

1 DIGITIZER STUDIO INTRODUCTION

1.1 Features

- Diagram view for understanding relation between parameters
- Table view for efficient entry of parameters
- Details view with complete information about parameters
- Waveform plot in multiple windows
- Multiple Cursor
- Time-domain and FFT plot
- Signals analysis

1.2 Applications

- Test and measurement
- Scientific instruments
- Medical imaging
- Particle physics
- ATE

1.3 Advantages

- Digitizer Studio is a fast and easy way to evaluate the performance of the ADQ digitizer.
- Digitizer Studio is an easy to use tool to explore the possibilities of the ADQ digitizers.
- Digitizer Studio can interface to the end application by saving recorded data.
- Digitizer Studio speeds up the development of the application since the development of the application can be separated from control of the digitizer.

2 DIGITIZER MODEL SUPPORT

Digitizer studio supports the following models.

Table 1 ADQ digitizer models

Model	Interface options	Configuration options	Firmware	Limitations
ADQ8-8C	PXIe, MTCA	All options	FWDAQ	Daisy chain trigger not supported. MTCA signals "MLVDS" has limited support.
ADQ8-4X	PXIe	All options	FWDAQ2G FWDAQ4G	Daisy chain trigger not supported
ADQ14	USB, PXIe, PCIe, MTCA	All options	FWDAQ, FWATD, FWSDR	MTCA signals "MLVDS" has limited support
ADQ7DC	USB, PXIe, PCIe, MTCA	All options	FWDAQ, FWATD, FW2DDC	No support for 10GBE port MTCA signals "MLVDS" has limited support
ADQ7WB	PXIe, PCIe	All options	FWDAQ, FW2DDC	
ADQ12DC	PCIe	All options	FWDAQ	
ADQ32	PCIe		FWDAQ	

3 GENERAL LIMITATIONS

The GPIO function is not supported by the GUI since this function is related to building a real-time application.

For using the full potential and flexibility of the ADQ digitizer, the c/c++ or Python programming interface is recommended.

To achieve maximum data throughput, the c/c++ programming interface is required.

4 SYSTEM REQUIREMENT

Digitizer Studio operates under Windows 10 and Linux.

See 15-1494 Operating system support for a detailed listing of supported distributions.

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