

CAEN SyncTest x742

**Demo Software for
x742 Digitizers
Synchronization**

CAEN

SyncTest
x742

Features



- Console application to demonstrate the synchronization of two V/VX1742 CAEN digitizers
- Digitizers configuration by configuration text file with parameters and instructions
- Multi-board acquisition management by key commands
- Multi-channel waveform plot
- Individual settings for threshold and DC offset adjustment
- ASCII data saving
- Source files and Visual Studio project open source for developers

Description

SyncTest x742 software is a C-based console application for the specific support of the **x742 CAEN digitizers** basing on the **CAENDigitizer library**.

The software has the specific goal of demonstrating the synchronization of two V/VX1742.

SyncTest x742 can perform the following operations:

- Connect two digitizers through a physical communication interface (USB, Optical Link or VME).
- Program the digitizers for the synchronization according to parameters written in a configuration file (text file).
- Check the clock alignment.
- Start and stop the acquisition (run on/off).
- Acquire waveforms from the digitizers and check the alignment of the signal in comparison to a reference channel.
- Save the waveform samples to timestamped ASCII files.

SyncTest x742 is provided with C source files to let the users customize the code for personalized solutions.

The program core is a C application that configures the digitizer, starts/stops the acquisition, and checks the alignment of a signal in comparison to a reference channel, according to a set of parameters as reported in the configuration text file. Data passing the alignment check (waveforms or time histograms) can be plotted using the third-party Gnuplot tool, or saved to output text files.

Supported Operating Systems: Windows, Linux

Language: C

Supported Products: VME x742 Digitizers

Supported Comm. Interface: USB, Optical Link, VME

Additional Software Required: CAENDigitizer, CAENComm, CAENVMElib, Gnuplot (Linux only)

Applications

- Signal inspection and waveform recording
- Sensors readout and detectors' performances

Related Products

V1742



32+2 Channel 12bit 5 GS/s Switched Capacitor Digitizer

VX1742



32+2 Channel 12bit 5 GS/s Switched Capacitor Digitizer



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