4 ///////////

CALL FA4_; ////////// F4 ///////////

CALL MI4_; ////////// E4 ///////////

CALL RE4_; ////////// D4 ///////////

```
        CALL RE4_;  ///////////  D4  ////////////

        call Retardo_50ms


FIN_INTER

    SWAPF SAVE_STATUS,0

    MOVWF STATUS

    SWAPF SAVE_W,1

    SWAPF SAVE_W,0

    BCF INTCON,INTF

    RETFIE


    INCLUDE <RETARDOS_NOTAS.INC>

    INCLUDE <NOTAS_A.INC>

    INCLUDE <NOTAS_B.INC>

    END
```
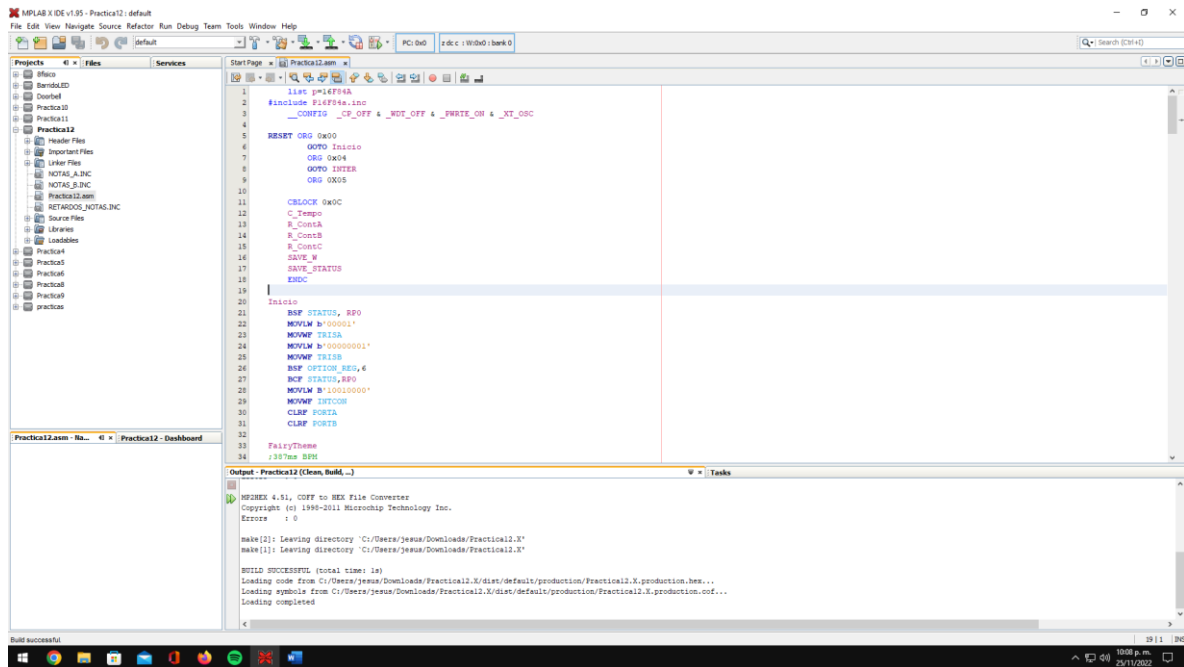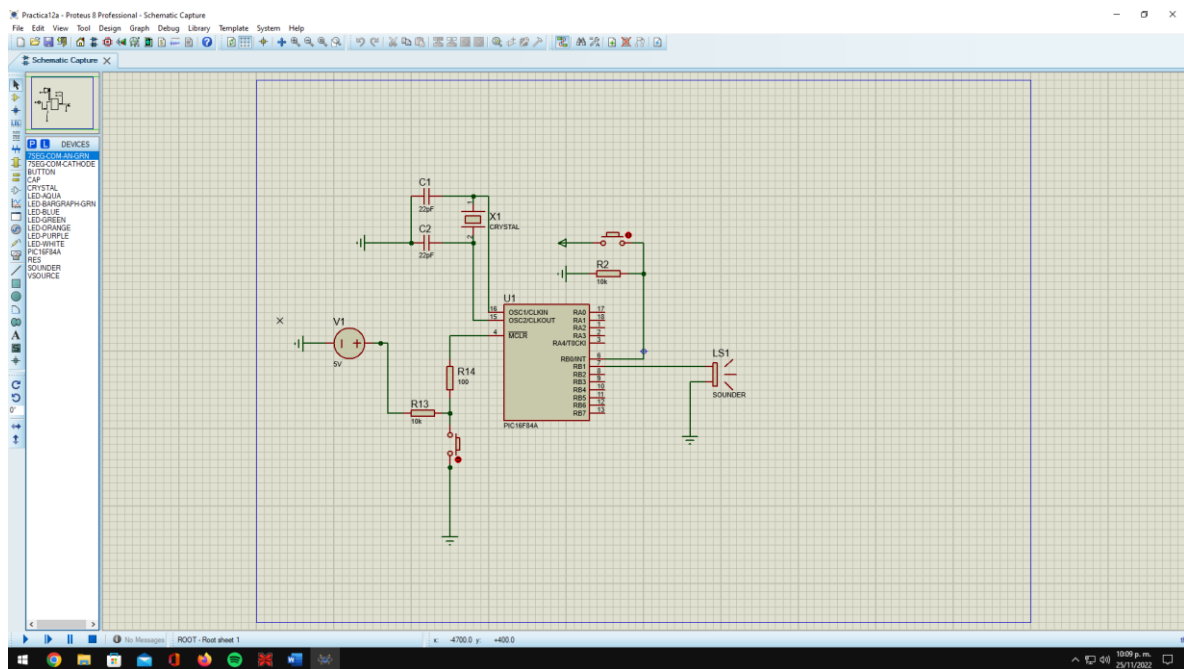
La carta .asm compilada y las librerías a la izquierda

Circuito sin simular

Circuito simulado