Programming PIC Microcontrollers using PICkit™ 2 / 3 Programmers
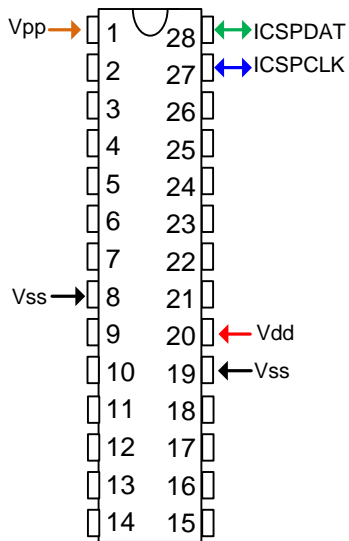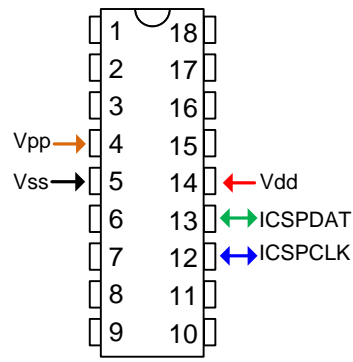
http://picprojects.org

ICSP connections

16F1933/1936/1938
16F1512/1513/1516/1518
16F882/883/886

Vpp → 1 — 28 ↔ ICSPDAT
2 — 27 ↔ ICSPCLK
3 — 26
4 — 25
5 — 24
6 — 23
7 — 22
Vss → 8 — 21
9 — 20 ← Vdd
10 — 19 ← Vss
11 — 18
12 — 17
13 — 16
14 — 15
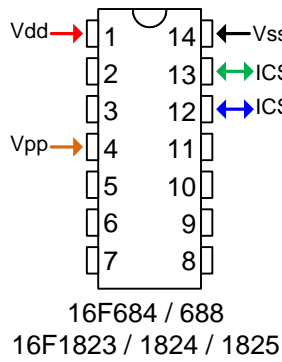
16F684 / 688
16F1823 / 1824 / 1825

Vdd → 1 — 14 ← Vss
2 — 13 ↔ ICSPDAT
3 — 12 ↔ ICSPCLK
Vpp → 4 — 11
5 — 10
6 — 9
7 — 8

16F84 / 84A
16F627 / 628
16F627A / 628A / 648A
16F88
16F1826 / 1827

1 — 18
2 — 17
3 — 16
Vpp → 4 — 15
Vss → 5 — 14 ← Vdd
6 — 13 ↔ ICSPDAT
7 — 12 ↔ ICSPCLK
8 — 11
9 — 10

16F685/687/689/690

Vdd → 1 — 20
2 — 19 ↔ ICSPDAT
3 — 18 ↔ ICSPCLK
Vpp → 4 — 17
5 — 16
6 — 15
7 — 14
8 — 13
9 — 12
10 — 11
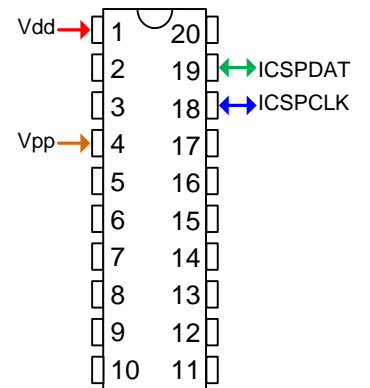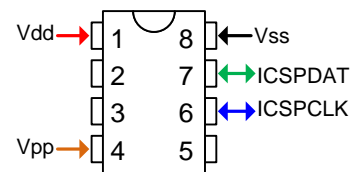
12F629 / 675 / 683
12F1822 / 1840

Vdd → 1 — 8 ← Vss
2 — 7 ↔ ICSPDAT
3 — 6 ↔ ICSPCLK
Vpp → 4 — 5
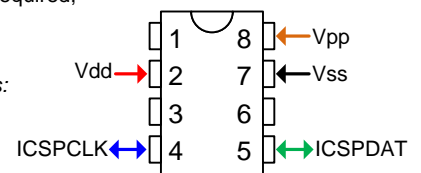
10F200/202/204/206
10F220/222/224/226

1 — 8 ← Vpp
Vdd → 2 — 7 ← Vss
3 — 6
ICSPCLK ↔ 4 — 5 ↔ ICSPDAT

Pin 1 indicator

PICkit™ 2
PICkit™ 3

1 → Vpp
2 → Vdd
3 → Vss
4 ↔ ICSPDAT
5 ↔ ICSPCLK
6 *Aux (not used)*

To program a PIC using ICSP you only need to make the five connections shown.
No other connections are required. No other components are needed; no external crystal is required; no external power supply is needed.

For other PIC Microcontrollers, refer to the datasheet to identify the correct pin connections:
http://www.microchip.com/en_US/family/8bit/ index.html

See also PICkit 2 User's Guide
http://ww1.microchip.com/downloads/en/ DeviceDoc/51553E.pdf