;\*INC\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

; NAME: AT8XC5123.inc

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

; PURPOSE: SFR definition - include file for KEIL

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;----------------------------- C51 CORE -----------------------------------

SP DATA 081H ;Stack Pointer

DPL DATA 082H ;Data Pointer Low byte

DPH DATA 083H ;Data Pointer High Byte

PSW DATA 0D0H ;Program Status Word

CY BIT 0D7H ;Carry Flag

AC BIT 0D6H ;Auxilary Carry Flag

F0 BIT 0D5H ;Flag 0 available to the user for general purpose

RS1 BIT 0D4H ;Register Bank Selector bit 1

RS0 BIT 0D3H ;Register Bank Selector bit 0

OV BIT 0D2H ;Overflow Bit

F1 BIT 0D1H ;General Purpose Flag

P BIT 0D0H ;Parity Bit

ACC DATA 0E0H ;Accumulator

B DATA 0F0H ;B register

;----------------------- SYSTEM CONFIGURATION -----------------------------

CKSEL DATA 085H ;Clock Selection

PCON DATA 087H ;Power Control

AUXR DATA 08EH ;Auxilary Register 0

CKCON0 DATA 08FH ;Clock Control Register 0

CKRL DATA 097H ;Clock Reload

AUXR1 DATA 0A2H ;Auxilary Register 1

PLLCON DATA 0A3H ;Phase Lock Loop Control

PLLDIV DATA 0A4H ;Phase Lock Loop Divider

CKCON1 DATA 0AFH ;Clock Control Register 0

;---------------------------- INTERRUPTS ----------------------------------

ISEL DATA 0A1H ;Interrupt Enable Control

IEN0 DATA 0A8H ;Interrupt Enable Control 0

EA BIT 0AFH ;Global Interrupts Enable/Disable Bit

ES BIT 0ACH ;Serial Port Interrupt Enable/Disable Bit

ET1 BIT 0ABH ;Timer 1 Overflow Interrupt Enable/Disable Bit

EX1 BIT 0AAH ;External Interrupt 1 Enable/Disable Bit

ET0 BIT 0A9H ;Timer 0 Overflow Interrupt Enable/Disable Bit

EX0 BIT 0A8H ;External Interrupt 0 Enable/Disable Bit

IPH0 DATA 0B7H ;Interrupt Priority Control High 0

IPL0 DATA 0B8H ;Interrupt Priority Control Low 0

PSL BIT 0BCH ;Serial Port Interrupt Priority LSB

PT1L BIT 0BBH ;Timer 1 Overflow Interrupt Priority LSB

PX1L BIT 0BAH ;External Interrupt 1 Priority LSB

PT0L BIT 0B9H ;Timer 0 Overflow Interrupt Priority LSB

PX0L BIT 0B8H ;External Interrupt 0 Priority LSB

IEN1 DATA 0B1H ;Interrupt Enable Control 1

IPL1 DATA 0B2H ;Interrupt Priority Control Low 1

IPH1 DATA 0B3H ;Interrupt Priority Control High 1

;------------------------------- PORTS -----------------------------------

PMOD1 DATA 084H ;Port Mode Register 1

P1 DATA 090H ;Port 1

P1\_7 BIT 097H ;

P1\_6 BIT 096H ;

P1\_5 BIT 095H ;

P1\_4 BIT 094H ;

P1\_3 BIT 093H ;

P1\_2 BIT 092H ;

P1\_1 BIT 091H ;

P1\_0 BIT 090H ;

CCLK1 BIT 097H ;Alternate Card Clock ;

CPRES BIT 092H ;Smart Card Presence

PMOD0 DATA 091H ;Port Mode Register 0

P3 DATA 0B0H ;Port 3

P3\_7 BIT 0B7H ;

P3\_6 BIT 0B6H ;

P3\_5 BIT 0B5H ;

P3\_4 BIT 0B4H ;

P3\_3 BIT 0B3H ;

P3\_2 BIT 0B2H ;

P3\_1 BIT 0B1H ;

P3\_0 BIT 0B0H ;

T1 BIT 0B5H ;External Event 1

T0 BIT 0B4H ;External Event 0

INT1 BIT 0B3H ;External Interrupt 1

INT0 BIT 0B2H ;External Interrupt 0

TXD BIT 0B1H ;UART Transmit Port

RXD BIT 0B0H ;UART Receive Port

CRST1 BIT 0B5H ;Alternate Card Reset

CIO1 BIT 0B4H ;Alternate Card I/O

LED3 BIT 0B7H ;Led Number 3

LED2 BIT 0B6H ;Led Number 2

LED1 BIT 0B4H ;Led Number 1

LED0 BIT 0B2H ;Led Number 0

P4 DATA 0C0H ;Port 4

P4\_7 BIT 0C7H ;

P4\_6 BIT 0C6H ;

P5 DATA 0E8H ;Port 5

P5\_0 BIT 0E8H ;

;------------------------------- TIMERS -----------------------------------

TCON DATA 088H ;Timer-Counter 0 and 1 Control

TF1 BIT 08FH ;Timer 1 Overflow Flag

TR1 BIT 08EH ;Timer 1 Run Control Bit

TF0 BIT 08DH ;Timer 0 Overflow Flag

TR0 BIT 08CH ;Timer 0 Run Control Bit

IE1 BIT 08BH ;Interrupt 1 Edge Flag

IT1 BIT 08AH ;Interrupt 1 Type Control Bit

IE0 BIT 089H ;Interrupt 0 Edge Flag

IT0 BIT 088H ;Interrupt 0 Type Control Bit

TMOD DATA 089H ;Timer-Counter 0 and 1 Configuration

TL0 DATA 08AH ;Timer-Counter 0 Low Byte

TL1 DATA 08BH ;Timer-Counter 1 Low Byte

TH0 DATA 08CH ;Timer-Counter 0 High Byte

TH1 DATA 08DH ;Timer-Counter 1 High Byte

;------------------------------ WATCHDOG --------------------------------

WDTRST DATA 0A6H ;WatchDog Timer Reset

WDTPRG DATA 0A7H ;WatchDog Timer Program

;--------------------------- USB CONTROLLER -----------------------------

UFNUML DATA 0BAH ;USB Frame Number Low

UFNUMH DATA 0BBH ;USB Frame Number Low

USBCON DATA 0BCH ;USB Global Control

USBINT DATA 0BDH ;USB Global Interrupt

USBIEN DATA 0BEH ;USB Global Interrupt Enable

UEPIEN DATA 0C2H ;USB Endpoint Interrupt Enable

USBADDR DATA 0C6H ;USB Address

UEPNUM DATA 0C7H ;USB Endpoint Number

UEPSTAX DATA 0CEH ;USB Endpoint X Status

UEPDATX DATA 0CFH ;USB Endpoint X Fifo Data

UEPCONX DATA 0D4H ;USB Endpoint X Control

UEPRST DATA 0D5H ;USB Endpoint Reset

UBYCTX DATA 0E2H ;USB Byte Counter Low (EPX)

UEPINT DATA 0F8H ;USB Endpoint Interrupt

EP6INT BIT 0FEH ;

EP5INT BIT 0FDH ;

EP4INT BIT 0FCH ;

EP3INT BIT 0FBH ;

EP2INT BIT 0FAH ;

EP1INT BIT 0F9H ;

EP0INT BIT 0F8H ;

;------------------------------- SCIB ----------------------------------

SCTBUF DATA 0AAH ;Smart Card Transmit Buffer (Write Only)

SCRBUF DATA 0AAH ;Smart Card Receive Buffer (read Only)

SCSR DATA 0ABH ;Smart Card Selection Register

SCCON DATA 0ACH ;Smart Card Interface Contacts

SCETU0 DATA 0ACH ;Smart Card ETU Register 0

SCISR DATA 0ADH ;Smart Card UART Interface Status

SCETU1 DATA 0ADH ;Smart Card ETU Register 1

SCIIR DATA 0AEH ;Smart Card UART Interrupt Identification

SCIER DATA 0AEH ;Smart Card UART Interrupt Enable

SCWT0 DATA 0B4H ;Smart Card Character-Block Waiting Time Register 0

SCGT0 DATA 0B4H ;Smart Card Transmit Guard Time Register 0

SCWT1 DATA 0B5H ;Smart Card Character-Block Waiting Time Register 1

SCGT1 DATA 0B5H ;Smart Card Transmit Guard Time Register 1

SCWT2 DATA 0B6H ;Smart Card Character-Block Waiting Time Register 2

SCICR DATA 0B6H ;Smart Card Interface Control

DCCKPS DATA 0BFH ;DC/DC Converter Reload Register

SCWT3 DATA 0C1H ;Smart Card Character-Block Waiting Time Register 3

SCICLK DATA 0C1H ;Smart Card Clock Prescaler

;------------------------------- UART ---------------------------------

SCON DATA 098H ;UART Interface Control

SM0 BIT 09FH ;Serial Port Mode Bit 0

FE BIT 09FH ;Framing error Bit

SM1 BIT 09EH ;Serial Port Mode Bit 1

SM2 BIT 09DH ;Serial Port Mode Bit 2

REN BIT 09CH ;Reception Enable Bit

TB8 BIT 09BH ;Transmitter bit 8

RB8 BIT 09AH ;Receiver Bit 8

TI BIT 099H ;Transmit Interrupt Flag

RI BIT 098H ;Receive Interrupt Flag

SBUF DATA 099H ;UART Data Buffer

SADDR DATA 0A9H ;Slave Address

SADEN DATA 0B9H ;Slave Address Mask

;------------------------ BAUD RATE GENERATOR -------------------------

BRL DATA 09AH ;Baud Rate Relaod

BDRCON DATA 09BH ;Baud Rate Control

;-------------------------------- LED ---------------------------------

LEDCON0 DATA 0F1H ;LED control 0