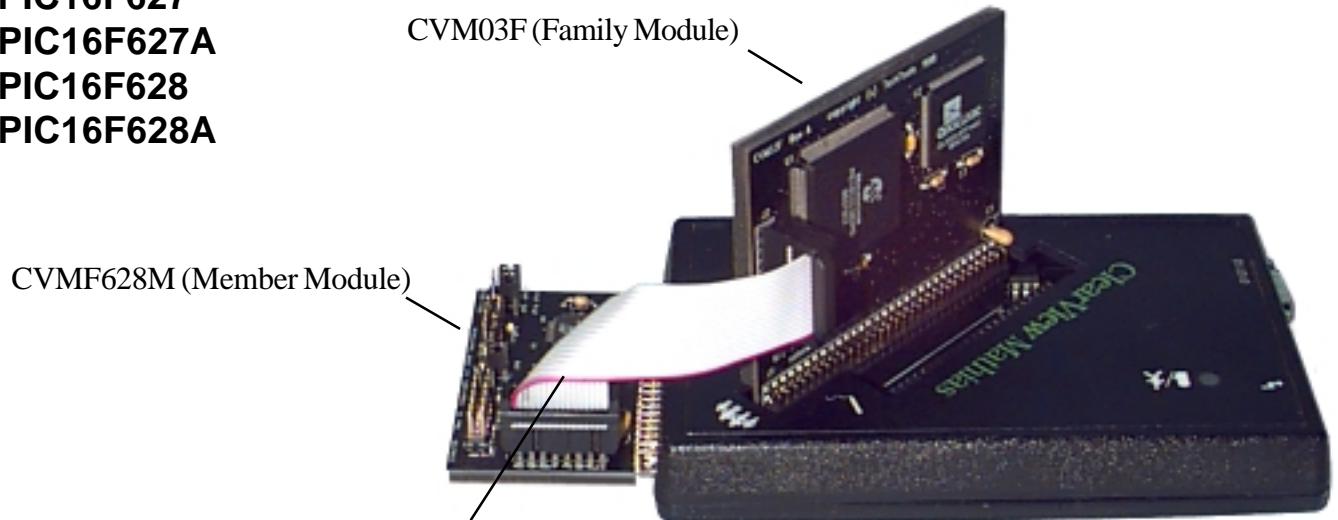




ClearView Mathias 16F62X Member Module

Emulates the following PICmicro®
Devices by Microchip Technology Inc.

- PIC16F627
- PIC16F627A
- PIC16F628
- PIC16F628A



NOTE: Red Stripe indicates Pin1.

CVMF628M jumper configuration

The CVMF628M module completely emulates the production devices with the following exceptions:

The PIC16F62x devices have multi-purpose functions on three pins that can not be emulated automatically. For these functions we have provided jumpers on the member module for emulation.

The primary difference between the CVMF628M 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 OSC pins are ALWAYS available for general purpose digital I/O. In your production device, you will lose 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.

The other difference is the MCLR line which Mathias uses to "RESET" the emulated PICmicro. To use this pin as a Digital Input, we provide an additional jumper.

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



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- **JP7** (N/C or Target vcc)

If removed or placed in the N/C position, the ICE and the TARGET will each power themselves. When placed in the TARGET VCC position, the two power rails are shorted together, enabling the ICE to provide 50ma or so to power the target. All of our modules have this jumper. The manual briefly describes its use.

- **JP5** (MCLR or RA5), **JP3** (OSC2 or RA6), **JP4** (OSC1 or RA7)

These jumpers select whether each of these pins should be used for DIGITAL I/O (RAx) or its alternative function (MCLR, OSC1 or OSC2).

If your applications uses internal MCLR, freeing up the MCLR pin for DIGITAL I/O use, set JP5 to 'RA5', else set it to 'MCLR'.

Likewise, set JP3 and JP4 according to your application's use of internal OSC, OSCOUT and DIGITAL I/O.

- **JP8** ('flying lead' connection to the CVM03F)

The other end of this cable connects to the CVM03F (Advanced Family module - J2). This provides access to new control features added to the new bondouts. The read stripe is pin 1. NOTE that pin 1 on the CVM03F is toward the BOTTOM of the connector. You can see a picture of this cable connected (although a different module, still same orientation) at:

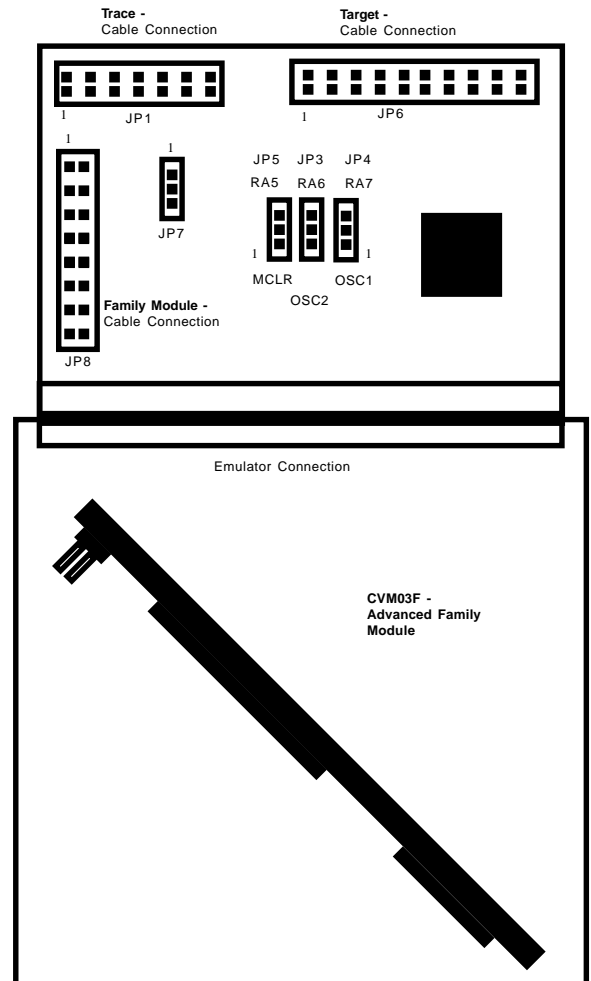
http://www.tech-tools.com/pd_67xm.htm

- **JP1** (Trace cable)

If you have a TRACE module, its cable plugs in here. This is common to all of our modules. The trace cable pinout is included in your manual.

- **JP6** (target connector)

This is the connection to the target PIC socket. The 18 pin cable that came with your Mathias plugs in here. Of course, the cable pin-out matches the 16F628 PIC.



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