Interface Converters

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Overview

Interface converters provide a means of communication from the main computer to peripheral microcontrollers. Interface converters are responsible for translating USB communications into UART, SPI, and any other serial communication protocol required.

Timeline

- Hardware

1. Creation of Schematic (October 9th)
2. Footprint Association and Part Selection (October 15th)
3. Schematic and Component Review (October 20th)
4. PCB Routed (November 10th)
5. Routing Review (November 17th)
6. Order PCB (November 21st)
7. Populate and Verify Board (January 8th)

- Software

1. Determine FT232H Driver Dependencies (October 14th)
2. Determine interface functions to use (October 21st)
3. FT232H Computer Class Prototype (November 21st)
4. FT232H Driver Interface Functional (January 15th)

Design

The interface converter will allow for two different means of connecting to it: either through a female mezzanine connector or alternatively through a female connector to a cable harness as specified by the harnessing project.

Resources

Part	Description	Datasheet
FT232H	IC for converting USB to multiple different interfaces.	Datasheet
SN6505A	IC for magnetically isolating power supplies.	Datasheet