



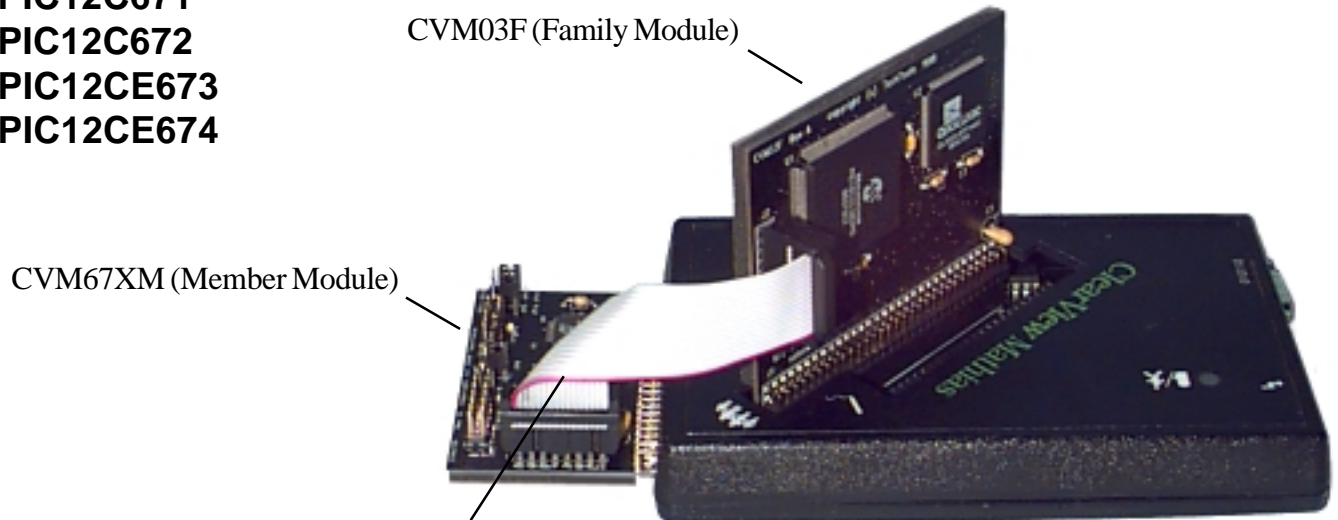
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## ClearView Mathias 12C67X Member Module

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Emulates the following PICmicro®  
Devices by Microchip Technology Inc.

- PIC12C671
- PIC12C672
- PIC12CE673
- PIC12CE674



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.

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## ClearView Mathias 12C67X Member Module

### Target mode

OSC MODE	JP15 (GP4/OSC) (1)	JP16 (GP5/OSC) (2)
External RC, no clk out	GP4	Remove or 'OSC'
External RC,CLK out GP4	Remove or 'OSC'	Remove or 'OSC'
Internal RC, no clk out	GP4	GP5
InternalRC clk out GP4	Remove or 'OSC'	GP5
HS	Remove or 'OSC'	Remove or 'OSC'
XT	Remove or 'OSC'	Remove or 'OSC'
LP	Remove or 'OSC'	Remove or 'OSC'

### 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.

