

# PIC16F87/88

## REGISTER 15-1: CONFIG1: CONFIGURATION WORD 1 REGISTER (ADDRESS 2007h)

R/P-1	R/P-1	R/P-1	R/P-1	R/P-1	R/P-1	R/P-1	R/P-1	R/P-1	R/P-1	R/P-1	R/P-1	R/P-1	R/P-1	R/P-1
CP	CCPMX	DEBUG	WRT1	WRT0	CPD	LVP	BOREN	MCLRE	FOSC2	PWRTEN	WDTEN	FOSC1	FOSC0	
bit 13													bit 0	

- bit 13 **CP:** Flash Program Memory Code Protection bits  
 1 = Code protection off  
 0 = 0000h to 0FFFh code-protected (all protected)
- bit 12 **CCPMX:** CCP1 Pin Selection bit  
 1 = CCP1 function on RB0  
 0 = CCP1 function on RB3
- bit 11 **DEBUG:** In-Circuit Debugger Mode bit  
 1 = In-Circuit Debugger disabled, RB6 and RB7 are general purpose I/O pins  
 0 = In-Circuit Debugger enabled, RB6 and RB7 are dedicated to the debugger
- bit 10-9 **WRT<1:0>:** Flash Program Memory Write Enable bits  
 11 = Write protection off  
 10 = 0000h to 00FFh write-protected, 0100h to 0FFFh may be modified by EECON control  
 01 = 0000h to 07FFh write-protected, 0800h to 0FFFh may be modified by EECON control  
 00 = 0000h to 0FFFh write-protected
- bit 8 **CPD:** Data EE Memory Code Protection bit  
 1 = Code protection off  
 0 = Data EE memory code-protected
- bit 7 **LVP:** Low-Voltage Programming Enable bit  
 1 = RB3/PGM pin has PGM function, Low-Voltage Programming enabled  
 0 = RB3 is digital I/O, HV on MCLR must be used for programming
- bit 6 **BOREN:** Brown-out Reset Enable bit  
 1 = BOR enabled  
 0 = BOR disabled
- bit 5 **MCLRE:** RA5/MCLR/VPP Pin Function Select bit  
 1 = RA5/MCLR/VPP pin function is MCLR  
 0 = RA5/MCLR/VPP pin function is digital I/O, MCLR internally tied to VDD
- bit 3 **PWRTEN:** Power-up Timer Enable bit  
 1 = PWRT disabled  
 0 = PWRT enabled
- bit 2 **WDTEN:** Watchdog Timer Enable bit  
 1 = WDT enabled  
 0 = WDT disabled
- bit 4, 1-0 **FOSC<2:0>:** Oscillator Selection bits  
 111 = EXTRC oscillator; CLKO function on RA6/OSC2/CLKO  
 110 = EXTRC oscillator; port I/O function on RA6/OSC2/CLKO  
 101 = INTRC oscillator; CLKO function on RA6/OSC2/CLKO pin and port I/O function on RA7/OSC1/CLKI pin  
 100 = INTRC oscillator; port I/O function on both RA6/OSC2/CLKO pin and RA7/OSC1/CLKI pin  
 011 = ECIO; port I/O function on RA6/OSC2/CLKO  
 010 = HS oscillator  
 001 = XT oscillator  
 000 = LP oscillator

<b>Legend:</b>			
R = Readable bit	W = Writable bit	U = Unimplemented bit, read as '0'	
-n = Value at POR	'1' = Bit is set	'0' = Bit is cleared	x = Bit is unknown