



# **Digitizer AL8xGTE-1**

- PCI Express Bus Interface
- Configurable as 1 Channel @1 GHz. or 2 Channels @ 500 MHz.
- 8 bit Resolution

- 125 mV to 2V input range
- Oscilloscope Software
- Software Development Kit supports C/C++, C#, VB and LabVIEW

Acquisition system is capable of being re-armed by hardware within 1uS of the previous trigger.

- ♦ Up to 2 Billion samples of on-board acquisition memory
- ♦ Dual Ported Memory Architecture for simultaneous collection and processing/download.
- ♦ Trigger Input/Output Connector
- Optional External Clock Connector
- Multiple Trigger Modes

## AL8xGTE-1

is a single-channel, high speed, 8 bit 1 GS/s PCI Express Digitizer board upporting the PCI Express x1 bus. Onboard memory options range from 512M samples to 4G samples Memory operation allows acquisition to continue while data is being transferred to the PC.

The AL8xGTE-1 digitizer utilizes 8-bit ADC to digitize the input signals. The sampling rate ranges from 1GS/s to 250KS/s. The acquisition is capable of being triggered by software, BNC, Quadrature encoder input, or internal TTL connection. Acquisition can consist of multiple data records; each record is the result of a trigger event. Records can have both pre-trigger and post-trigger data.

The AL8xGTE-1 KIT
Includes a sample application that allows users to immediately begin data acquisition. Integration of the AL8xGTe-1 into customer specific software is simplified by a Windows based software development kit that is included at no additional charge. The SDK includes support of C# or C/C++ and VB, LabVIEW™ for Windows.

# **Acquisition System**

Resolution	8 bits
Bandwidth	
DC-coupled	50Ω, DC - 1000 MHz
Number of channels	1 Channel @ 1 GHz or 2 Channels @ 500 MHz
Maximum Sample Rate	4 GHz in 1 Channel Mode
Minimum Sample Rate	250 KHz single shot for internal clocking
Full Scale Input ranges	50 Ω input impedance-125mV, 250mV, 500mV, 1V, 2V software
	selectable DC accuracy ±5% of full scale in all input ranges
Input coupling	DC
Input impedance	50Ω
Input protection	50Ω ±5V

## **IO Connectors**

BNC: CHA

BNC: CH B (used in 2 channel config.)

**BNC: TRIG IN/TRIG OUT** 

**BNC: Clock** 



Time Base

Internal Clock

External Reference Clock

# Computer Requirements

### **Power Requirements**

+5V 3.5 A + 3.3V 2.4 A +12V .01A - 12V .01A

## **Physical Dimensions**

Single slot PCI Express card (4.25 inches x 9.375 inches) Weight 210g

#### Environmental

Operating temperature 0 to 55 o C Storage temperature -20 to 70 o C Relative humidity 5 to 95%, non condensing



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