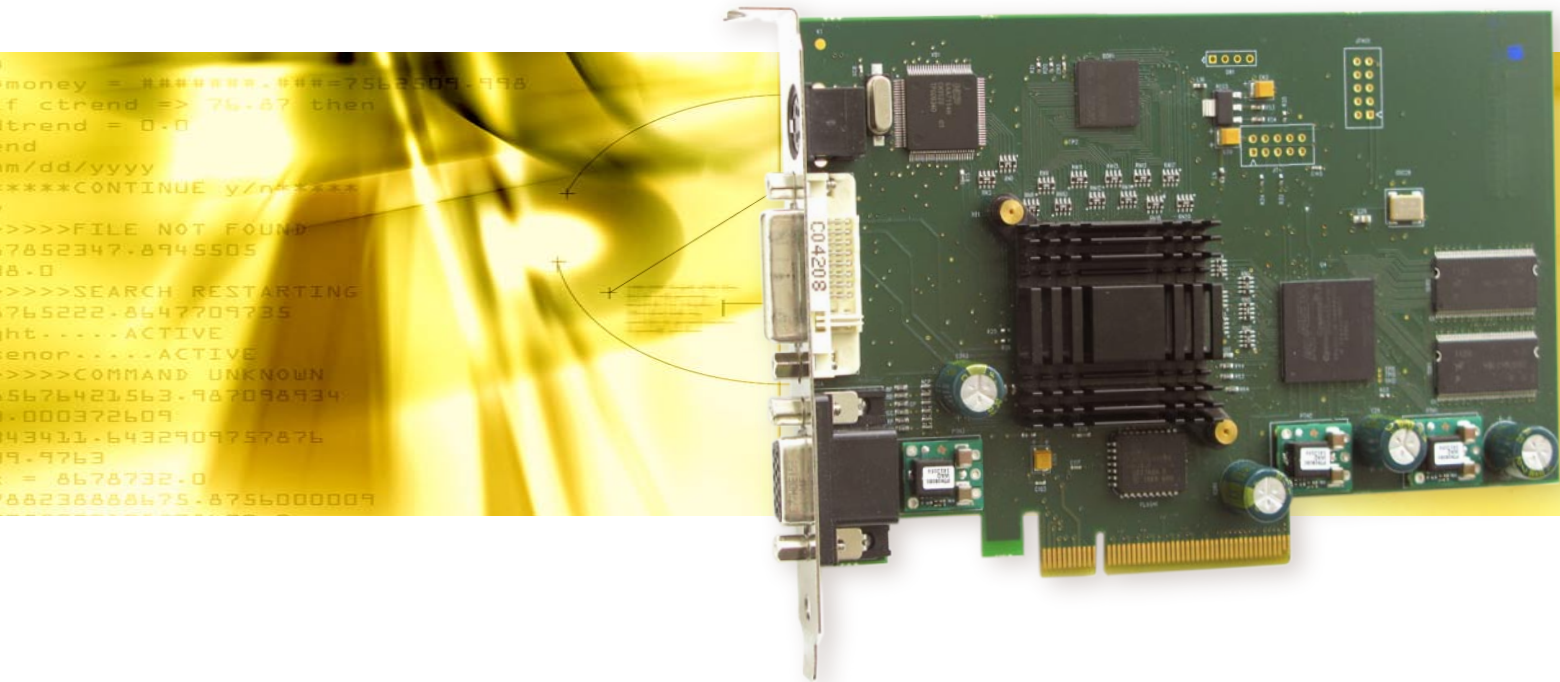


UFG-05 4S

high speed streaming frame grabber
with HDMI, DVI and analog inputs



Full Speed Frame Grabber with a Complete Set of Inputs

UFG-05 4S is full speed frame grabber with a 4-lane PCIe bus. The board features all popular interfaces from HDMI to Composite video. A wide variety of standard PC tools can be used to preview or store video as single frames or video streams. The high PCIe bus speed enables a high data throughput and results a smooth capturing stream. Application areas for the UFG-05 4S can be found in medical, industrial, multimedia or in maritime environment.

DirectShow®

UFG-05 4S can be used in Microsoft® Windows® 7, Vista or XP with any application supporting DirectShow®. The AVStream driver provides full control of the capturing process, enabling the user to select the captured resolution as well as an optimum frame rate.

Automatic Video Signal Detection

UFG-05 4S automatically detects all standard VESA and HDTV modes and can be manually configured to any other timing. UFG-05 4S can be used with RGB or YPbPr/YCbCr color modes and analog sync modes from CSync to Sync on Green.

Benefits

- Data transfer speed up to 650 MBytes/s
- Capture HDMI, DVI, RGB, Component, S-video and Composite
- Autodetect VESA and HDTV modes
- Resolutions up to 1920 x 1200 and 1080p60
- Arbitrary HW scaling from 160 x 120 to 1920 x 1200
- 64 and 32 bit AVStream drivers
- LabVIEW Support in the SDK
- Windows® 7, Vista and Windows® XP support
- High speed 4-lane PCI Express bus

UFG-05 4S

high speed streaming frame grabber with
HDMI, DVI and analog inputs



Video Streaming

The UFG-05 series frame grabbers are ideal for streaming high resolution video. The WDM driver is compatible with e.g. Microsoft® Media Encoder, VLC and other DirectShow applications. The high data transfer speed of UFG-05 4S enable creation of smooth, crisp and joggle-free video streams.

High Data Speed

The data transfer capability of UFG-05 4S enables transferring the image data of a Full HD 1080p60 video without dropping any frames. The table below illustrates the full color image data stream speeds of some of the display modes that UFG-05 4S supports. Please make sure that the data bus and storage media speed in your PC will match the requested capture resolution and captured frames per second (fps) target.

Capturing data stream speed in video modes

Resolution	Hz	P / I	MBytes/s *
1920 x 1200	60	Prog	527
1920 x 1080	60	Prog	475
1600 x 1200	60	Prog	439
1280 x 1024	60	Prog	300
1920 x 1080	30	Int	263
1280 x 720	60	Prog	211
1024 x 768	60	Prog	180

*) UFG-05 4S is able to capture 650 MBytes/s to the PC

Specifications

Input	S-video and Composite on S-Video connector RGB and Component on VGA connector DVI or HDMI on DVI-D connector
Input Resolution	PAL, NTSC and SECAM for composite and S-video 640 x 480 to 1920 x 1200 for VGA, Component and DVI
Color Coding	RGB or YPbPr / YCbCr
Input Pixel Frequency	25 MHz to 165 MHz
Scan Modes	Progressive, interlaced
Sync Modes	Automatically detected RGBHV, RGsB, RGBC
Capture Format	RGB32, 8 bits per color
HW Scaling	160 x 120 to 1920 x 1200
Data Interface	PCI Express 4 lane (2.0). Bus master with up to 650 MBytes/second speed. Scatter gather DMA, no CPU load. Physically 8 lane slot.
Operating Systems	Windows® 7, Vista or Windows® XP (32 and 64 bit)
SW Interface	Standard WDM driver with configuration dialogue.
Module Size	106 x 155 mm
Power Consumption	1 W max on +3.3 V; 5 W max on +12.0 V

www.unigraf.fi

UNIGRAF OY Piispantilantuja 4, FI-02240 Espoo, Finland
Tel +358 9 859 550

Please visit www.unigraf.fi for listing of Unigraf Worldwide Distribution