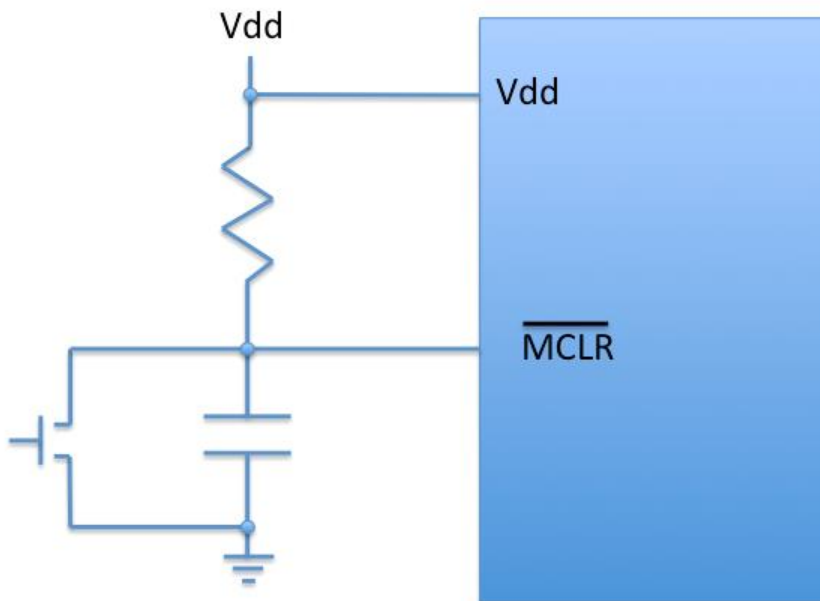## 1. MCLR/Vpp

This acts as a reset pin. When the pin is pulled low, it will hold the device in reset mode. When the PIC is normally operated, this pin is pulled high through a resistor connected to Vdd. An addition of a capacitor facilitates in holding the device in reset mode longer which helps when a short signal is used to pull the pin low.

2. RA0/AN0

Analog pin 0 or 0th pin of PORTA; bidirectional input/output pin

3. RA1/AN1

Analog pin 1 or 1st pin of PORTA; bidirectional input/output pin

4. RA2/AN2/Vref-

Analog pin 2 or 2nd pin of PORTA; bidirectional input/output pin. It can also be assigned negative analog voltage.

5. RA3/AN3/Vref+

Analog pin 3 or 3rd pin of PORTA; bidirectional input/output pin. It can also be assigned positive analog voltage.

6. RA4/T0CKI/C1out

4th pin of PORTA; bidirectional input/output pin. This acn also work as the clock input pin.

7. RA5/AN4/SS/C2out

Analog pin 4 or 5th pin of PORTA; bidirectional input/output pin. It can also be used as the slave select for synchronous serial port in the microcontroller.

8. RE0/RD/AN5

Analog pin 5 or 0th pin of PORT E; bidirectional input/output pin. It can also act as 'read control' pin which will be active low.

9. RE1/WR/AN6

Analog pin 6 or 1st pin of PORT E; bidirectional input/output pin. It can also act as 'write control' pin which will be active low

10. RE2/CS/AN7

7th pin of PORT E; bidirectional input/output pin. It can also act as a 'control select' pin which will be active low

11. Vdd

Positive voltage supply for input/output and logic pins. Should be connected to 5V.

12. Vss

Positive pin of MCU (+5V)

13. OSC1/CLKI

External Oscillator/clock input pin

14. OSC2/CLKO

External Oscillator/clock output pin

15. RC0/T1OSO/T1CKI

0th pin of PORT C; bidirectional input/output pin

16. RC1/T1OSI/CCP2

1st pin of PORT C; bidirectional input/output pin or Timer/PWM pin

17. RC2/CCP1

2nd pin of PORT C; bidirectional input/output pin or Timer/PWM pin

18. RC3/SCK/SCL

3rd pin of PORT C; bidirectional input/output pin. It can be the output for SPI or I2C modes. Cam also be used as the input/output for synchronous serial clock.

19. RD0/PSP0

0th pin of PORT D; bidirectional input/output pin

20. RD1/PSPI

1st pin of PORT D; bidirectional input/output pin

21. RD2/PSP2

2nd pin of PORT D; bidirectional input/output pin

22. RD3/PSP3

3rd pin of PORT D; bidirectional input/output pin

23. RC4/SDI/SDA

4th pin of PORT C; bidirectional input/output pin or Serial Data in pin

24. RC5/SDO

5th pin of PORT C; bidirectional input/output pin or Serial Data Out pin

25. RC6/Tx/CK

6th pin of PORT C; bidirectional input/output pin or Transmitter pin of Microcontroller

26. RC7/Rx/DT

7th pin of PORT C; bidirectional input/output pin or Receiver pin of Microcontroller

27. RD4/PSP4

4th pin of PORT D; bidirectional input/output pin

28. RD5/PSP5

5th pin of PORT D; bidirectional input/output pin

29. RD6/PSP6

6th pin of PORT D; bidirectional input/output pin

30. RD7/PSP7

7th pin of PORT D; bidirectional input/output pin

31. Vss

Positive pin of MCU (+5V)

32. Vdd

Positive voltage supply for input/output and logic pins. Should be connected to 5V.

33. RB0/INT

0th pin of PORT B or External Interrupt pin

34. RB1

1st pin of PORT B

35. RB2

2nd pin of PORT B

36. RB3/PGM

3rd pin of PORT B or connected to the programmer

37. RB4

4th pin of PORT B

38. RB5

5th pin of PORT B

39. RB6/PGC

6th pin of PORT B or connected to the programmer

40. RB7/PGD

7th pin of PORT B or connected to the programmer