

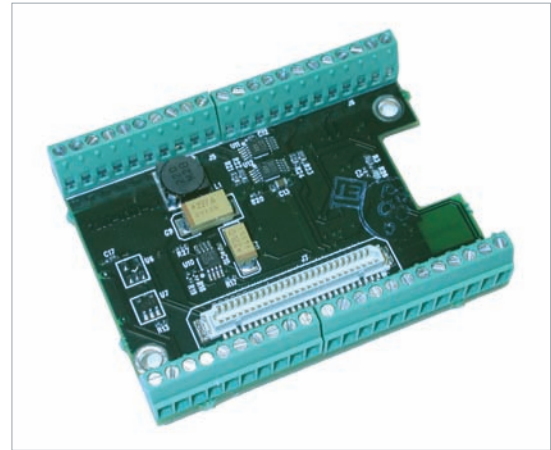
# MDA300

## DATA ACQUISITION BOARD

- Multi-Function Data Acquisition Board with Temp, Humidity Sensor
- MICAz/MICA2 Compatible with MoteView Driver Support
- Up to 11 Channels of 12-bit Analog Input
- Onboard Sensor Excitation and High-Speed Counter
- Convenient Micro-Terminal Screw Connections

### Applications

- Environmental Data Collection
- Agricultural and Habitat Monitoring
- Viticulture and Nursery Management
- HVAC Instrumentation and Control
- General Data Collection and Logging



## MDA300CA

Developed at UCLA's Center for Embedded Networked Sensing (CENS), the MDA300CA is an extremely versatile data acquisition board that also includes an onboard temperature/humidity sensor. With its multi-function direct user interface, the MDA300CA offers a convenient and flexible solution to those sensor modalities commonly found areas such as environmental and habitat monitoring as well as many other custom sensing applications.

As part of a standard mesh network of TinyOS-based MICAz/MICA2 Motes, the MDA300CA's easy access micro-terminals also make it an economical solution for a variety of different agricultural applications and a key component in the next generation of low-cost wireless weather stations.

### Communication and control features including:

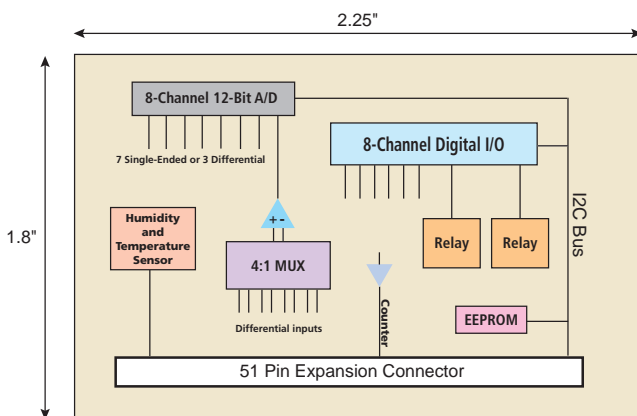
- 7 single-ended or 3 differential ADC channels
- 4 precise differential ADC channels
- 6 digital I/O channels with event detection interrupt
- 2.5, 3.3, 5V sensor excitation and low-power mode
- 64K EEPROM for onboard sensor calibration data
- 2 relay channels, one normally open and one normally closed
- 200 Hz counter channel for wind speed, pulse frequencies
- External I2C interface

Open-Source TinyOS drivers for the MDA300CA data acquisition board are available from the TinyOS project at:

<http://www.sourceforge.net>

Information on both hardware design and a variety of compatible sensors is available from the following CENS web site:

<http://www.cens.ucla.edu/~mhr/daq>



MDA300CA Block Diagram

### Ordering Information

Model	Description
MDA300CA	MICAz/MICA2 Data Acquisition Board with temperature and humidity