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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

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