

## Commands and Directives

<u>ADIN</u>	Read on-chip analogue to digital converter.
<u>ASM-ENDASM</u>	Insert assembly language code section.
<u>BOX</u>	Draw a square on a graphic LCD.
<u>BRANCH</u>	Computed GOTO (equiv. to ON..GOTO).
<u>BRANCHL</u>	<b>BRANCH</b> out of page (long <b>BRANCH</b> ).
<u>BREAK</u>	Exit a FOR-NEXT, REPEAT-UNTIL, or WHILE-WEND loop prematurely.
<u>BSTART</u>	Send a <b>START</b> condition to the I2C bus.
<u>BSTOP</u>	Send a <b>STOP</b> condition to the I2C bus.
<u>BRESTART</u>	Send a <b>RESTART</b> condition to the I2C bus.
<u>BUSACK</u>	Send an <b>ACKNOWLEDGE</b> condition to the I2C bus.
<u>BUSIN</u>	Read bytes from I2C device.
<u>BUSOUT</u>	Write bytes to I2C device.
<u>BUTTON</u>	Detect and debounce a key press.
<u>CALL</u>	Call assembly language subroutine.
<u>CDATA</u>	Define initial contents in memory.
<u>CIRCLE</u>	Draw a circle on a graphic LCD.
<u>CLEAR</u>	Place a variable or bit in a low state, or clear all RAM area.
<u>CLEARBIT</u>	Clear a bit of a port or variable, using a variable index.
<u>CLS</u>	Clear the LCD.
<u>CONFIG</u>	Set or Reset programming fuse configurations.
<u>COUNTER</u>	Count number of pulses on a pin.
<u>CREAD</u>	Read word from code memory.
<u>CURSOR</u>	Position the cursor on the LCD.
<u>CWRITE</u>	Write word to code memory.
<u>DATA</u>	Define initial contents in memory.
<u>DEC</u>	Decrement a variable.
<u>DECLARE</u>	Adjust library routine parameters.
<u>DELAYMS</u>	Delay (1mSec resolution).
<u>DELAYUS</u>	Delay (1uSec resolution).
<u>DEVICE</u>	Choose the type of PICmicro to compile with.
<u>DIG</u>	Return the value of a decimal digit.
<u>DIM</u>	Create a variable.
<u>DISABLE</u>	DISABLE software interrupts that were previously ENABLED.
<u>DTMFOUT</u>	Produce a DTMF Touch Tone note.
<u>EDATA</u>	Define initial contents of on-chip EEPROM.
<u>ENABLE</u>	ENABLE software interrupts that were previously DISABLED.
<u>END</u>	Stop execution.
<u>EREAD</u>	Read a value from on-chip EEPROM.
<u>EWRITE</u>	Write a value to on-chip EEPROM.
<u>FOR...TO...NEXT...STEP</u>	Repeatedly execute statements.
<u>FREQOUT</u>	Generate one or two tones, of differing or the same frequencies.
<u>GETBIT</u>	Examine a bit of a port or variable, using a variable index.
<u>GOSUB</u>	Call BASIC subroutine at specified label.
<u>GOTO</u>	Continue execution at specified label.
<u>HBSTART</u>	Send a <b>START</b> condition to the I2C bus using the MSSP module.
<u>HBSTOP</u>	Send a <b>STOP</b> condition to the I2C bus using the MSSP module.
<u>HBRESTART</u>	Send a <b>RESTART</b> condition to the I2C bus using the MSSP module.
<u>HBUSACK</u>	Send an <b>ACKNOWLEDGE</b> condition to the I2C bus using the MSSP module.
MSSP module.	
<u>HBUSIN</u>	Read from an I2C device using the MSSP module.
<u>HBUSOUT</u>	Write to an I2C device using the MSSP module.
<u>HIGH</u>	Make pin or port high.
<u>HPWM</u>	Generate a PWM signal using the CCP module.
<u>HRSIN</u>	Receive data from the serial port on devices that contain a USART.

<u>HRROUT</u>	Transmit data from the serial port on devices that contain a USART.
<u>HSERIN</u>	Receive data from the serial port on devices that contain a USART.
<u>HSEROUT</u>	Transmit data from the serial port on devices that contain a USART.
<u>HR SIN2</u>	Same as <b>HR SIN</b> but using a 2nd USART if available.
<u>HR SOUT2</u>	Same as <b>HR SOUT</b> but using a 2nd USART if available.
<u>HSERIN2</u>	Same as <b>HSERIN</b> but using a 2nd USART if available.
<u>HSEROUT2</u>	Same as <b>HSEROUT</b> but using a 2nd USART if available.
<u>IF..THEN..ELSEIF..ELSE..ENDIF</u>	Conditionally execute statements.
<u>INC</u>	Increment a variable.
<u>INCLUDE</u>	Load a BASIC file into the source code.
<u>INKEY</u>	Scan a keypad.
<u>INPUT</u>	Make pin an input.
<u>[LET]</u>	Assign result of an expression to a variable.
<u>LCDREAD</u>	Read a single byte from a Graphic LCD.
<u>LCDWRITE</u>	Write bytes to a Graphic LCD.
<u>LDATA</u>	Place information into code memory. For access by LREAD.
<u>LINE</u>	Draw a line in any direction on a graphic LCD.
<u>LINETO</u>	Draw a straight line in any direction on a graphic LCD, starting from the previous LINE command's end position.
<u>LOADBIT</u>	Set or Clear a bit of a port or variable, using a variable index.
<u>LOOKDOWN</u>	Search constant table for value.
<u>LOOKDOWNL</u>	Search constant / variable table for value.
<u>LOOKUP</u>	Fetch constant value from table.
<u>LOOKUPL</u>	Fetch constant / variable value from table.
<u>LOW</u>	Make pin or port low.
<u>LREAD</u>	Read a value from an LDATA table and place into Variable.
<u>ON INTERRUPT</u>	Execute a BASIC or ASSEMBLER subroutine using a SOFTWARE interrupt.
<u>ON INTERRUPT</u>	Execute an ASSEMBLER subroutine on a HARDWARE interrupt.
<u>ON LOW INTERRUPT</u>	Execute an ASSEMBLER subroutine when a LOW PRIORITY HARDWARE interrupt occurs on a <u>16-bit</u> core device.
<u>OUTPUT</u>	Make pin an output.
<u>OREAD</u>	Receive data from a device using the Dallas 1-wire protocol.
<u>OWRITE</u>	Send data to a device using the Dallas 1-wire protocol.
<u>ORG</u>	Set Program Origin.
<u>PEEK</u>	Read byte from register.
<u>PIXEL</u>	Read a single pixel from a Graphic LCD.
<u>PLOT</u>	Set a single pixel on a Graphic LCD.
<u>POKE</u>	Write byte to register.
<u>POT</u>	Read potentiometer on specified pin.
<u>PRINT</u>	Display characters on LCD.
<u>PULSIN</u>	Measure pulse width on a pin.
<u>PULSOUT</u>	Generate pulse to a pin.
<u>PWM</u>	Output pulse width modulated pulse train to pin.
<u>RANDOM</u>	Generate a pseudo-random number.
<u>RCIN</u>	Measure pulse width on a pin.
<u>READ</u>	Read a value from memory.
<u>REM</u>	Add a remark to the source code.
<u>REPEAT...UNTIL</u>	Execute a block of instructions until a condition is true.
<u>RESTORE</u>	Adjust the position of data to READ.
<u>RESUME</u>	Re-enable software interrupts and return.
<u>RETURN</u>	Continue at statement following last GOSUB.
<u>RSIN</u>	Asynchronous serial input from fixed pin and baud.
<u>RSOUT</u>	Asynchronous serial output to fixed pin and baud.
<u>SEED</u>	Seed the random number generator, in order to obtain a more random result.
<u>SELECT..CASE..ENDSELECT</u>	Conditionally run blocks of code.
<u>SERIN</u>	Receive asynchronous serial data (i.e. RS232 data).

<u>SEROUT</u>	Transmit asynchronous serial data (i.e. RS232 data).
<u>SERVO</u>	Control a servo motor.
<u>SET</u>	Place a variable or bit in a high state.
<u>SET_OSCCAL</u>	Calibrate the on-chip oscillator.
<u>SETBIT</u>	Set a bit of a port or variable, using a variable index.
<u>SHIN</u>	Synchronous serial input.
<u>SHOUT</u>	Synchronous serial output.
<u>SLEEP</u>	Power down processor for a period of time.
<u>SNOOZE</u>	Power down processor for short period of time.
<u>SOUND</u>	Generate tone or white-noise on specified pin.
<u>SOUND2</u>	Generate 2 tones from 2 separate pins.
<u>STOP</u>	Stop program execution.
<u>STR</u>	Load a Byte array with values.
<u>STRN</u>	Create a NULL terminated Byte array.
<u>STR\$</u>	Convert the contents of a variable to a NULL terminated String.
<u>SWAP</u>	Exchange the values of two variables.
<u>SYMBOL</u>	Create an alias to a constant, port, pin, or register.
<u>TOGGLE</u>	Reverse the state of a port's bit.
<u>UNPLOT</u>	Clear a single pixel on a Graphic LCD.
<u>USBINIT</u>	Initialise the USB interrupt on devices that contain a USB module.
<u>USBIN</u>	Receive data via a USB endpoint on devices that contain a USB module.
<u>USBOUT</u>	Transmit data via a USB endpoint on devices that contain a USB module.
<u>VAL</u>	Convert a NULL terminated String to an integer value.
<u>VARPTR</u>	Locate the address of a variable.
<u>WHILE...WEND</u>	Execute statements while condition is true.
<u>XIN</u>	Receive data using the X10 protocol.
<u>XOUT</u>	Transmit data using the X10 protocol.