TR122, 2-Channel, 12-bit, 200MS/s Transient Recorders

Features



- **200 MS/s sample rate**
- **12-Bit resolution**
- **Two million sample static memory per channel**
- **100 MHz bandwidth**
- **Low noise operation**
- **1 MW Input Impedance**
- **Input ranges ±0.5 volts to ±250 volts in 9 ranges**
- **Full scale offset adjustment**
- **Analog triggering from either channel or external trigger**
- **Programmable post trigger sample count**

Samples are recorded to a circular buffer which stops filling after recording a specified number of samples after the trigger event. This feature allows for adjustment of recording capacity for the level ofinterest in samples before the trigger event.

- **Segmentable memory**

A segmented memory architecture and internal timer allow multiple sequential events to be captured and time stamped without the need to read data between events. The sample memory is divisible into segments of as little as 64 KSamples. The internal timer is used to record a count with each trigger event which can be used to determine the relative time of multiple trigger events.

- **Turnkey transient recorder software for Windows**

The software provides an oscilloscope look and feel for a familiar and easy start to transient recorder operation with one or multiple modules. The application coexists seamlessly with other instrument system components and can often be used as the only interface to the transient recorder.

- **Fully documented API provided as a Windows DLL**

The API can be directly accessed from programming environments such as C, Visual Basic, and LabView for adaptation to a larger instrument system.

- **Software source code provided**

All software is provided with source code for the possibility of adaptation to other environments or addressing custom applications. The API is written in C and the application layer is written in Visual Basic. The source code can be helpful in understanding the API layer for adaptation to other application programming environments.

The TR122 Transient Recorder is a high performance two channel transient waveform digitizing instrument in a sir gle slot 3U Compact PCI module, capable of digitizing to 12 bits at rates up to 200 MS/s on each channel indepeı dently. Each channel includes an independent analog front end and analog-to-digital converter, providing superio interchannel isolation and full bandwidth availability on all channels.

The TR122 and included software provide a turn key transient measurement solution, while included softwar source code and drivers provide powerful system level integration options.

Detailed Specifications

Dataway Interface
Compact PCI at 32 Bits and 33 MHz
Compliant with PICMG 2.0 R3.0
Single Width 3U Compact PCI Card

Sample Rate
200 MS/s All Channels
100 MHz Bandwidth

Input Channel Architecture
2 Independent Analog Signal Inputs
1 External Trigger Input

Analog Input Characteristics
Single Ended DC Or AC Coupled
Full Scale Offset 10-Bit Resolution
1 M. 20 pF Or 50 . Impedance

External Trigger Input
Single Ended DC Coupled
1 K. 20 pF

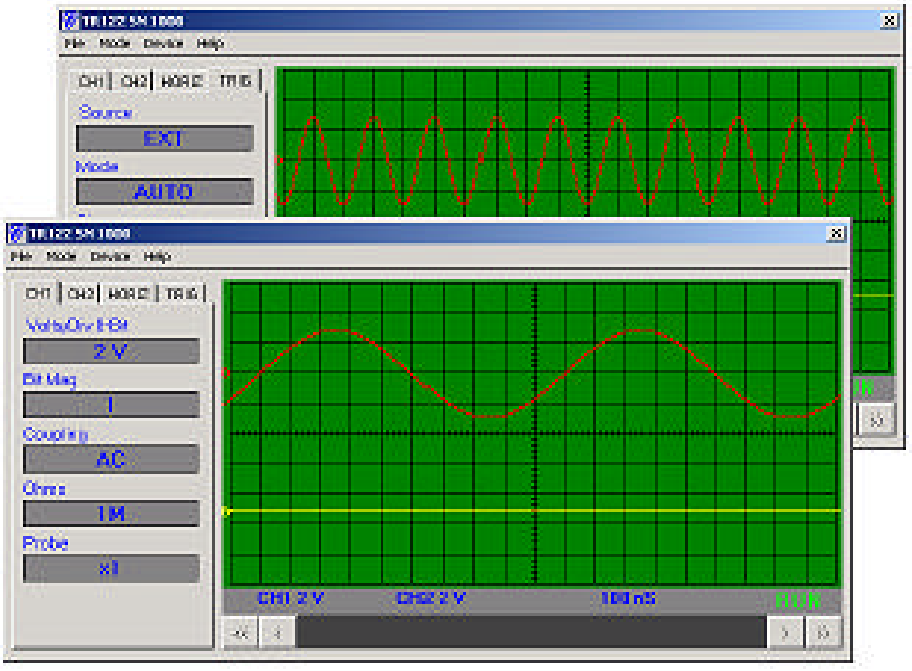
Ambient Temperature Range
0 To 70 C

Memory
2 MSample Per Channel
64 KSample Minimum Block Size
Configurable Segmenting

Input Sensitivity
12-Bit Resolution
1-500 Volts Full Scale In 9 Ranges
0.05% Accuracy (10 LSB)
80 dB Minimum Interchannel Isolation

Input Withstand Rating
1 M. Input ±250 VDC
50 . Input 4 Watts (14 Volts RMS)

Trigger Input Sources
Channel Greater Than Full Scale Range
External -10V To +10V 10-Bit Resolution
Rising Or Falling Edge



Ordering info

TR 122 Transient Recorder

TR122 2 analog inputs, 200MS/s, 12 bits

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