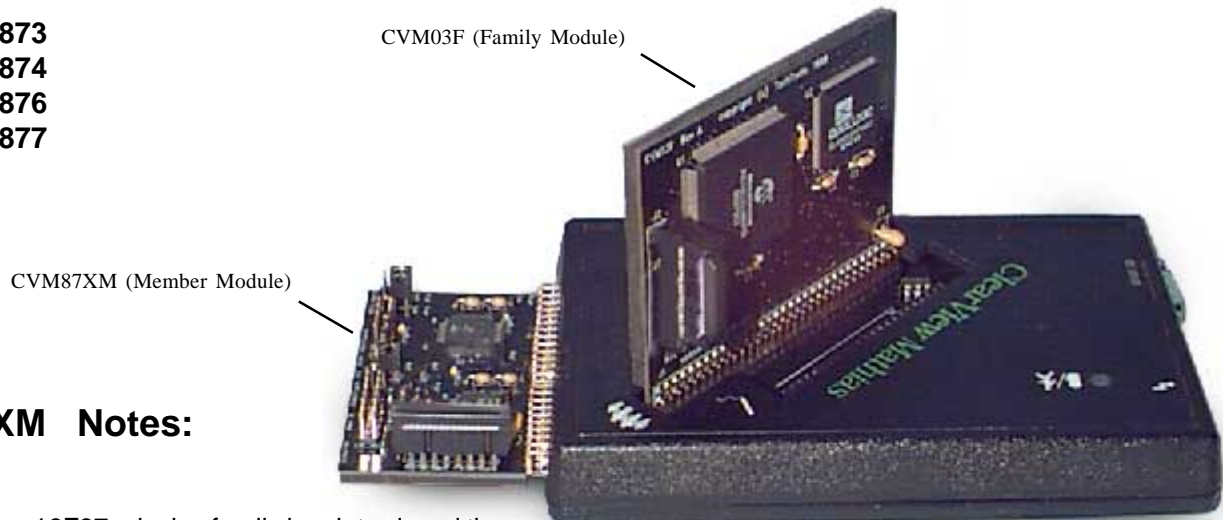




ClearView Mathias 16F87X Member Module

Emulates the following PICmicro®
Devices by Microchip Technology Inc.

- PIC16F873
- PIC16F874
- PIC16F876
- PIC16F877



CVM87XM Notes:

The PICmicro 16F87x device family has introduced the ability for a device to programmatically Read and Write its own Code space. This “self modifying” code feature is a first for PICmicro products and is not directly supported in the PIC16F877/ME bondout (Emulation Silicon) itself. However, this new feature can be emulated with a small performance limitation.

Emulation Requirements and Limitations:

Advanced Family Module (CVM03F)

Although all other features of the '87x devices are supported by the standard family module (CVMXXF), the Advanced Family Module (CVM03F) is required in order to emulate the Code FLASH Read/Write capability.

TDE 4.1

Newly released modules require the latest version of supporting software for proper identification and configuration. This module requires TDE 4.1. If you have an earlier version of TDE or a pre-release copy of 4.1, an update can be downloaded from our website.

Emulation differences for Code FLASH Read/Write

1. Since Code FLASH Read/Write ability is new to the PICmicro and is not directly implemented within the bondout, we emulate it using software and existing hardware. This “external” method of emulation, although accurate, does not execute Code FLASH Reads or Writes in real time. For example, production silicon will have a delay of approximately 5ms when Writing to Code FLASH, whereas the CVM87XM module will have a 50ms to 75ms delay.
2. The Data breakpointing hardware is used to emulate code space R/W. This means that the data breakpointing capability is not available when using the code R/W capability and vice-versa. The available feature is determined by a selection in the Project Setup dialog under Emulator Options.
3. The code image that is maintained by TDE represents the code image that is built at compile time. If you implement the “Self modifying Code” feature during emulation, the contents of TDE’s windows will no longer match the contents of the program memory being executed.

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