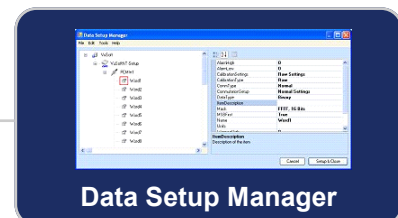# PCI Bit Sync/Decom and VuSoft™ Software

JDA introduces the **PCI-SD4-2**, leading the next generation in telemetry software decommutation cards. The PCI-SD4-2 recovers up to 4 simultaneous RS422 or TTL PCM serial input streams at up to 32 Mbps per channel or 80 Mbps aggregate. Each channel has internal time tagging accuracy locked to external IRIG A,B or G time to better than 10 uSec, time regeneration options are also available. Up to four telemetry encoders are also included on the card with multiple format types and RS422 or TTL outputs. Access to all of the signals is made easy via BNC connectors on the supplied breakout box.

**PCI-SD4-BS** bit synchronizers maybe added to the PCI-SD4-2 for rates up to 32 Mbps per stream. This daughter card to the JDA Systems PCI-SD4-2 four channel soft decom card for the first time offers exceptional performance on multiple telemetry streams while requiring only one short PCI PC slot.
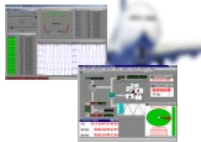
Controlling and data transfer from the card is simple with the JDA Systems **VuSoft** software which is designed to work with the PCI-SD4-2. VuSoft operates under Microsoft Windows XP, 7, 8.1 or 10 and not only recovers your data, but can also process, displays and record it in IRIG106 Chapter 10 compatible files in real time. Data may be regenerated under software control and BER software options are available.



**Analysis Tools**

**Drag and Drop Displays**

**Data Setup Manager**

**Available with both hardware & software**
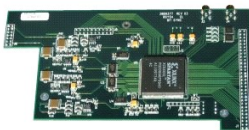
## VuSoft Software Features

VuSoft

- Designed for easy of use and quick access to data
- Flexible display settings
- Records IRIG106 Chapter 10 compliant data files
- Exports data to comma separated files

- Archives data to tape (also in IRIG106 Chapter 10 format)
- Easy data setup manager for PCM channel and parameter definitions
- Support for user and recording events
- Capture and print the screen
- Displays Include: Tabular, Dial, Vertical & horizontal bar chart, Vertical & Horizontal Strip chart, X/Y plot, Moving Map and many other displays
- Save setup, data settings & screen files for later use

## PCI-SD4-2 Decommutation Card Features

- Card Type: PCI PNP, Bus Master DMA no jumpers or switches on the card
- Transfer Notification: PCI Interrupts on FIFO flip flop
- Bus Transfer: SpeedBurst 80 million words per second

- Input Types: 4 Serial RS422 or TTL
- Input Bit Rate: 100 bps to 32 Mbps
- Input Code Type: NRZ-L BNC & Internal
- Output Types: 4 Serial RS422 or TTL
- Output Code Types: NRZ-L/M/S, BIO-L/M/S, DM-M/S,RNRZ/RNRZR-9/11/15/17/23
- Output Bit Rate: 100 bps to 32 Mbps
- Maximum I/O Rate: 32 Mbps/Channel (Maximum 80 Mbps/Card)
- Time IRIG A, B and G
- BER function available via software option

## PCI-SD4-BS Bit Synchronizer Features

- Card Type Daughter card PCI PNP, no jumpers or switches on the card
- Transfer Type DMA
- Input Connector SMA and BNC, Autogaining input 20mV > 10 Vpp
- Output Level TTL 75 Ohm and RS422 Switchable, BNC External and Internal
- Data Polarity Normal or Inverted

- Input Rate 100 bps to 15Mbps (or 32 Mbps)
- Input Code Types NRZ-L/M/S, BIO-L/M/S, DM-M/S, RNRZ/RNRZR-9/11/15/17/23
- Output Code Type NRZ-L Data/CLK & Internal
- Bit Error Rate Within 1db to Theoretical
- Loop Bandwidth Automatic Full Digital
- Tracking Range Automatic Full Digital
- Clock Format 0 Degree and 180 Degree
- Indicators Search & Lock software indicators
- Operating Temp Better than 0 to 50 deg C
- Optional error correction