

## **Description**

The AD2433\_proto is a continuation of while(1)\_engineering's low cost and convenient A<sup>2</sup>B expansion boards. Similar to the AD2428\_proto, the AD2433\_proto exposes A<sup>2</sup>B interfaces Port A and Port B, as well as GPIO, I2S and I2C. New features from the AD243x series of parts now offers an SPI interface which is also accessible along with a convenient on-board Analog Devices USBi header.

The AD2433\_proto can be configured in local powered or bus powered applications by setting jumpers on the board. A jumper setting is also used to select the logic level of the IC at +3.3V or +1.9V. Molex Dura-Click connectors are used as the AD2433 is intended for low-power applications. While all signals from the GPIO, I2S, I2C and SPI interfaces are routed to convenient 100-mil pitch IDC headers, the I2C signals are also interfaced to a QWIIC connector allowing flexibility to interface to a variety of devices developed for the QWIIC ecosystem. Additionally, a 256kb EEPROM is present on the board along with the option of an opto-isolated enable circuit.

While larger than while(1)\_engineering's AD2428\_proto in the vertical direction, the AD2433\_proto matches the form factor of the AD2428\_proto with respect to the large IDC header and mounting holes near the A<sup>2</sup>B interface. This allows users an easy replacement or swapping capabilities for simple re-use and minimizing development.

## <u>Applications</u>

- Application development and debug
- In-vehicle testing and diagnostics
- Test and measurement



A<sup>2</sup>B is a registered trademark of Analog Devices Incorporated

## **Features**

- Port A & Port B A2B interfaces
- I2S, I2C & SPI interfaces
- USBi interface
- Configurable Local or Bus powered
- Configurable logic-levels
- GPIO LEDs and expansion headers
- 256kb EEPROM memory
- Optional opto-isolated enable circuit available upon request at additional cost

THE AD2433\_proto WILL ONLY BE SOLD TO CUSTOMERS WITH A VALID NDA WITH ANALOG DEVICES WHICH WILL BE CONFIRMED BY WHILE(1)\_ENGINEERING. FOR MORE DETAILS AND TO REQUEST A FULL DATASHEET CONTACT pantelis@while1.io



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