**Emulates the following PICmicro®
Devices by Microchip Technology Inc.**

- **PIC12C671**
- **PIC12C672**
- **PIC12CE673**
- **PIC12CE674**

CVM03F (Family Module)

CVM67XM (Member Module)
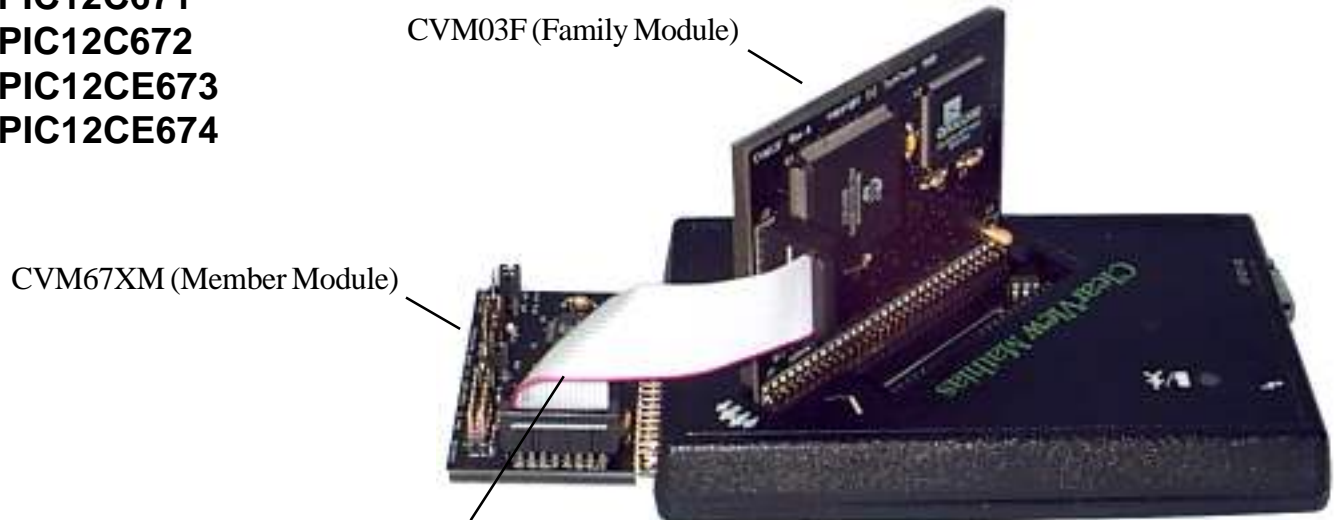
NOTE: Red Stripe indicates Pin1.

CVM67X jumper configurations

The CVM67XM modules completely emulates the production devices with the following exceptions:

The PIC16C67x and PIC16CE67x devices have 6 general purpose pins that can be used for a variety of purposes. All can be used as GPIO (digital I/O) and most have alternative functions. The primary difference between the CVM67XM module and production chips is the fact that ClearView Mathias ALWAYS provides the CLOCK for emulation. Production devices allow you to choose from a variety of OSC MODES (internal RC, external OSC, HS…). Since Mathias always provides the clock, the GPIO pins are ALWAYS available for general purpose digital I/O. In your production device, you will loose use of one or two pins in some OSC MODEs. We provide jumpers to allow you to isolate the unavailable pins to eliminate any contention from crystals, RC networks, tank caps, etc.

(972) 272-9392, FAX: (972) 494-5814, sales@tech-tools.com, http://www.tech-tools.com
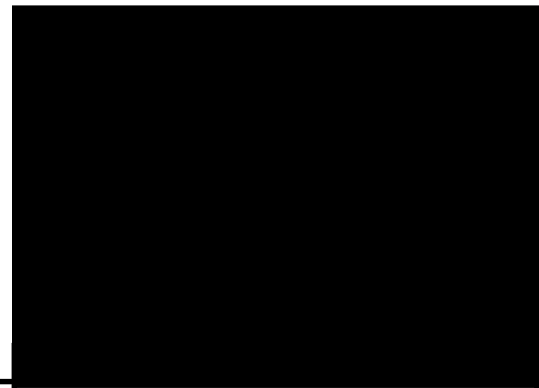
Target mode

Trace -
Cable Connection

Target -
Cable Connection   JP16   JP15
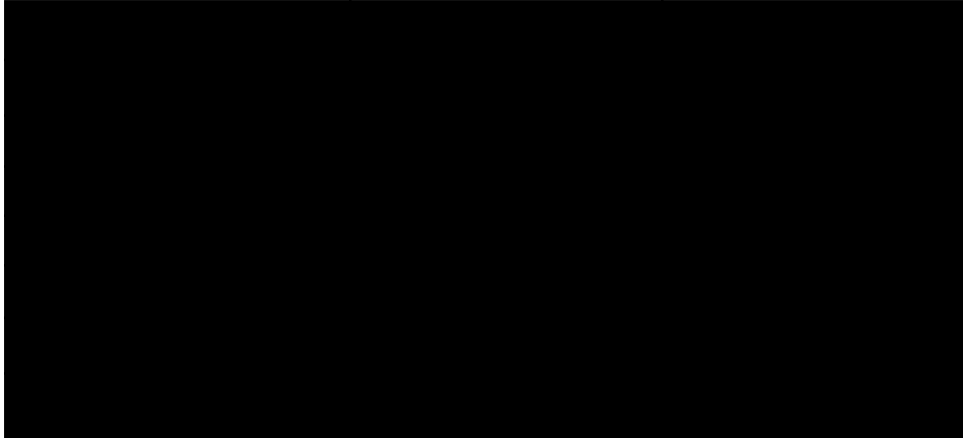
Family Module -
Cable Connection
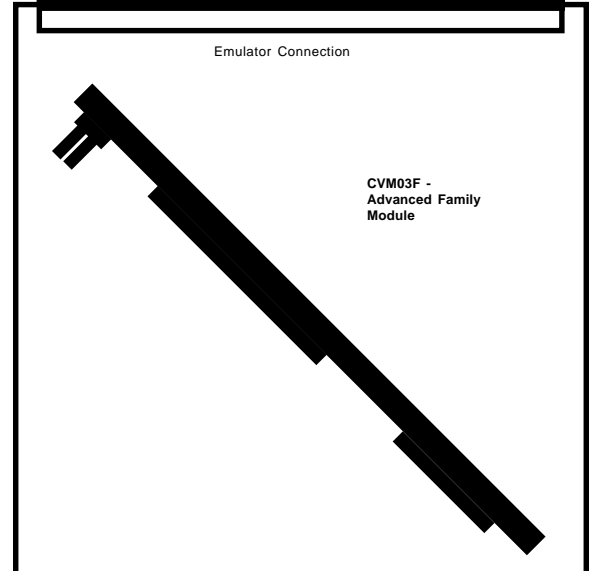

Emulator Connection

CVM03F -
Advanced Family
Module

NOTEs:

1. When JP15 is set to the 'OSC' position, it will drive a LOW LEVEL version of Mathias' clock out pin GP4. If you select this setting, make sure that there are no crystals, tank caps, oscillators or resonators attached to this pin! Production devices will drive clk/4 out this pin when RC mode with CLK out is selected. Mathias will drive CLK/1. REMOVE the jumper unless you really need to see the clock on this pin.

2. When JP16 is set to the 'OSC' position, it will drive a TTL level version of Mathias' clock out pin GP5. If you select this setting, make sure that there are no crystals, tank caps, oscillators or resonators attached to this pin! REMOVE the jumper unless you really need to see the clock on this pin.

3. The external MCLREN function is not available. Pin 4 is always GP3 (an input). You can not reset the emulator by applying a low to this pin. Use 'F10' or the speed button with the blue dot to reset Mathias from within TDE.

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