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// TP1\_BSE.c

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//

// Target: C8051F02x

// Tool chain: KEIL Microvision5

//

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// Déclarations Registres et Bits de l'espace SFR

#include "intrins.h"

#include<c8051F020.h>

#include<c8051F020\_SFR16.h>

#include<TP1\_BSE\_Lib\_Config\_Globale.h>

#include<TP1\_BSE\_Lib\_Divers.h>

#define LED\_ON 1

#define LED\_OFF 0

#define BP\_PRESSED 1

#define BP\_NOT\_PRESSED 0

#define CLIGNOTEMENT 1

#define START 1

#define END 0

sbit LED = P1^6; // LED

sbit BP = P3^7; //BP

sbit VISU\_INT7\_START = P2^0;

//sbit VISU\_INT7\_END = 0x86;

//sbit VISU\_INT7\_WIDTH = 0x87;

bit ETAT\_LED = 1;

bit ACK\_BP = 1;

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// Function Prototypes

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//Le cod.e de l’interruption INT7

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void ISR\_INT7() interrupt 19

{ VISU\_INT7\_START = START;

VISU\_INT7\_START = END;

P6 |= (1<<1); //VISU\_INT7\_WIDTH

ETAT\_LED = !ETAT\_LED;

P3IF &= ~(1<<7);

P6 &= ~(1<<1); //VISU\_INT7\_WIDTH

P6 |= (1<<0); //VISU\_INT7\_END

P6 &= ~(1<<0); //VISU\_INT7\_END

}

void Config\_INT7\_Ext(void){ //p109/110

P3IF &= ~(1<<7); //Pending Flag =0

P3IF |= (0<<3); //Declenchement sur front descendant

EIE2 |= (1<<5); //Autorise l'interruption sur INT7

EIP2 |= (1<<5); //Priorité

}

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// MAIN Routine

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void main (void) {

Init\_Device();

//Accès au port en mode GPIO sortie du port

P3MDOUT &= ~(1<<7);

BP = 1;

Config\_INT7\_Ext();

EA = 1;

P2MDOUT |= (1<<0);

P3MDOUT &= ~(1<<7);

P74OUT |= (1<<4);

while(1)

{

if(ETAT\_LED == CLIGNOTEMENT){

LED = LED\_ON;

Software\_Delay(2); // Allumage 20ms

LED = LED\_OFF;

Software\_Delay(10); // Extinction 100ms

}

}

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*