



Frame grabbers

# Matrox Meteor-II/1394 >>

IEEE 1394-to-PCI adapter board for digital video acquisition.



## Key features

- > three 400 Mbps IEEE 1394 ports
- > extensive FIFO for reliable capture to PC
- > power for IEEE 1394 drawn directly from PC power supply
- > supports IEEE 1394 video cameras based on the IIDC Digital Camera Specification using Matrox Imaging Library (MIL)
- > available software is sold separately and includes Matrox Imaging Library (MIL)/ActiveMIL, MIL-Lite/ActiveMIL-Lite and Matrox Inspector
- > supports Microsoft® Windows® Me, Windows NT® 4.0, Windows® 2000 and Windows® XP

## Simplified, High-performance Digital Video Capture

Matrox Meteor-II/1394 is an IEEE 1394-to-PCI adapter board for simplified, high-performance digital video capture using a PC. Connect a new generation of industrial/scientific video cameras to a PC using the industry standard IEEE 1394 serial link. Offering functionality equivalent to existing cameras, IEEE 1394-based cameras provide higher-quality video than their analog counterparts and simpler cabling than traditional digital cameras, making them ideal for machine vision, medical imaging and security applications. Matrox Meteor-II/1394, through Matrox Imaging Library (MIL), fully supports IEEE 1394 video cameras based on the IIDC Digital Camera Specification for companies such as BASLER and Sony.

### IEEE 1394 digital video

The high speed IEEE 1394 digital serial link supports data transfer rates of 100, 200 and 400 Mbps, meeting the bandwidth demands of typical video resolutions and frame rates. It supports bi-directional communication for device control and transfer of device data such as video, as well as provides support for two types of data transfer modes depending on the nature of the data. Asynchronous data transfer mode provides guaranteed delivery of control commands. Isochronous data transfer mode provides guaranteed bandwidth for time-critical data such as live video.

IEEE 1394 simplifies camera interfacing with a standard connector and cable design that provides video transmission, camera control and power to the camera over a single cable. There is no need to use a specialized frame grabber that requires custom cables and software drivers.



## IEEE 1394 to PCI

Matrox Meteor-II/1394 adapter board provides three external 6-pin IEEE 1394 ports. It is based on a Texas Instruments® chipset which integrates a deep FIFO for reliable video capture and transfer over the PCI bus. Power supplied through the IEEE 1394 connector is drawn directly from the PC power supply and not the PCI slot.

## Software

Software support is available for Microsoft® Windows® Me, Windows® NT® 4.0, Windows® 2000 and Windows® XP and includes Matrox Imaging Library (MIL)/ActiveMIL or MIL-Lite/ActiveMIL-Lite development toolkits for creating custom applications. Matrox Meteor-II/1394 is also supported by Matrox Inspector Windows®-based interactive imaging software.

## Specifications

### Hardware

- three 6-pin 400 Mbps IEEE 1394 ports
- Texas Instruments physical/link layer chipset (OHCI compliant)
- 8 KB FIFO (4KB for isochronous, 2KB for asynchronous receive and 2KB for asynchronous transmit)
- 32-bit/33 MHz PCI 2.2 bus interface
- power for IEEE 1394 drawn directly from PC power supply
- universal PCI card edge connector

### Software Environment

- drivers for Me, NT 4.0, 2000 and XP
- programmed using MIL/MIL-Lite (.DLLs) with Microsoft® Visual C++® (.NET)
- programmed using ActiveMIL/ ActiveMIL-Lite (ActiveX controls) with Microsoft® Visual Basic® or C++®

### Dimensions and environmental information

- 12.0 cm L x 10.6 cm H (4.7" L x 4.2" H)<sup>1</sup>
- operating temperature: 0° C to 55° C (32° F to 131° F)
- relative humidity: up to 95% (non-condensing) over board(s)
- FCC class A
- CE class A

## Ordering Information

### Hardware

Part number	Description
METEOR2-1394	Matrox Meteor-II IEEE 1394-to-PCI adapter board.

### Ordered separately: Software

Part number	Description
MIL LITE 7	MIL-Lite board control library (see MIL-Lite brochure for more details).
MIL 7 DEV P or U	Matrox Imaging Library (MIL) (see MIL brochure for more details).
INSPECTOR 4 P or U	Matrox Inspector interactive Windows® imaging software (see Inspector brochure for more details).

#### Notes:

1. Vertical dimensions are from bottom edges of goldfinger to top edge of board. Horizontal dimensions are from edges of the board excluding bracket.

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