PIC18Fxxx Instruction Set

Byte-oriented File Register Operations

- ADDWF Add WREG to f
- ADDWFC Add WREG and Carry bit to f
- ANDWF AND WREG with f
- CLRF Clear f
- COMF Complement f
- CPFSEQ Compare f with WREG, skip =
- CPFSGT Compare f with WREG, skip if >
- CPFSLT Compare f with WREG, skip if <
- DECF Decrement f
- DECFSZ Decrement f, Skip if 0
- DCFSNZ Decrement f, Skip if Not 0
- INCF Increment f
- INCFSZ Increment f, Skip if 0
- INFSNZ Increment f, Skip if Not 0
- IORWF Inclusive OR WREG with f
- MOVF Move f
- MOVFF Move fs (source) to fd (destination)
- MOVWF Move WREG to f
- MULWF Multiply WREG with f
- NEGF Negate f
- RLCF Rotate Left f through Carry
- RLNCF Rotate Left f (No Carry)
- RRCF Rotate Right f through Carry
- RRNCF Rotate Right f (No Carry)
- SETF Set f
- SUBFWB Subtract f from WREG with borrow
- SUBWF Subtract WREG from f
- SUBWFB Subtract WREG from f with borrow
- SWAPF Swap nibbles in f
- TSTFSZ Test f, skip if 0
- XORWF Exclusive OR WREG with f

Bit-oriented File Register Operations

- BCF Bit Clear f
- BSF Bit Set f
- BTFSC Bit Test f, Skip if Clear
- BTFSS Bit Test f, Skip if Set
- BTG Bit Toggle f

Control Operations

- BC Branch if Carry
- BN Branch if Negative
- BNC Branch if Not Carry

- BNN Branch if Not Negative
- BNOV Branch if Not Overflow
- **BNZ** Branch if Not Zero
- **BOV** Branch if Overflow
- **BRA** Branch Unconditionally
- **BZ** Branch if Zero
- **CALL** Call subroutine
- **CLRWDT** Clear Watchdog Timer
- **DAW** Decimal Adjust WREG
- **GOTO** Go to address
- **NOP** No Operation
- **POP** Pop top of return stack (TOS)
- PUSH Push top of return stack (TOS)
- RCALL Relative Call
- **RESET** Software device RESET
- **RETFIE** Return from interrupt enable
- **RETLW** Return with literal in WREG
- **RETURN** Return from Subroutine
- **SLEEP** Go into Standby mode

Literal Operations

- **ADDLW** Add literal and WREG
- **ANDLW** AND literal with WREG
- **IORLW** Inclusive OR literal with WREG
- **LFSR** Move literal to FSRx
- **MOVLB** Move literal to BSR<3:0>
- **MOVLW** Move literal to WREG
- **MULLW** Multiply literal with WREG
- **RETLW** Return with literal in WREG
- **SUBLW** Subtract WREG from literal
- **XORLW** Exclusive OR literal with WREG

Data Memory & Program Memory Operations

- TBLRD* Table Read
- TBLRD*+ Table Read with post-increment
- TBLRD*- Table Read with post-decrement
- TBLRD+* Table Read with pre-increment
- **TBLWT*** Table Write
- TBLWT*+ Table Write with post-increment
- **TBLWT*-** Table Write with post-decrement
- **TBLWT+*** Table Write with pre-increment