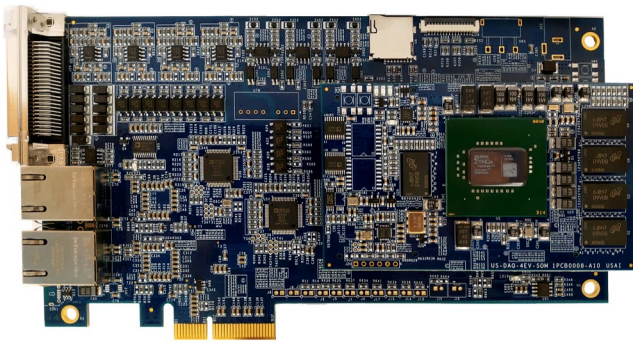


DAQ-D1001-01

256 kS/s, 16-Bit, 16-Ch, DAQ Platform with Xilinx
MPSOC 1.5GHz PCI Express Multifunction DAQ Card

Features

- 32 single-ended or 16 differential or a combination of analog inputs
- 16 A/D converters simultaneously sampling
- 16 analog inputs, up to 256kS/s, 16-bit resolution
- 2 analog outputs, up to 3 MS/s, 16-bit resolution
- Supports analog and digital triggers for analog I/O
- 6 programmable digital I/O lines
- 2 x 10/100/1000 Base-T RJ-45 LAN ports
- 2 x RS-232/RS-485 port



Introduction

DAQ-D1001-01 is an ARM based stand-alone automation controller integrates with data acquisition and signal conditioning to provide analog I/O, isolated digital I/O, and counter functions. This application-ready controller also supports serial communication ports and several other networking interfaces to seamlessly enable integration and rapid system development

Specifications

Analog Input

- Channels 32-ch single ended, 16-ch differential
- Resolution 16 bits
- Sample Rate 256 kS/s per channel
- Overvoltage Protect 30 Vp-p
- Input Impedance Voltage: 1 GΩ
Current: 249 Ω
- Input Range Software programmable
- Accuracy ±0.1% FSR@25°C, ±0.3% FSR@-20/75°C

Voltage	0 ~ +10V, 0 ~ +5 V, -5V~+5V -10V~-+10V
Current	0~20mA, 4~20mA

Analog Output

- Channels 2-ch
- Resolution 16 bits
- Output Range Software programmable
- Driving Capability 0~20 mA
- Accuracy DNLE: ± 1 LSB

Isolated Digital Input

- Channels 6-ch
- Isolation Protection 3,750 VDC
- Opto-Isolator Resp 18 us
- Input Voltage Logic 0: 3V max.
Logic 1: 5 ~ 50 V
- Overvoltage Protect 50 Vp-p

Isolated Digital output

- Channels 6-ch (sink type)
- Isolation Protection 3,750 VDC
- Opto-Isolator Resp 18 us
- Sink Current 200mA per channel
- Digital I/O select Software programmable
- Overvoltage Protect 50 Vp-p

General

- Bus Type Universal PCI-E Gen2 x 4
- PCI-E card dimension 7.625 x 3.87(L x W)
- Power Requirements 12Vcc input (PCI-E slot)
- I/O Connector 1 x 50-pin SCSI female connector
- Operating Temperature 0 ~ 70°C
- Storage Temperature -20 ~ 85°C

System Hardware

- CPU Xilinx Ultrascale+ MPSOC XCZU4EV
- Memory Onboard DDR4 2GB, max 4GB
- Flash 64MB QSPI Flash
- Ethernet 2 x 10/100/1000 Mbps
- USB 1 x USB 2.0 OTG
- Serial Port 2 x RS-232/RS-485
- Storage 1 x SD slot
- MIPI-CSI2 1 x FPC slot

