SparkFun AST-CAN485 Dev Board

DEV-14483

The SparkFun AST-CAN485 Dev Board is a miniature Arduino in the compact form factor of the Pro Mini. In addition to all the usual features that a mini Arduino has, it possesses an onboard CAN (Control Area Network) and RS485 ports, enabling quick and easy interfacing to a multitude of industrial devices. The CAN485 Dev Board bridges the gap between the maker and industrial spaces!

The CAN485 builds on the massively popular Arduino platform and is pin-compatible with the Arduino Pro Mini, giving it a small form factor ideal for embedding in projects. It supports the Arduino IDE and Arduino core libraries and is installed using the Arduino boards manager. Libraries are provided to support the CAN and RS485 ports, making it easy to get started and interface with.
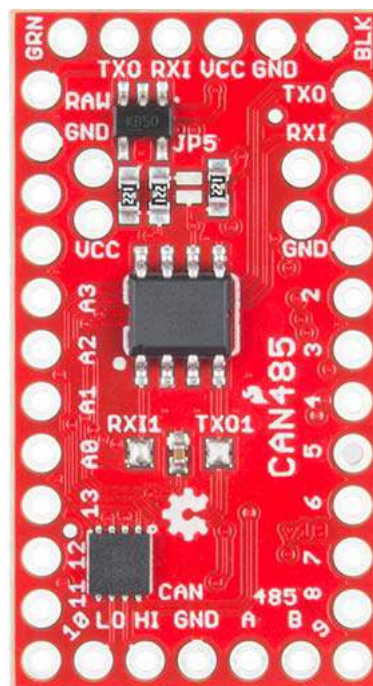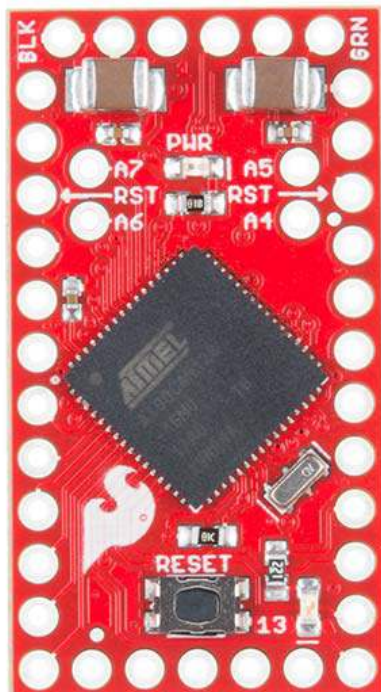
Thanks to the onboard CAN and RS485 transceivers, this development board allows for out-of-the-box interfacing to either network.
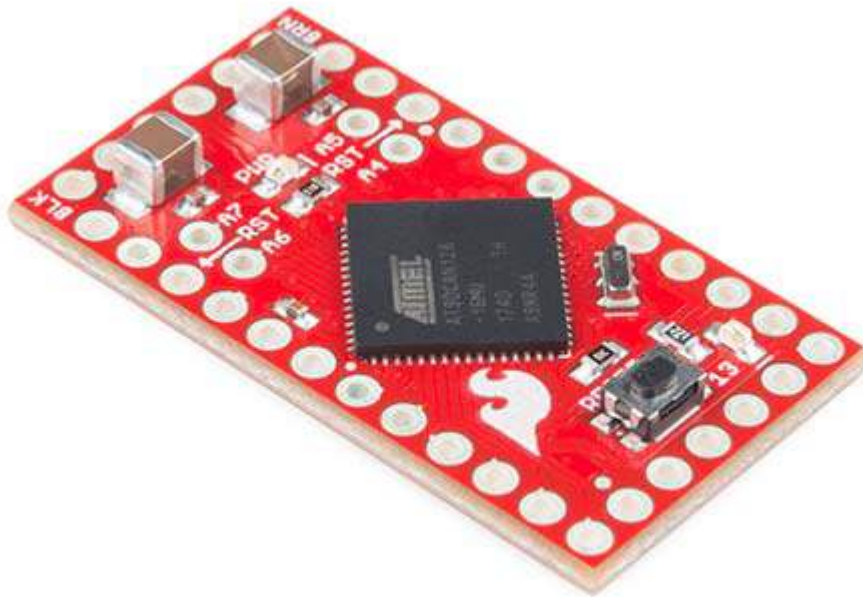
The SparkFun AST-CAN485 Dev Board is based on the Atmel AT90CAN128 processor. The processor runs at 16MHz, has 128kB or Flash, 4kB of SRAM and features a hardware CAN controller. The CAN485 breaks out commonly used communications ports and pin functions including: I^{2}C, SPI, UARTs, eight analog inputs and six interrupt-enabled pins. Additionally, the AST-CAN485 is equipped with an onboard regulator, allowing for an unregulated input voltage to be supplied on the VIN pin to make the allowable input voltage range 7–16V. Please keep in mind, however, that 7–12V is recommended.

CAN and RS485 form the backbone of many communications protocols with applications in automation, industrial systems, building management, automotive systems, OBDII and many more. With all of these features combined, you have an economical, handy board with a wide array of functions in the palm of your hand!

FEATURES

- Uses the AT90CAN microcontroller
- 16MHz Clock
- 8 analog inputs
- 2 UARTs
- 16 Digital I/Os
- DC Input: 5–16V (150mA Current Max)
- RS485 Transceiver
- CAN Transceiver
- Pro Mini form factor
- Works with Arduino
- Onboard power and D13 LEDs

https://www.sparkfun.com/products/14483 3-9-18