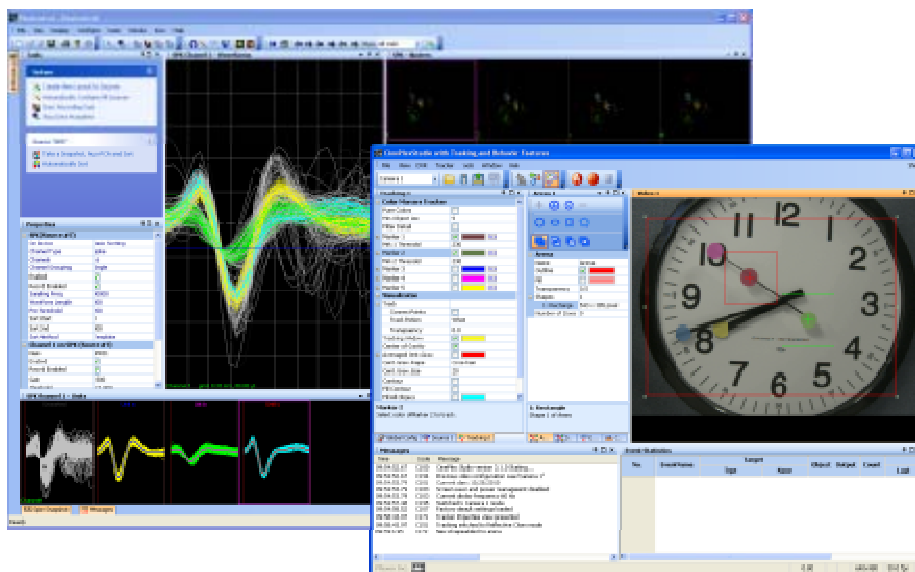


Integrating OmniPlex and CinePlex v3



Plexon Inc

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Introduction and Terminology

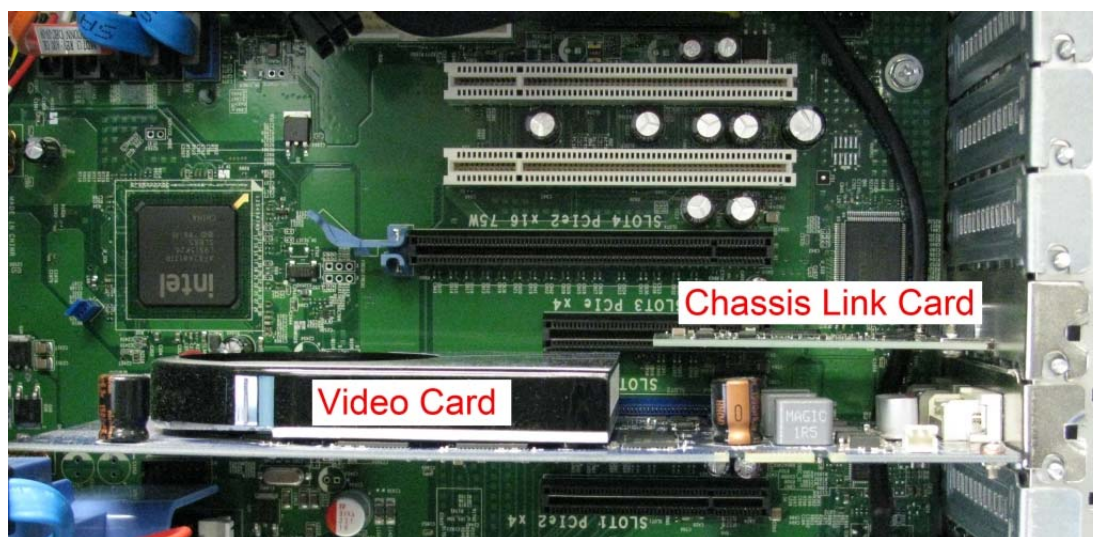
Plexon added CinePlex v3 support to the OmniPlex digital acquisition system in July 2010. OmniPlex systems shipped before this date require new Timing Control boards in the OmniPlex chassis, as well as the PCI timing and PCIe FireWire boards installed in the computer that CinePlex requires.

This document will cover the hardware and software required for integrating CinePlex with any OmniPlex system in the field, with special considerations for systems shipped prior to July 2010.

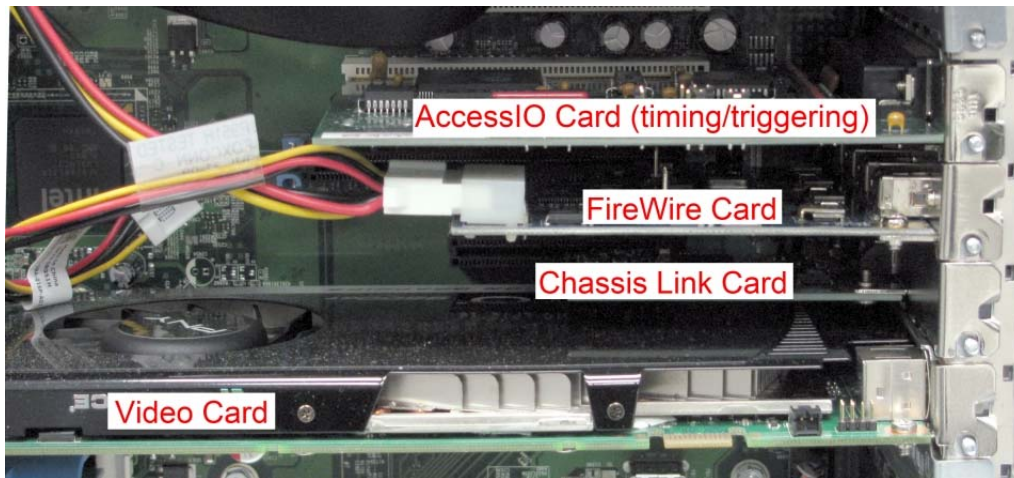
Hardware Components

OmniPlex is currently installed on Dell T3500 computers, and requires a National Instrument PCIe card in the PC for linking to the external PXI chassis where the OmniPlex hardware is seated. The computer has enough PCI and PCIe slots left over for the FireWire and timing boards such that CinePlex can be (and must be) installed in the same host machine that OmniPlex is on.

OmniPlex PCI card configuration:



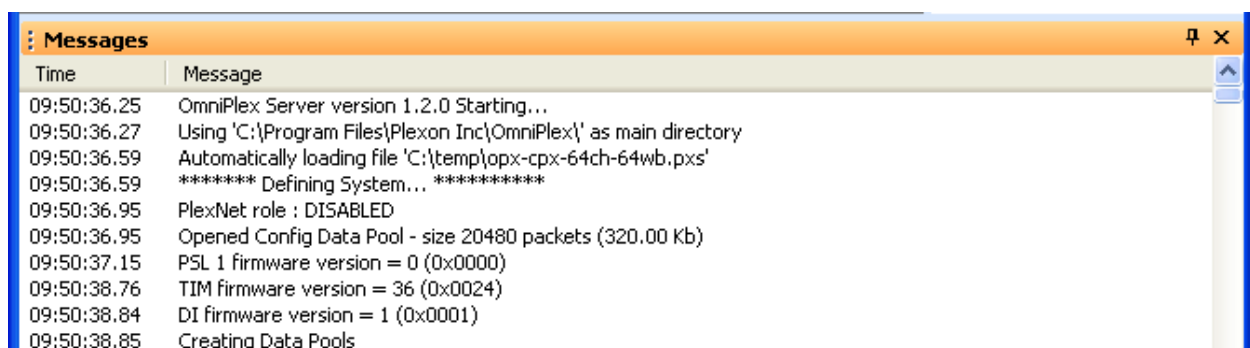
OmniPlex with CinePlex PCI card configuration:



Don't forget that the FireWire card needs power from the PC power supply.

It is advisable to put the cards in the PC before installing the CinePlex software (although not completely necessary). See the CinePlex v3 manual if you need step-by-step procedures for installing the CinePlex software.

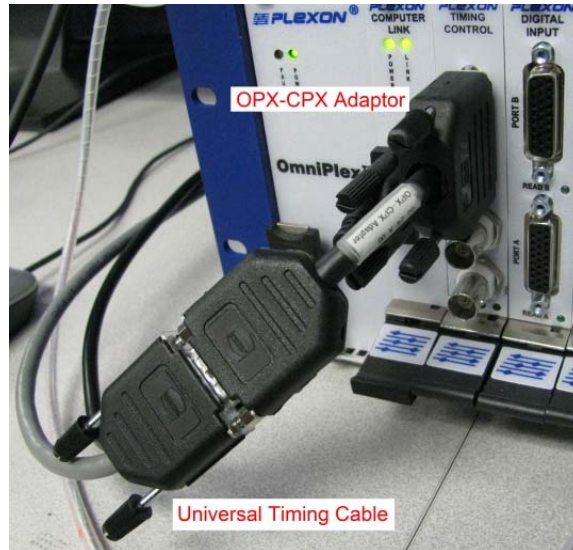
OmniPlex systems shipped before July 2010 do not have Timing Control boards with CinePlex-compatible firmware. New timing boards must be shipped to users that want to add CinePlex to their pre-July 2010 OmniPlex systems. The firmware version of the Timing Control board is shown when loading OmniPlex Server.



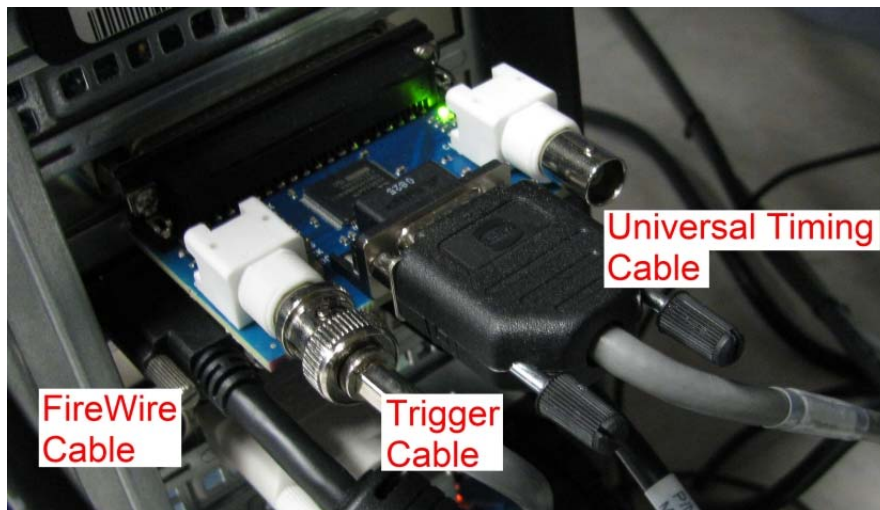
The "TIM firmware version" should be listed as 36 (or higher).

CinePlex receives a clock from the OmniPlex Timing Control board. To get the clock to CinePlex from OmniPlex, an adaptor and universal timing cable goes from the

OmniPlex Timing Control board to the CinePlex timing board (also called the AccessIO card).



The CinePlex camera and universal timing cable is connected in the standard fashion as detailed in the CinePlex v3 manual.



Software Components

OmniPlex software version 1.1.0 or later is required. You must also use an OmniPlex Server configuration file that has the OmniPlex/CinePlex device client added. These Server configuration files (.pxs files) have “CPX” as part of the file name and will have the “OmniPlex/CinePlex Interface” node in the OmniPlex Server display.

Load OmniPlex Server and PlexControl, start the data flow, and then open CinePlex.



Document History

October 27th 2010 – Initial document creation.