I²C-IO-Shield

for Arduino™ **ord. no. 90BEII002003**

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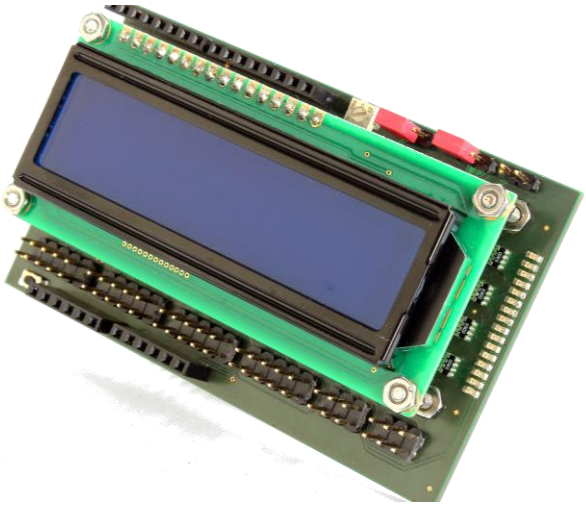
Summary

The I²C-IO-Shield is an universal digital and analog interface card, which splits up the two TWI pins of an Arduino™-Board into many additional inputs and outputs with several functions, as well as a dot matrix LCD, a real-time clock and an EEPROM.

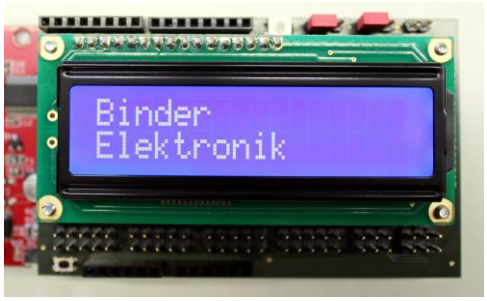


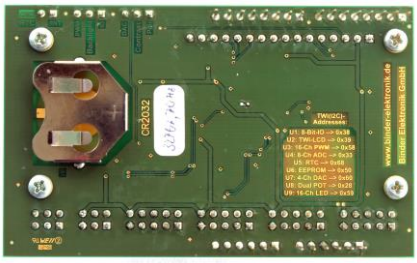
Applications

The I²C-IO-Shield is the ideal solution for applications, which need a lot of further I/O functions on an Arduino™-Board.

Key Features

- 8 general-purpose quasi-bidirectional I/O lines for 5V Levels
- Two 16-channel LED drivers providing pulse-width modulation (PWM), 12-bit resolution, 40...1000Hz, 5V levels for LED (<25mA). The first is attached to a connector; the second is connected to a LED bar graph. It has also the ability to generate control signals for servos
- 8-channel, 12-bit analog-to-digital converter
  Input range: 0...4.096V
- 4-channel, 12-bit digital-to-analog converter
  Output range: 0...2.048V or 0...4.096V
- 2 digital potentiometers (10kΩ) with 8-bit resolution
- LCD with 16 x 2 characters, backlight can be switched by its I²C expander or be controlled by a PWM output, contrast is adjustable by a potentiometer or a DAC channel
- Battery backed up real-time clock with calendar and programmable alarm/clock output
- 256 kBit EEPROM
- The IO-Shield is compatible with Arduino™ Diecimila, Duemilanove, Uno, Ethernet and other microcontroller boards, which provide I²C on Pin A4/A5 and work with 5V supply voltage
- A library for Arduino™ is available which covers a large amount of useful functions





Bottomside with battery clip