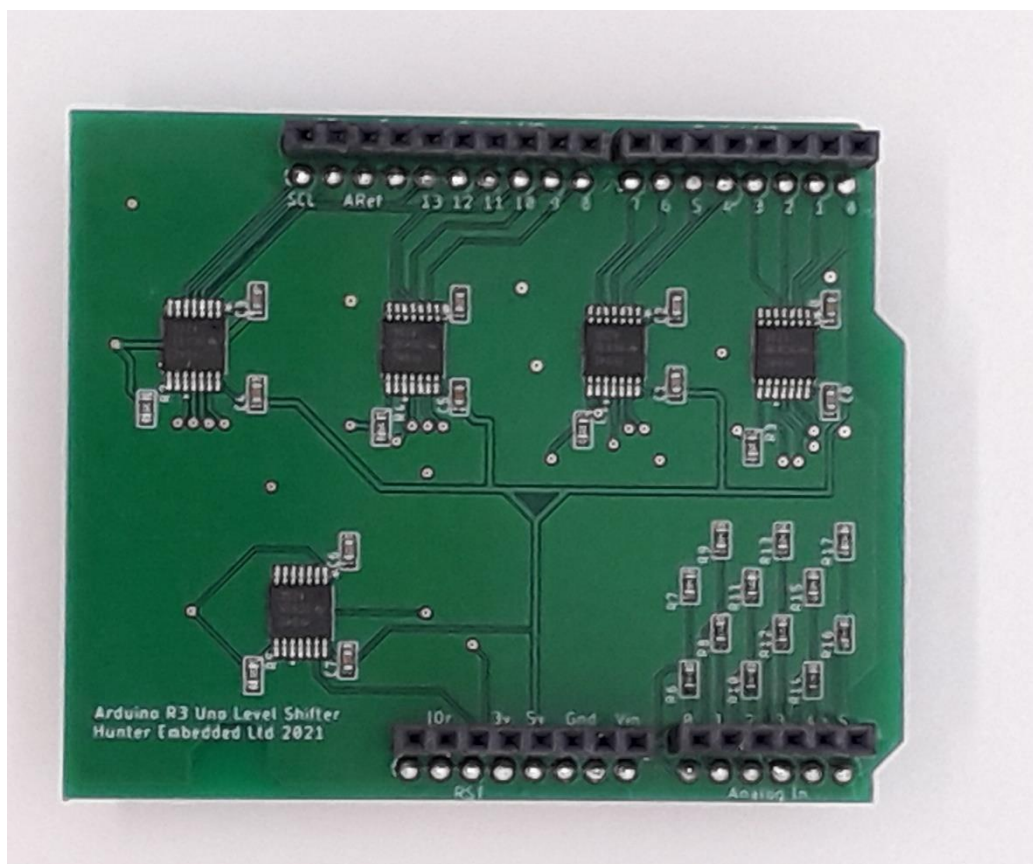# Level shifter shield

This product is designed to allow 3.3V processor boards which have implemented an Arduino® Uno (rev3) pinout to use a 5V shield. It provides the following functionality:
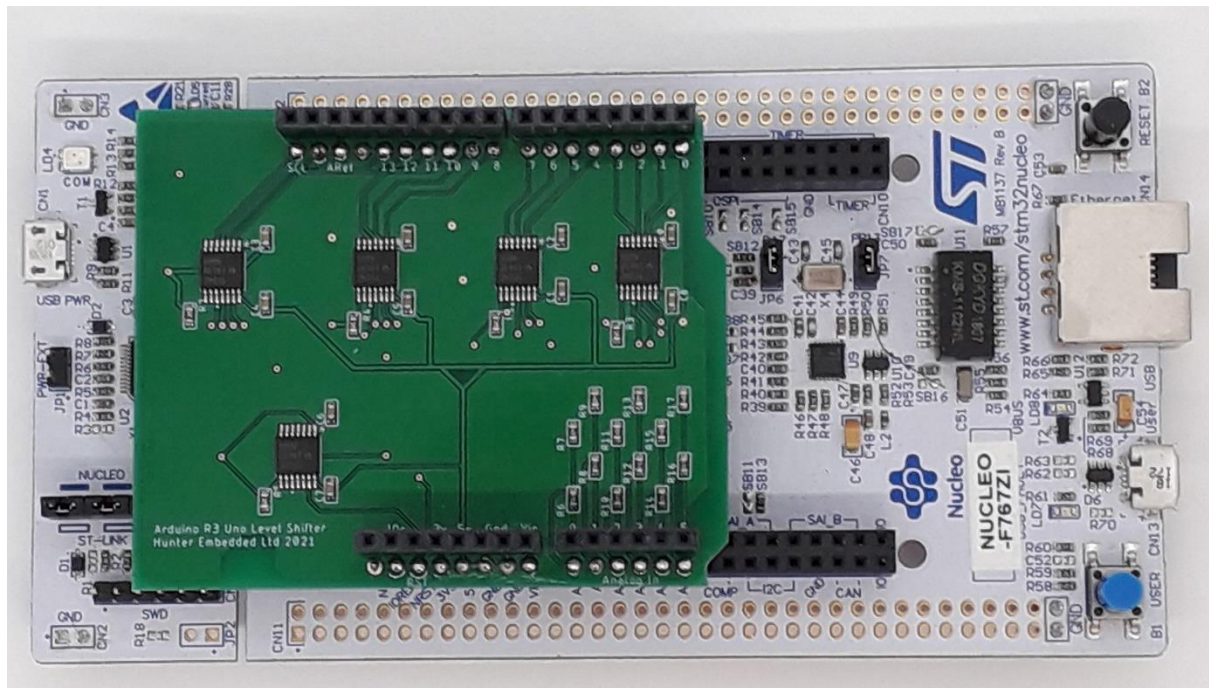
- bi-directional level shift from 3.3V (as provided on IOREF pin) to 5V on all 16 digital pins and reset using TXS0104 devices.
- Voltage dividers on the 6 analogue input pins to divide down from 0-5V range to 0-3.3V range.

On the digital pins the "low" voltage is provided by IOREF pin from the processor board.

On the analogue pins the divide ratio is fixed from 5V to 3.3V.

The level shifter is shown below plugged into an STM32-Nucleo board.

The board is available to buy from Amazon.

The schematics and Eagle .sch file are available at https://github.com/HunterEmbedded/hw-shield-level-shifter.

Trademarks

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