

PWM sample_PICMB876.pdf

'PICMB876 microcomputer board PWM sample Program.(For DC motor or Other PWM Control)

'Program Name PWM.BAS
'CopyRights (C)2003,Japan Tech.Hanzougane Yoshiaki Morohashi All Rights Reserved.
'Date 2003.07.18
'Language microEngineering Labs,Inc. PICBasic Pro Compiler
'Target Device PIC16F876 on PICMB876(PIC microcomputer board)
'Remarks PWM is Background.(MEL PICBasic Pro Compiler COMMAND "HPWM")

Include "modedefs.bas"

'LCD DEFINE
DEFINE LCD_DREG PORTB
DEFINE LCD_DBIT 0
DEFINE LCD_RSREG PORTB
DEFINE LCD_RSBIT 4
DEFINE LCD_EREG PORTB
DEFINE LCD_EBIT 5
DEFINE LCD_BITS 4
DEFINE LCD_LINES 2

'HPWM DEFINE
DEFINE CCP1_REG PORTC 'HPWM 1 Pin PORT
DEFINE CCP1_BIT 2 'HPWM 1 Pin bit
DEFINE CCP2_REG PORTC 'HPWM 2 Pin PORT
DEFINE CCP2_BIT 1 'HPWM 2 Pin bit

DEFINE HPWM1_TIMER 1 'HPWM 1 timer select

'RS-232C OUT define
SO Var PORTA.5
OUTPUT PORTA.5 'SO(PORTA.5) RS-232C TX

'Variable define
CNT Var byte
CNT = 0

PWC Var byte
PWC = 0
duty Var byte
duty = 0

GOTO main

PWMsub: HPWM 1, PWC,1000 'Output PWM on PORTC.2 at 1KHz
RETURN

main: LCDOUT \$FE, 1, "**Start PWM RC2**"
LCDOUT \$FE, \$C0, "PWM Background"
pause 100

FOR CNT = 0 TO 255 'PWC(duty%) Sample increase 0 - 255(0%-100%)
pause 100 'PWC=127 (=duty 50%)
PWC = CNT
GOSUB PWMsub 'PWM subroutine: Output PWM PORTC.2

PAUSE 100 '*****Free Routine. PWM is Background.*****
'***GOSUB PWMsub After PWC(duty%) determine.***
SEROUT SO, T9600, ["Now Free Routine",10,13]

PAUSE 100 '*****Free Routine End
NEXT CNT

GOTO main