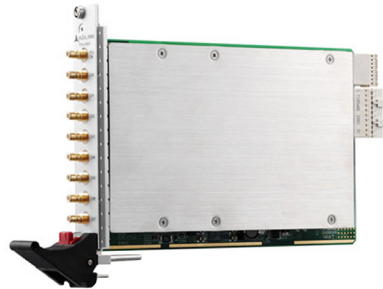# PXIe-9848

8 CHANNEL, 14-BIT, 100 MS/S,
PXI EXPRESS DIGITIZERE

FEATURES

8-CH, 14-bit, 100 MSa/s simultaneous sampling
analog outputs

512 MB deep on-board memory

Software selectable 50Ω or 1 MΩ input impedance

±0.2V and ±2V input ranges

SMB digital trigger input

Fully auto calibration

Driver and SDK support for Windows and Linux, and for
third-party applications including Visual Studio, LabVIEW
and MATLAB

VTI
Instruments

www.vtiinstruments.com

OVERVIEW

The PXIe-9848 is an 8 channel, 14-bit, 100 MS/s digitizer for high frequency and wide dynamic range signals with input frequencies up to 100 MHz. The analog input range can be programmed via software to ±1 V or ±0.2 V. With a PCI Express bus interface and ample onboard acquisition memory up to 512 MB, the PXIe-9848 easily manages simultaneous 8-CH data streaming even at a full 100 MS/s.

Equipped with high speed and high linearity 14-bit A/D converters, the PXIe-9848 is ideal for applications requiring high-speed data acquisition, such as PSU (power supply unit) testing, LIDAR testing, and radar signal acquisition.

Software drivers and SDK support are provided for Windows and Linux environments. Wide range of application development environments including Visual Studio, Labview, Matlab and VEE are supported.

Detailed Specifications

ANALOG SPECIFICATIONS

NUMBER OF CHANNELS	8 single-ended
INPUT IMPEDANCE	50 Ω or 1 MΩ software selectable
INPUT COUPLING	AC or DC
INPUT RANGE	±0.2 V, ±2 V
ADC RESOLUTION	14-bit
OFFSET ERROR	±1 mV
GAIN ERROR	±0.5% of input
-3 DB BANDWIDTH TYPICAL	100 MHz
OVERVOLTAGE PROTECTION	±5 V

TRIGGERING

TRIGGER SOURCES	Software, External digital, PXI Star, PXI Trigger Bus
TRIGGER MODES	Pre-trigger, post-trigger, middle trigger, delay-trigger
EXTERNAL DIGITAL TRIGGER COMPATIBILITY	5V, 3.3V TTL compatibility
EXTERNAL DIGITAL TRIGGER CONDITION	Rising edge of falling edge trigger condition, software programmable.
EXTERNAL DIGITAL TRIGGER MINIMUM PULSE WIDTH	20 ns minimum pulse width

TIMEBASE

SAMPLE CLOCK SOURCE	On-board oscillator sample clock source
	100 MHz timebase frequency

DATA STORAGE AND TRANSFER

ON-BOARD MEMORY	512 MB shared
DATA TRANSFER	Scatter-gather DMA

ON-BOARD REFERENCE

VOLTAGE	+2.000V
DRIFT	< 3.0 ppm/°C
RECOMMENDED WARM UP TIME	15 minutes

GENERAL SPECIFICATIONS

I/O CONNECTOR	Analog inputs: SMB
EXTERNAL DIGITAL INPUTS: SMB	
OPERATING TEMPERATURE	0°C to 55°C
RELATIVE HUMIDITY:	10% to 90% non-condensing
STORAGE TEMPERATURE	-20°C to 80°C
CERTIFICATIONS	EMC/EMI: CE, FCC Class A

Notes:

1) All specifications are typical unless otherwise stated as a minimum or maximum.

2) All specifications subject to change without notice.

3) All specifications assume within 24 hours and 5°C of self-calibration temperature unless otherwise specified

4) Distributed product. These products are manufactured and supported by other leading vendors

RELIABLE DATA   FIRST TIME   EVERY TIME

Ordering Information

PXIE-9848	8 Channel, 14-bit, 100 MS/s, PXI Express Digitizer
RELATED PRODUCTS	
EMX-4350	4-Channel, 625k Sa/s Smart Dynamic Signal Analyzer
EMX-4250	16-Channel, 200k Sa/s Smart Dynamic Signal Analyzer
CMX09	9-slot, 3U PXI Express Chassis
CMX18	18-slot 3U PXI Express Chassis