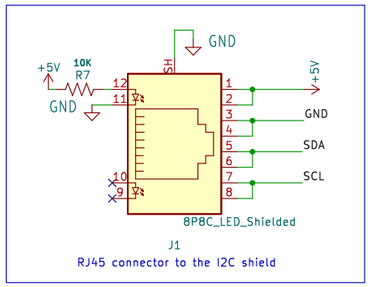
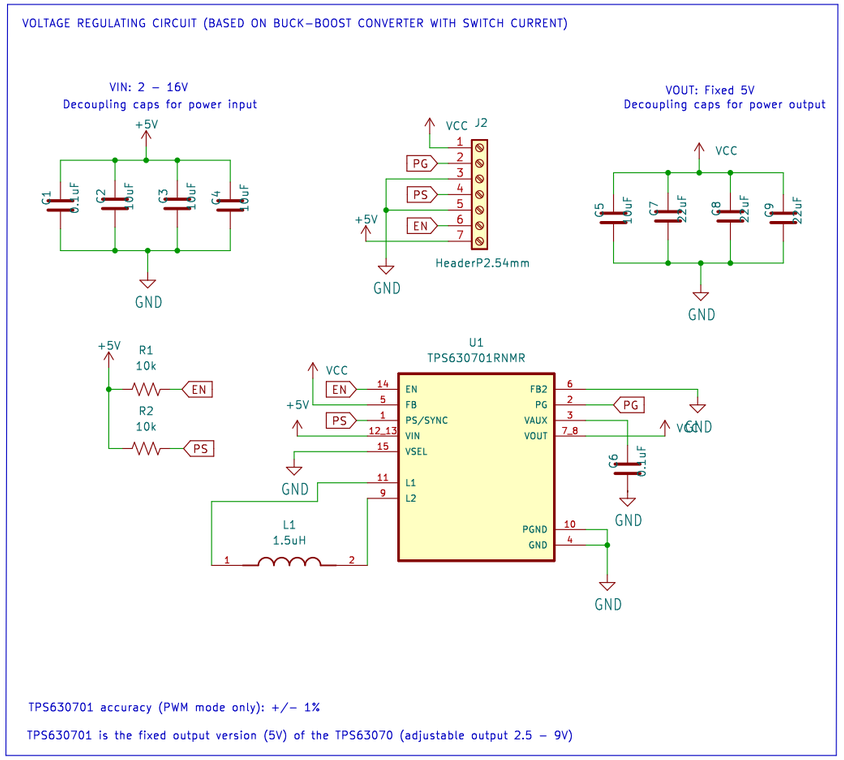
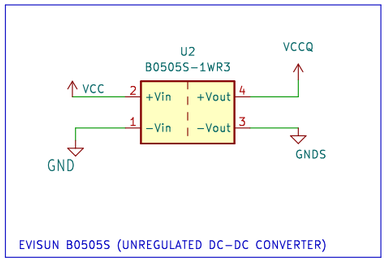


+5V ---->>

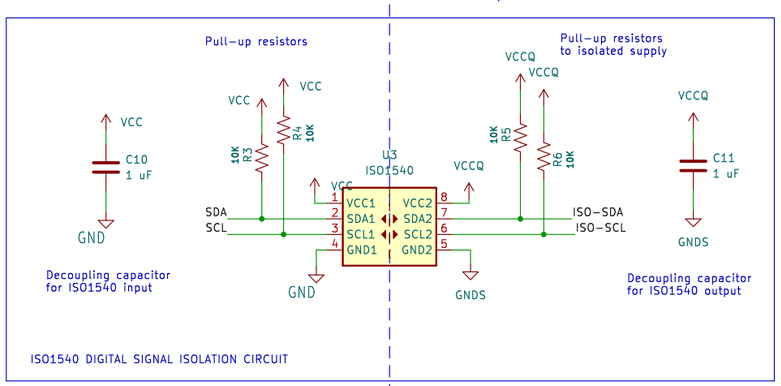


VCC ---->>

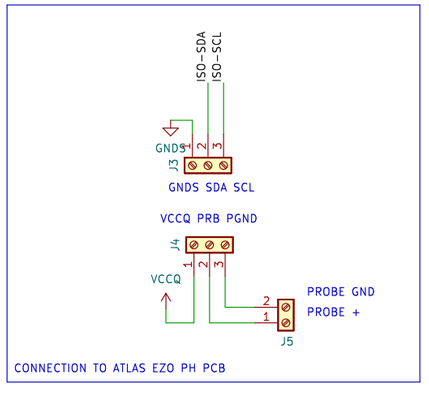


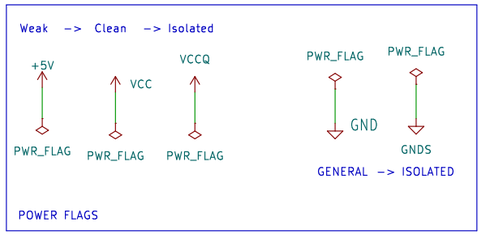
VCC ---->>

VCCQ & GNDS
(ISOLATED SUPPLY)



ISOLATED SUPPLY AND
ISOLATED I2C





NOTE:
+5V is the WEAK SUPPLY (POST-NANO, PRE-REGULATOR)
VCC is the CLEAN SUPPLY (POST-RFM-0505S)
VCCQ is the ISOLATED SUPPLY
GND is the UNISOLATED GROUND FOR GENERAL USAGE
GNDS is the ISOLATED GROUND ("S" for SIGNAL) (PRE-EZO-PH)

Note: The DC/DC converter provides: electrical isolation, galvanic isolation, noise reduction, ground loop protection and power regulation.

Note: The voltage regulator circuit transforms the 4.5V +/- 0.5V of the Arduino output to a 5V+/- 0.1% to feed the DC-DC converter.

Note: The original Atlas design (public domain) has a OFF pin. This was not kept in the design since there no 5th pin available in the CAT cable and power is cut by multiplexer when needed.

Note: For availability and cost reduction, the SI8600 ($8US) from the original design (Atlas) has been substituted with ISO1540 ($1US) by Texas Instruments (recommended).

Modified by Frederic Coulombe, B.Eng. M.Sc.
Original schematic by Atlas Scientific (public domain)
Jericho Laboratory Inc.

Sheet: /
File: WIRED-pH-EZO-Carrier-revA1.kicad_sch

Title: PCB Carrier for EZO pH Meter

Size: A3	Date: 2024-04-06	**Rev: revA1**
KiCad E.D.A. kicad 7.0.9		Id: 1/1