USB-4702

10 kS/s, 12-bit, 8-ch Multifunction USB Module

NEW

CE FCC RoHS COMPLIANT 2002/95/EC
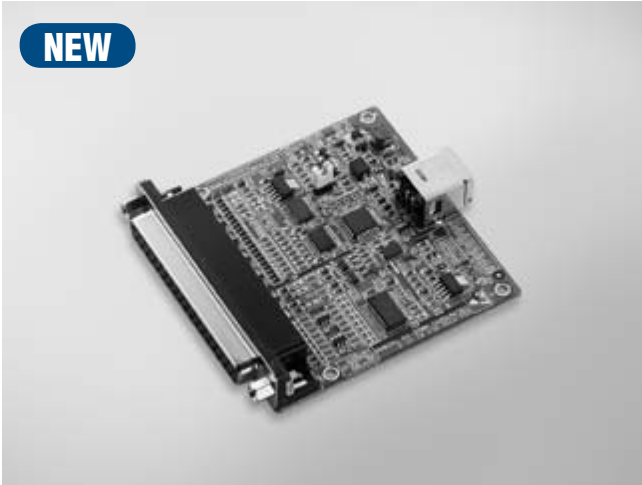
Features

- Supports USB 2.0
- Bus-powered
- 8 analog input channels
- 12-bit resolution AI
- Sampling rate up to 10 kS/s
- 8-ch DI/8-ch DO, 2-ch AO and one 32-bit counter

Introduction

USB-4702 is a low-cost USB data acquisition module. You no longer need to open the chassis to install DAQ modules. Just plug in the module, then get the data. It's easy and efficient. The USB-4702 is the perfect way to add measurement and control capability to any USB capable computer. It obtains all required power from the USB port, so no external power connection is ever required. With the features of USB-4702, it is your most cost effective choice of lab or production line test & measurement tool.

Specifications

Analog Input

- **Channels**   8 single-ended/4 differential (software programmable)
- **Resolution**   12 bits
- **Max. Sampling Rate**   10 kS/s max.
- **FIFO Size**   512 samples
- **Overvoltage Protection** 30 Vp-p
- **Input Impedance**   127 kΩ
- **Sampling Modes**   Software, onboard programmable pacer, and external
- **Input Range**   (V, software programmable)
                             Single ended: ± 10
                             Differential: ±1, ±1.25, ± 2, ± 2.5, ±4, ±5, ±10, ±20

Analog Output

- **Channels**   2
- **Resolution**   12 bits
- **Output Rate**   Static update
- **Output Range**   (V, software programmable) 0~5
- **Slew Rate**   0.7 V/µs
- **Driving Capability**   5 mA
- **Output Impedance**   51 Ω
- **Operation Mode**   Single output
- **Accuracy**   Relative: ±12 LSB
                             Differential non-linearity: ±5 LSB

Digital Input

- **Channels**   8
- **Compatibility**   3.3 V/5 V/TTL
- **Input Voltage**   Logic 0: 0.8 V max.
                             Logic 1: 2.0 V min.

Digital Output

- **Channels**   8
- **Compatibility**   3.3 V/TTL
- **Output Voltage**   Logic 0: 0.4 V max.@ 4 mA (sink)
                             Logic 1: 3.5 V min.@ 4 mA (source)

Counter

- **Channels**   1
- **Resolution**   32 bits
- **Compatibility**   3.3 V/TTL
- **Max. Input Frequency**   5 MHz

General

- **Bus Type**   USB 2.0
- **I/O Connector**   1 x DB37 female connector
- **Dimensions (L x W)**   70 x 70 mm (2.76" x 2.76")
- **Power Consumption**   Typical: 5 V @ 100 mA
                             Max.: 5 V @ 500 mA
- **Operating Temperature** 0 ~ 55° C (32 ~ 131° F)
- **Storage Temperature**   -20 ~ 70° C (-4 ~ 158° F)
- **Storage Humidity**   5 ~ 95% RH non-condensing (refer to IEC 68-2-3)

Ordering Information

- **USB-4702**   10 kS/s, 12-bit, 8-ch Multi. USB Module
- **PCL-10137-1**   DB37 Cable, 1m
- **PCL-10137-2**   DB37 Cable, 2m
- **PCL-10137-3**   DB37 Cable, 3m
- **ADAM-3937**   DB37 DIN-rail Wiring Board