Digitizer B021

Two-channel Digitizer B021 represents the hardware core of VI-100 SYSTEM of DASP Virtual Instruments. It performs digitizing of wideband analog signals in various software-selectable samp-ling modes for further PC-aided digital signal processing.

In addition to the periodic sampling mode, typical for the classical DSP applications, (up to 50 MS/s in each channel), B021 Digitizer offers a special DASP mode of signal sampling that provides for 4 times enlargement of the input signal frequency range (up to 100 MHz). The PLD-based design of the digitizer makes it relatively simple and small-sized. B021 Digitizer has two selectable 50Ω or 100 KΩ inputs, coax or probe. It is connected to PC via parallel port functioning in the EPP mode. There is a built-in test signal generator supplying a rectangular waveform. The repetition rate is up to 10 MHz.

B021 Specifications

	One channel (A or B)		**Two channels (A and B)**
	DASP mode	*DSP mode*	*DSP mode only*
Analog bandwidth	10 KHz to 100 MHz	10 KHz to 50 MHz	10 KHz to 25 MHz
Sampling rate	50 MS/s mean (200 MS/s equiv.)	100 to 0.1 MS/s	50 to 0.05 MS/s
Record length	32K samples		16K samples per channel
Input range	±1.0 V		
Input resistance	50 Ω or 100 KΩ		
Input coupling	AC		
Resolution	8 bits (8 mV/div.)		
Trigger	From PC or by the external signal (TTL)		
Test signal output	TTL level, 9.8 to 0.076 MHz repetition rate		

Power supply	+9V/0.5A from external adapter
Connection to PC	via parallel port working in EPP mode
Dimensions	130x54x175 mm

Last update: Oct. 2004

Digitizer B021

Institute if Electronics and computer Science
University of Latvia. www.edi.lv