

Compatible Windows Software



- DT-Active Open Layers
- 32-Bit Frame Grabber SDK for Windows 98/2000/ME
- DT-Acquire
- Global LAB Image/2



DT3120

BUS: PCI

Type: Low-Cost Monochrome/Composite Color

DT3120

Low-Cost Monochrome and Composite Color Frame Grabber for the PCI bus

Key Features

- Single channel image acquisition.
- Handles standard monochrome, composite color, and S-video input sources.
- PCI Bus Master and Scatter/Gather architecture for intelligent image data management.
- DT-Open Layers compliance protects your investment.
- DT-Acquire & SDK included on free Imaging Omni CD.



The DT3120 low-cost frame grabber is an ideal solution for scientists, lab technicians, researchers, or anyone performing scientific and general-purpose imaging applications.

Overview

The DT3120 is a high quality, low-cost PCI frame grabber designed for industrial, scientific, and medical imaging applications. The DT3120 enables the acquisition of a standard monochrome, composite color, or S-video color image from a single camera.

Data Translation Quality in a Low-Cost Frame Grabber

Since 1984, when Data Translation introduced the industry's first single-board frame grabber, the company has led the way in the development of high quality, reasonably priced frame grabbers.

Extensive Software Support

The free Imaging Omni CD provides you with the tools you need to set up your Data Translation frame grabber, to develop imaging applications, and to integrate your frame grabber into your existing application. The CD includes the ready-to-run

DT-Acquire application, all board drivers and documentation, and the 32-bit Frame Grabber SDK, with over 50 functions for Data Translation PCI frame grabbers (categorized into General Imaging, Memory Management, Input Control, Camera Control, Passthru, and Overlay).

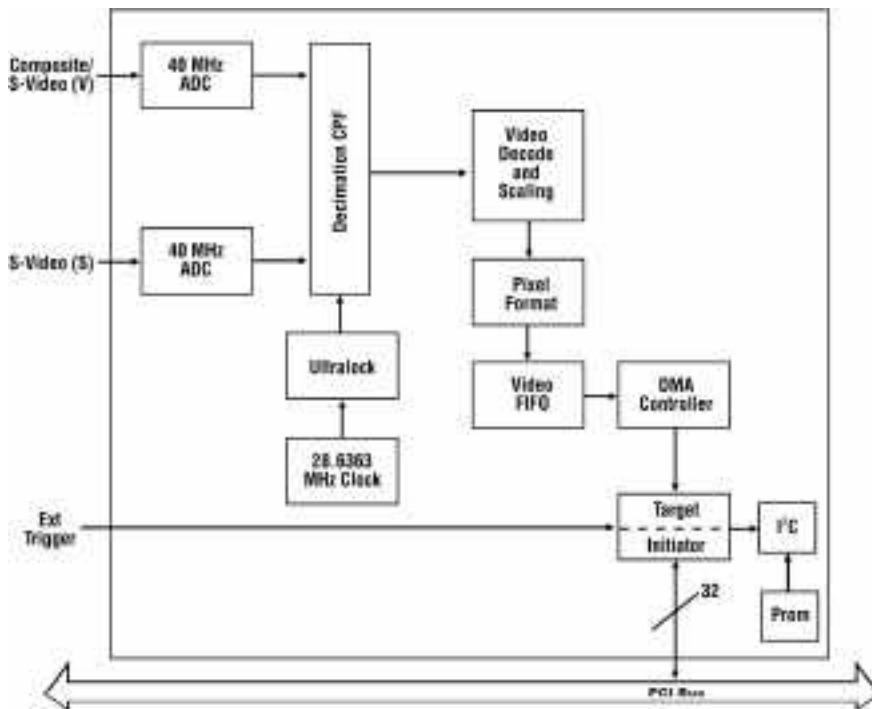
Available as an option, DT-Active Open Layers is an ActiveX control that enables you to use Data Translation's PCI frame grabbers with graphical programming environments such as Microsoft Visual Basic and Visual C++.

Data Translation software adheres to Data Translation's DT-Open Layers® software architecture, which provides a common application programming interface (API)

across all supported boards. This means that you can easily switch from one Data Translation frame grabber to another, or add more frame grabbers, with little or no reprogramming. Adding support for a new board is as easy as installing a new driver.

System CPU Free for Image Processing

Because of their PCI Bus Master design and intelligent Scatter/Gather memory-management architecture, the DT3120 frame grabbers handle large amounts of image data quickly and effectively, and with no CPU intervention. This leaves the host CPU free to do other tasks such as image processing, data manipulation, or other processor-intensive operations.



DT3120 Block Diagram

DT3120 Specifications



Video Input

Video Format: Composite video and S-video (Y/C) formats; RS-170, RS-330, and NTSC (60 Hz) or CCIR and PAL (50 Hz); interlaced; software selectable.

Timing Format: Standard 60Hz and 50Hz timing formats are supported; software selectable.

Inputs:

1 active input, composite or S-video, AC coupled

Video Signal: 1 volt peak to peak, 75 ohms

Spatial Resolution: 640 x 480 (60 Hz); 768 x 576 (50 Hz)

Acquisition

Digitization: Twin 8-bit A/Ds, one for monochrome, and one for chroma; data derived to YCrCb format.

Pixel Jitter: ±6 nsec maximum

Aspect Ratio: 1:1 Square pixels

Frame Grab Speed: 1/30 s (60 Hz); 1/25 s (50 Hz)

Modes: Interlaced (start on next even, next odd, or next field), single frame or continuous operation; all software selectable.

Data Formats

Image data can be output in 32, 24, and 16-bit RGB, standard YUV, and 8-bit monochrome formats.

Control Signals

External trigger inputs: 1 TTL level, nonqualified.

Video Display

Uses PC's graphics card and monitor for display. Real-time video display and non-destructive, real-time animated overlays performed using Microsoft Direct Show.

Video Transfer Rate

55MB/s typical, 132 MB/s maximum.

Board operates as a Bus Master using Burst Mode for data transfer to host memory. Intelligent Scatter/Gather architecture used for image data management in host memory.

Power Requirements

+5 V@ 1 A typical

Physical and Environmental

Form: Half-size PCI bus card (short card)

Dimensions: 10.7 cm x 17.5 cm (4.2 in x 6.875 in)

Weight: 150 g (5.3 oz)

Operating Temperature: 0° to 50° C (32° to 122° F)

Storage Temperature: -25° to 70° C (-13° to 158° F)

Relative Humidity: Up to 90%, non-condensing

Warranty

One year limited parts and labor.

System Requirements

- Pentium-class processor, 133 MHz or higher; Pentium II recommended
- At least one available PCI Bus slot
- Microsoft Windows 98/2000/ME
- Triton PCI chipset (or better) and supporting system BIOS
- 16 MB of system RAM minimum for Win 98; 32MB for Win 2000/ME
- CD-ROM drive (for software installation)
- DDI-compatible graphics adapter

Ordering Summary

All Data Translation hardware products are covered by a 1-year warranty. For pricing information, see a current price list, visit our web site, or call your local reseller.

The DT3120 frame grabber is shipped with the Imaging Omni CD, which includes device drivers for all DT PCI frame grabbers, DT-Acquire image-capture software application, example programs with source code, Frame Grabber SDK, and product documentation in PDF format.

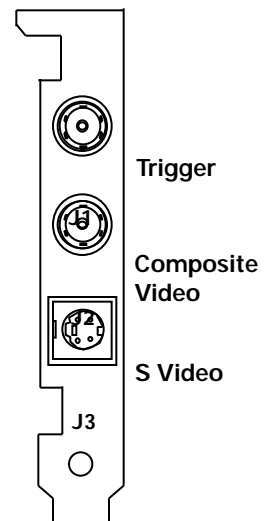
- DT3120 — Low Cost Monochrome/Composite Color Frame Grabber for the PCI bus.
- DT3120/10-Pack — Economical package of ten DT3120 frame grabbers
- EP261 — 2.0M (6 ft.) composite video cable, BNC connections
- EP263 — 2.0M (6 ft.) S-video cable

Software

All software packages include a copy of the software on CD-ROM, a user's manual, and 90 days of complimentary telephone support.

- DT-Active Open Layers Active X Control SP0974-CD
- For other compatible software, consult the software section of the Product Handbook, or call for details.

Backplate



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