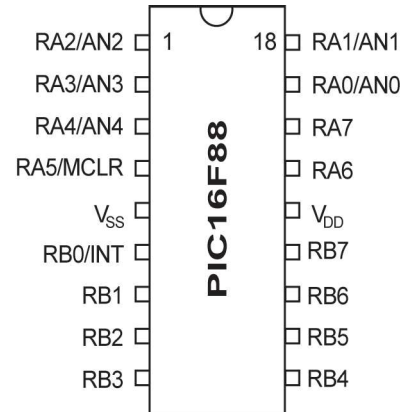


PIC Information

The PIC programs include 'equate' statements that define the following labels:

Label	Description
PORTA	input / output port A
PORTB	input / output port B
TRISA	the control register for port A
TRISB	the control register for port B
STATUS	the status register
INTCON	the interrupt control register
W	Destination d = W, result stored in working register
F	Destination d = F, result stored in specified file register
RP0	the register page selection bit 0
Z	the zero flag status bit
GIE	the global interrupt controller bit
INT0IE	the external interrupt enable bit

Pinout for 16F88 PIC IC:



List of commands

Mnemonic	Operands	Description
addlw	k	Add working register to literal k
andlw	k	AND working register with literal k
bcf	f, b	Clear bit b of file register f
bsf	f, b	Set bit b of file register f
btfs	f, b	Bit test bit b of file register f, skip if clear
btfs	f, b	Bit test bit b of file register f, skip if set
call	label	Call subroutine at label
clrf	f	Clear file register f
comf	f, d	Complement file register f
decfsz	f, d	Decrement file register f, skip if zero
goto	label	Unconditional branch to label
incf	f, d	Increment file register f
iorlw	k	Inclusive OR working register with literal
movf	f, d	Move file register f
movlw	k	Move literal to working register
movwf	f	Move working register to file register f
nop	-	No operation
retfie	-	Return from interrupt service routine and set global interrupt enable bit GIE
return	-	Return from subroutine
sublw	k	Subtract W from literal

Number system notation

Decimal	d'153'
Hex	h'99'
Binary	b'10011001'

Structure of the INTCON register

Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
GIE	PEIE	TMR0IE	INT0IE	RBIE	TMR0IF	INT0IF	RBIF

Structure of the STATUS register

Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
IRP	RP1	RP0	\overline{TO}	PD	Z	DC	C