Digitizer 4-PCIe Capture Card

N Cast ™
TAKE STREAMING FURTHER
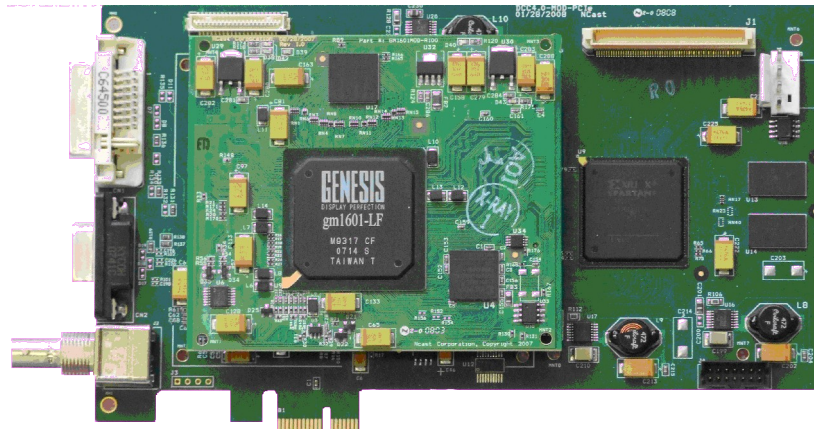
OVERVIEW

The Digitizer 4 Card is a digital frame grabber/ capture card that captures frames from analog and digital sources and delivers them to applications via the PCI Express 1 Lane bus. The Digitizer 4 card offers up to WUXGA capture resolution, an excellent frame capture rate, and Picture in Picture (PiP) capabilities.

The card is ideal for remote viewing applications, replacing dedicated monitors, and developing "multimedia capture" tools and products. The plugin card is designed to work with both Linux and Windows PC desktops.

APPLICATIONS

Stream and archive a prepared presentation easily to PC users with Windows Media Encoder or your favorite Linux application.

View multiple feeds on your Windows desktop.

Send RGB/DVI or video over IP.

MARKETS

NCast's DCC capture cards are used in a number of different markets to solve a variety of application needs:

Educational – Ideal for classroom lecture recording, the card allows real-time capture and composition of two input sources, typically a video podium shot and a computer graphics capture, such as a Powerpoint presentation.

Medical – The high-resolution, high-frame rate capture is being used in a variety of endoscopic systems.

Military – DCC's are used for remote display of command and control center information and recording of unmanned aerial vehicle flights.

FEATURE HIGHLIGHTS

Captures up to WUXGA (1920 x 1200) graphics and 1080p (HD) Video

RGB, DVI-D, Composite, and S-Video input connectors

DVI and RGB input with EDID support for flawless VGA/DVI Detection

Simultaneous capture of TWO fully synchronized input signals

Flexible PiP capability for video-in-graphics or graphics-in video

On board processor to detect input signals, compose input streams, and manage multiple buffers

Up to 60 fps of 1080p

High-Quality Advanced Scaling

Auto-Configuration/Auto-Detection Digital brightness, color and contrast control

Stream/record over IP using Windows Media Encoder, Real Producer or other Applications

Windows and Linux Support

TECHNICAL SPECIFICATIONS

GRAPHIC INPUTS
RGB/Y-Pr-Pb on DB15,
DVI-D Inputs up to 1920x1200

VIDEO INPUTS
S-Video, Composite

COLOR SPACE MODELS
RGB 8-8-8 format
YUV 4-2-0 format

SUPPORTED STANDARD VIDEO INPUT MODES

Video	Resolution	Frequency
NTSC – 480i	720x480	60Hz
PAL- 576i	720x576	50Hz
Progressive- 480p	720x480	60Hz
Progressive- 576p	720x576	50Hz
HDTV- 720p	1280x720	50, 60Hz
HDTV- 1080p	1920x1080	50, 60Hz

SUPPORTED STANDARD GRAPHICS INPUT MODES

Resolution	Resolution	Frequency
VGA	640x350	70, 85Hz
VGA	640x400	56, 70, 85Hz
VGA	640x480	60, 70, 72, 75, 85Hz
SVGA	720x350	70Hz
SVGA	720x400	70, 85Hz
SVGA	800x600	56, 60, 72, 75, 85Hz
SVGA	832x624	75Hz
XGA	1024x768	60, 70, 75, 85Hz
XGA	1152x864	70, 75Hz
XGA	1152x870	75Hz
XGA	1152x900	66, 76Hz
SXGA	1280x960	60, 85Hz
SXGA	1280x1024	60, 67, 70, 72, 75, 76, 85Hz
UXGA	1600x1200	60, 75Hz
WUXGA -Reduced blanking	1920x1200	60Hz

VIDEO AND GRAPHICS INPUT CONTROLS
Flexible control of main and PIP capture windows with adjustable sizes, positions and dynamic PIP/Main window swap

SUPPORTED INTERFACES (BUSES)
PCI-E 1 Lane

MAXIMUM DATA TRANSFER
180MBps

MAX PIXEL CLOCK
165 MHz

CAPTURE PERFORMANCE
(THE SPEED AT WHICH THE CARD DELIVERS FRAMES TO THE PCI BUS)

Resolution	YUV	RGB
1024x768 and below	60 fps	60 fps
1280x1024	60 fps	46 fps
1600x1200	60 fps	30 fps
1920x1080	58 fps	29 fps

PICTURE-IN-PICTURE SUPPORT
PIP, Side-by-Side, Swap control, On/Off control

SOFTWARE
Software development kit for custom applications
NCast Screen Capture software application
NCast Control Program for settings

OPERATING SYSTEMS/DRIVERS
Linux – 2.4 and 2.6 kernel support, V4L2
Windows – 2000/XP support

DIMENSIONS
Standard PCI Express Bus card interface

POWER CONSUMPTION
3.3V @ 3.0A = 10W
12V @ 0.2A = 2.4W
Total= 6.71W typical

ENVIRONMENTAL
0 to 35 deg. C
5% to 90% non-condensing
RoHS Compliant
FCC Class B

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