

PICCOLO Diligent Plus™

PCI Express full D1 video capture and MPEG4 compression board

P R E L I M I N A R Y

The Piccolo Diligent Plus is a PCI Express video capture board offering video capture and MPEG-4 compression for 4 channels. It provides in real-time four full D1 video streams to the PC and, simultaneously, four full D1 compressed video streams.

The acquisition rate of 100/120 frame/s or 200/240 field/s -PAL / NTSC- is permanently available.

An on-board header exposes 4 contact-closure digital inputs and 5 solid-state relay digital outputs for system integration. A powerful watchdog function further eases the Piccolo Diligent Plus integration in a system. The Piccolo Diligent Plus is a 1-lane PCI Express board with a delivery bandwidth of 170 MByte/s.

- **4 PAL/NTSC video inputs**

- 200/240 fields/s acquisition, constantly available

- **4 video inputs: simultaneous full D1 preview and full D1 compressed capture**

- **Hardware MPEG-4 compression**

- 4 high-quality compression chips
 - Enhanced motion adaptive de-interlacing functions
 - Programmable Group Of Pictures structures and sizes
 - Advanced MPEG bit-rate control (CBR/VBR) from 1Kbps to 6 Mbps

- **9 Digital I/O lines**

New robust and easy-to-use "Professional" input and output lines

- 4 "Professional" input lines
 - Contact-closure inputs that can be directly connected to switches, relays, opto-coupled devices, 5V or TTL output, 12V or 24V output
 - Not sensitive to polarity
 - Providing a very high common-mode immunity
- 5 "Professional" output lines
 - Solid-state relay outputs that can be directly connected to relays or opto-coupled devices, TTL inputs
 - Not sensitive to polarity

Direct connection to various kinds of devices

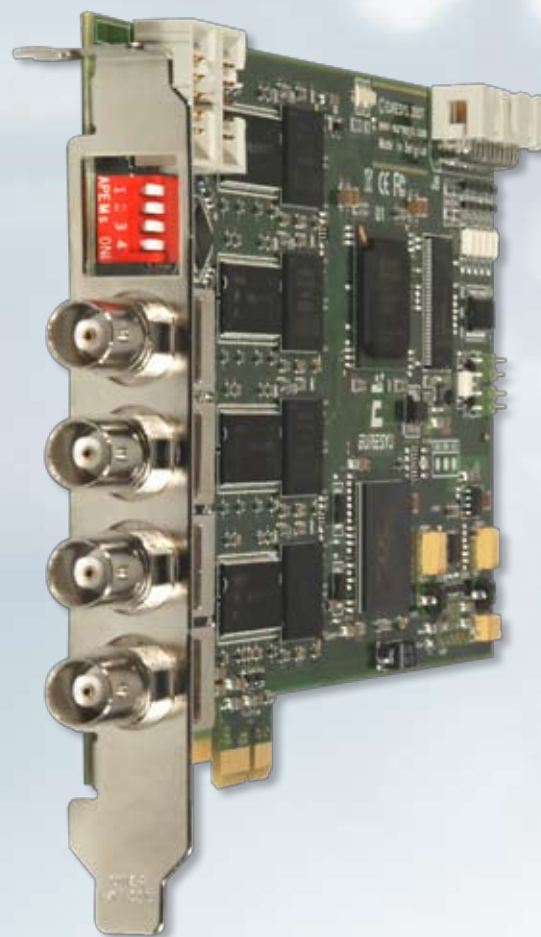
- **Configurable hardware watchdog**

- **One selected video output with cascading capability**

- **PCI Express x1**

- 170 MB/s delivery bandwidth

PCI EXPRESS™



EURESYS™
Excellence in vision

Software Support

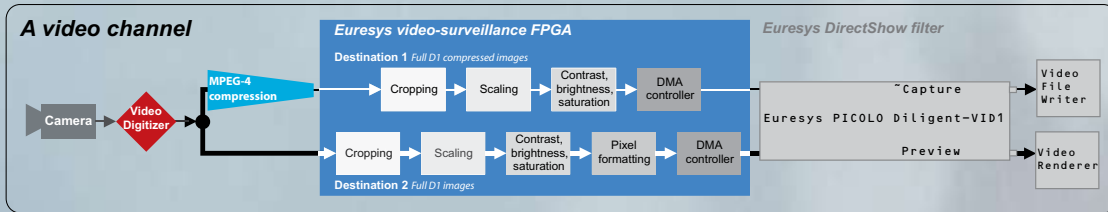
Euresys DirectShow source filters

Euresys provides dedicated DirectShow source filters for rapid application development. All the standard DirectShow features, such as property pages or time stamping, are supported.



PICOLO Diligent Plus, a natural match with the DirectShow API

Thanks to the Euresys FPGA technology, the design of the Piccolo Diligent Plus board naturally matches the DirectShow API. The **double destination per video channel feature** is implemented directly from the video acquisition on the board. DirectShow users naturally benefit from it. The Piccolo Diligent Plus acquisition and compression board simultaneously provides four live full D1 video streams for display and four live full D1 compressed video streams for recording or broadcasting. **Time stamping** is performed on board, directly in the FPGA conferring to it a particularly high accuracy. This allows the perfect time localisation of events or images and a precise and smooth playback.



MultiCam™ 6.1

MultiCam for Microsoft Windows 2000®, XP®, Server 2003® and Vista®
MultiCam for Suse Linux Enterprise Server 10
C, C++, .NET classes and ActiveX controls
MultiCam IDEs

Using MultiCam with C++	Microsoft Visual C++ 2005 Microsoft Visual C++ .NET 2003 Microsoft Visual C++ 6.0 Borland C++ Builder 2006 Borland C++ Builder 6.0 gcc c++ 4.1.0-28.4
Using MultiCam with .NET	Microsoft Visual C# 2005 Microsoft Visual C# .NET 2003
Using MultiCam with C	Microsoft Visual C++ 2005 Microsoft Visual C++ .NET 2003 Microsoft Visual C++ 6.0 Borland C++ Builder 2006 Borland C++ Builder 6.0 gcc 4.1.0-28.4
Using MultiCam with ActiveX	Microsoft Visual Basic 6.0 Borland Delphi 2006 Borland Delphi 6.0

Ordering Information

ORDER CODE

DESIGNATION

Video Capture board

6002

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