De Flowcode à la puce

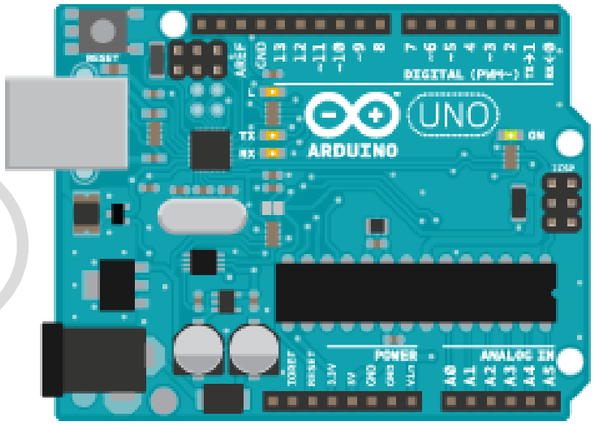
Flowcode

Choisir la puce

- PICDEM : PIC puis 18F452

  Choisir la bonne fréquence 4MHz

- Arduino : AVR puis Arduino R3...



ICD3—PICDEM

Compiler en .hex

Ouvrir MPLAB IPE

Choisir le device (le CPU)

Connecter

Ouvrir le fichier .hex

Programmer

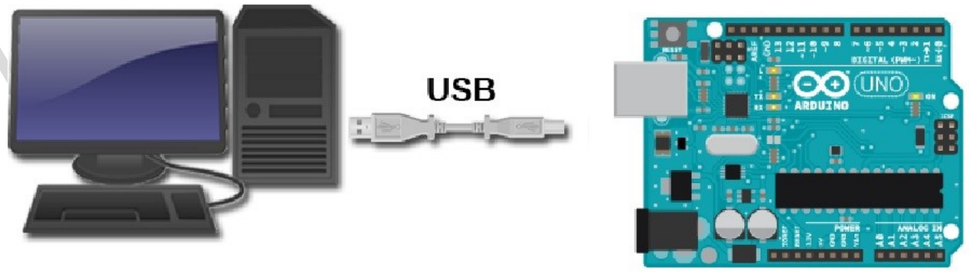
Arduino

Fermer le fichier .fcx

Rouvrir le fichier .fcx **via le drive perso**

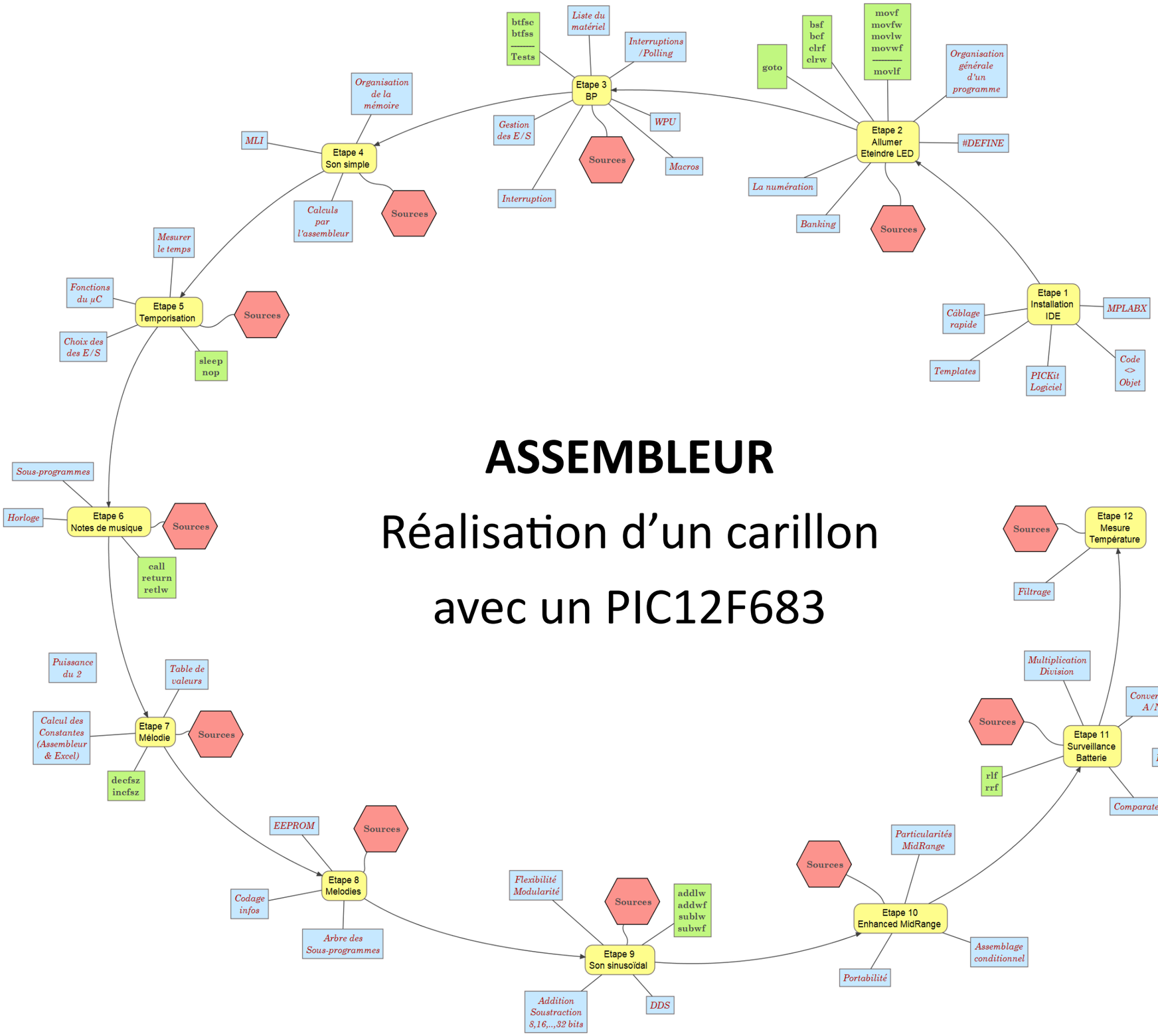
Choisir le bon port COM

Compiler vers la puce



ASSEMBLEUR

Réalisation d'un carillon avec un PIC12F683



Légende :

Etape de formation — Etape 1 Installation IDE

Fichiers source — Sources

Explications — *Câblage rapide*

Instructions du PIC — call return retlw

Les posters de Passtek !

22/08/2018

Jeu d'instructions

		MANIPULATIONS DE REGISTRES		
		NOP	–	No Operation
TO, PD		**SLEEP**	–	Go into Standby mode
	Z	TSTF	f	Test File
	Z	**CLRF**	f	Clear f
	Z	**CLRW**	–	Clear W
TO, PD		**CLRWDT**	–	Clear Watchdog Timer
	Z	**MOVF**	f, d	Move f
		MOVFW	f	Move File to W
		MOVLW	k	Move literal to W
		MOVWF	f	Move W to f
		SWAPF	f, d	Swap nibbles in f
		CALCULS		
	Z	**DECF**	f, d	Decrement f
	Z	**INCF**	f, d	Increment f
	Z	ADDCF	f,d	Add Carry to File
	Z	ADDDCF	f,d	Add Digit Carry to File
C, DC	Z	**ADDLW**	k	Add literal and W
C, DC	Z	**ADDWF**	f, d	Add W and f
		SUBCF	f,d	Subtract Carry from file
		SUBDCF	f,d	Subtract Digit Carry from file
C, DC	Z	**SUBLW**	k	Subtract W from literal
C, DC	Z	**SUBWF**	f, d	Subtract W from f
	Z	NEGF	f,d	Negate File
C		**RLF**	f, d	Rotate Left f through Carry
C		**RRF**	f, d	Rotate Right f through Carry
		FONCTIONS LOGIQUES		
	Z	**ANDLW**	k	AND literal with W
	Z	**ANDWF**	f, d	AND W with f
	Z	**COMF**	f, d	Complement f
	Z	**IORLW**	k	Inclusive OR literal with W
	Z	**IORWF**	f, d	Inclusive OR W with f
	Z	**XORLW**	k	Exclusive OR literal with W
	Z	**XORWF**	f, d	Exclusive OR W with f

	SAUTS		
B	k	Branch	
GOTO	k	Go to address	
LGOTO	k	Long Goto	
DECFSZ	f, d	Decrement f, Skip if 0	
INCFSZ	f, d	Increment f, Skip if 0	
BTFSC	f, b	Bit Test f, Skip if Clear	
BTFSS	f, b	Bit Test f, Skip if Set	
BC	k	Branch on Carry	
BDC	k	Branch on Digit Carry	
BNC	k	Branch on No Carry	
BNDC	k	Branch on No Digit Carry	
BNZ	k	Branch on No Zero	
BZ	k	Branch on Zero	
SKPC		Skip on Carry	
SKPDC		Skip on Digit Carry	
SKPNC		Skip on No Carry	
SKPNDC		Skip on No Digit Carry	
SKPNZ		Skip on No Zero	
SKPZ		Skip on Zero	
	SOUS-PROGRAMMES		
CALL	k	Call Subroutine	
LCALL	k	Long Call	
RETURN	–	Return from Subroutine	
RETLW	k	Return with literal in W	
RETFIE	–	Return from interrupt	
	MANIPULATIONS DE BITS		
BCF	f, b	Bit Clear f	
BSF	f, b	Bit Set f	
CLRC			
CLRDC		Clear Digit Carry	
CLRZ		Clear Zero	
SETC		Set Carry	
SETDC		Set Digit Carry	
SETZ		Set Zero	

12F683

Alimentation : 2V - 5V

Horloge : 0—20 MHz

(interne : 125 kHz—8 MHz)

4 CAN 10 bits

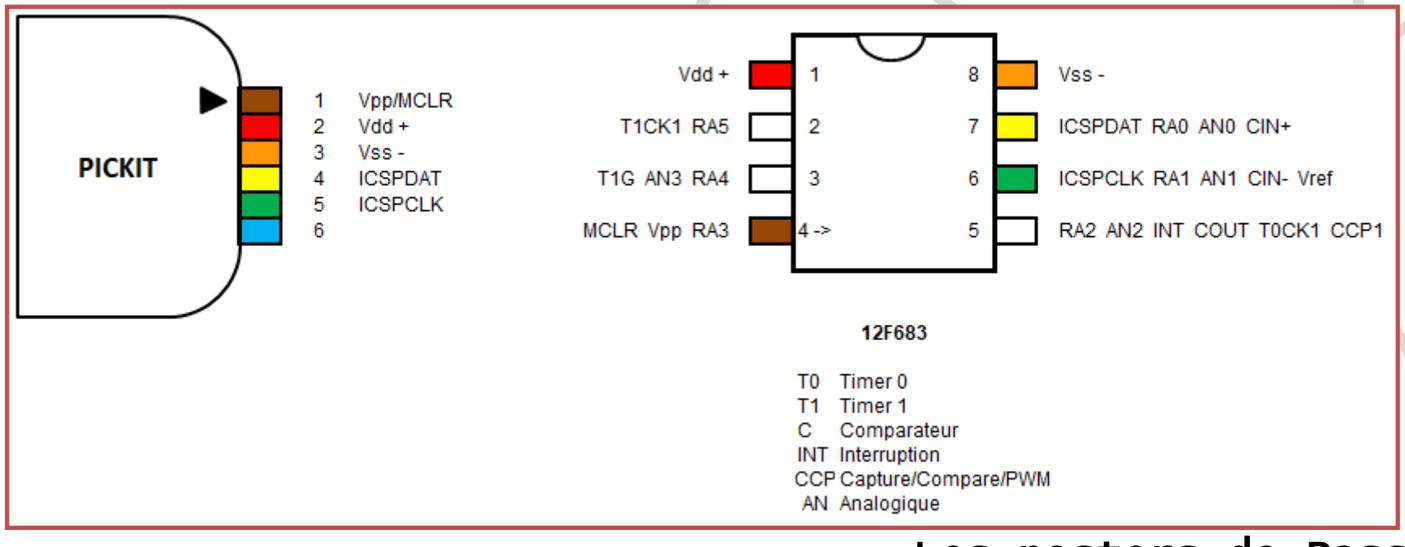
1 comparateur

2 Timers

MLI (PWM) 10 bits

EEPROM 256 octets

2048 mots de programme



12F683

T0 Timer 0
T1 Timer 1
C Comparateur
INT Interruption
CCP Capture/Compare/PWM
AN Analogique

	BANK 0	BANK 1
	Indirect addr.(1)	
	PCL	
	STATUS	
	FSR	
	PCLATH	
	INTCON	
Entrées TOR	GPIO	OPTION_REG
		TRISIO
		WPU
	PIR1	PIE1
		IOC
Horloge	WDTCON	PCON
		OSCCON
		OSCTUNE
Timers	TMR0	
	TMR1L	
	TMR1H	
	T1CON	
	TMR2	PR2
	T2CON	
MLI	CCPR1L	
	CCPR1H	
	CCP1CON	
Entrées Analogiques	CMCON0	VRCON
	CMCON1	ANSEL
	ADRESH	ADRESL
	ADCON0	
EEPROM		EEDAT
		EEADR
		EECON2
	Registres généraux 80 octets	Registres généraux 32 octets
	Registres communs 16 octets	