**PCL PCI L**

PCI card with LTC reader

PCL PCI LV

PCI analog video card with VITC and LTC reader

PCL PCI D

PCI digital video card with DVITC, ATC, UMID, Metadata and LTC reader

PCL PCI HD

PCI HD video card with DVITC, ATC, UMID, Metadata and LTC reader

PCL PCI TS

PCI card with LTC reader and Windows software for real time synchronization

AV PCL Time Code reader cards for the PCI bus are an important computer hardware solution for software development in fields such as subtitling, computer controlled editing, interactive-video, technical scientific analysis, and other applications that are based on picture accurate video processing.

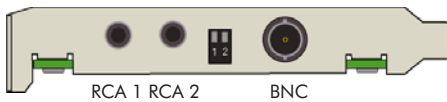
Driver compatibility between analog, digital and HD video cards enables you to design a software which is interoperable with any Alpermann+Velte PCI card. Each card has its own processor system with a register set for data transfer. Thus the critical time routines are completely decoupled from the PC's CPU, which enables extensive error checking.

An auto-matic frame rate detection (24, 25, 30, 30 DF) is supported as well as the parallel operation of two or more PCL PCI-Cards. Drivers and exemplary programs for Windows 98/ME/NT 4.0/2000/XP and Linux are included. DLL functions for reading Time Code and configuration are given. C/C++, Visual Basic and Delphi are also supported.

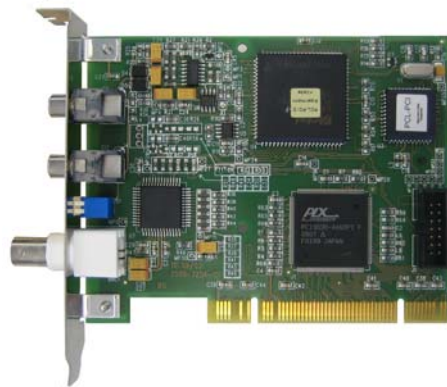
Video-Untertitelung, Computer-orientiertes Editing, Interaktiv-Video, Computer-Animationen und viele wissenschaftlich-technische Videoauswertungen benötigen eine framegenaue Videobildererkennung. Die PCL PCI- Timecode-Reader-Karten für PCI-Bus sind wichtige Hardware-komponenten für die Entwicklung solcher Anwendungen.

Die Treiber aller analog-, SDI-und HDSDI-Videokarten sind in der Basis identisch, so dass eine Anpassung an einen anderen Videostandard mit geringem Aufwand machbar ist. Jede PCL PCI-Karte verfügt über ein eigenes Prozessorsystem mit einem Registersatz zum Datentransfer. Die zeitkritischen Timecode-Routinen sind damit vollständig von der PC-CPU entkoppelt, wodurch umfangreiche Error-Checks möglich sind.

Die Framerate-Erkennung (24, 25, 30, 30 DF) erfolgt automatisch; der parallele Betrieb mit mehreren PCL PCI-Karten ist möglich. Treiber und Beispielprogramme für Windows 98/ME/NT 4.0/2000/XP und Linux werden mitgeliefert. Es stehen DLL-Funktionen zum Lesen der Timecode-Werte und zur Konfiguration zur Verfügung. Unterstützt werden C/C++, Visual Basic und Delphi.



PCI rear panel



PCL PCI D card

Working with ATC, UMID and Metadata formats offers new opportunities regarding the application area of PCL PCID and PCL PCI HD cards. This data is carried in the Ancillary Data portion of the digital video.

The „Monochrome Transfer“ method of MPEG transfer is available for use with this hardware. PCL PCI HD also offers an integrated logic analyzer for the digital video signal.

PCL PCI TS was designed for the synchronization of a Windows NT/2000 or XP system clock with a realtime locked LTC Time Code signal. The included Windows program "TimeSys" controls the realtime process.

PCL PCI D für SDI und PCL PCI HD für HD-SDI haben mit den Formaten ATC, UMID und Metadaten zusätzliche Möglichkeiten. Diese Daten werden als „Ancillary Data“ transportiert.

Für MPEG-Transfer ist das „Monochrom Transfer“-Verfahren verfügbar. PCL PCI HD-Karten bieten darüber hinaus einen integrierten Logicanalyzer für das digitale Videosignal.

PCL PCI TS dient zur Synchronisation der Systemuhr von Windows NT/2000 und XP- Rechnern auf ein echtzeit-verkoppeltes LTC-Signal. Das Windows-Programm "TimeSys" wird für diesen Zweck

PCL PCI specifications

LTC reader (LV, D, L, HD)

Reading range forward and backward

1 to 2500 fps

Connector (balanced or unbalanced)

2 x RCA (0.1 to 5 Vpp)

Video SD (D, HD)

SMPTE 259M-1997 (270 MB/s)

525/59, 97 or 625/50 component (SDI)

Equalization: 100m Belden 8281 or equivalent

Video HD

SMPTE 292M-1998 (1.485 GB/s HD)

SMPTE 260M-1999 (1125/60 HD)

SMPTE 295M-1997 (1080/50 HD)

SMPTE 274M-1998 (1080/all frame rates HD)

SMPTE 296M-1997 (720/all frame rates HD)

Equalization: 100m Belden 1694A or equivalent

VITC reader (LV)

Reading range

Still frame to search-speed

Connector

1 x BNC (FBAS 0.7 to 2 Vpp)

Termination

switchable

Level adjustment

Automatic

Video

NTSC, PAL, SECAM

DVITC reader (D, HD)

Standards

SMPTE 266M-1994 (DVITC)

Connector

1 x BNC, 75 Ω (8/10 Bit)

ATC reader (SD, HD)

Ancillary Time Code

SMPTE 291M - 1998 (ANC Data)

RP 188-1999 (ATC)

RP 196-1997 (HANC TC)

Connector

1 x BNC, 75 Ω (8/10 Bit)

Others

Dimensions

141 x 120 x 22 mm

Operating voltage

3.3 V/5 V

Interface

32 Bit, 33 MHz, 3.3 V/5 V universal

Base address

Automatic

I/O address

384 in 2 Blocks

Memory address

384 in 2 Blocks

Data transfer

32-Byte register set

Product ordering ID

PCL PCI L

3.3 V/5 V universal PCI card with LTC reader

PCL PCI LV

3.3 V/5 V universal PCI card with VITC and LTC reader

PCL PCI D

3.3 V/5 V universal PCI card with ATC, DVITC and LTC reader

PCL PCI HD

3.3 V/5 V universal PCI card with ATC, DVITC and LTC reader

PCI TS

PCI LTC reader card and software for real time synchronization

We reserve the right to modify specifications without notice.

Legend:

LTC:

Linear Time Code (SMPTE 12M-1999)

VITC:

Vertical Interval Time Code (SMPTE 12M-1999)

DVITC

Vertical Interval Time Code (SMPTE 266M-1994)

ATC

Ancillary Time Code (SMPTE 291M-1998)