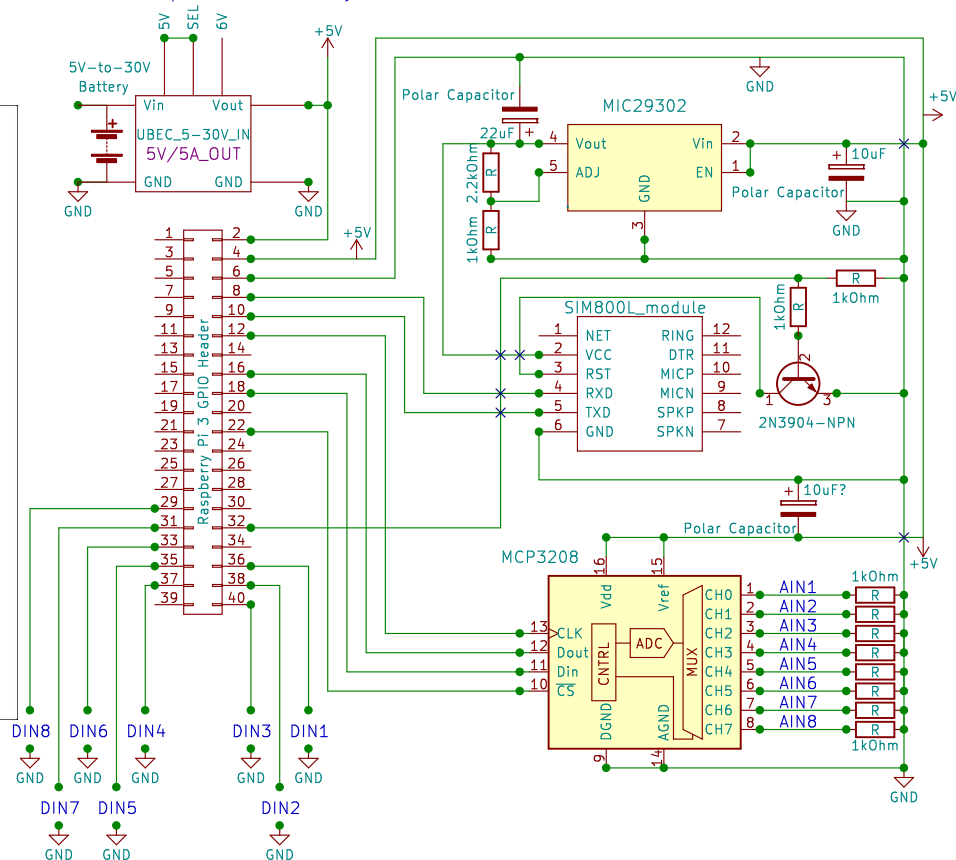


KiloWatts for Humanity Raspberry Pi based Data Logger

Pin#	NAME		NAME	Pin#
01	3.3v DC Power		DC Power 5v	02
03	GPIO02 (SDA1, I ² C)		DC Power 5v	04
05	GPIO03 (SCL1, I ² C)		Ground	06
07	GPIO04 (GPIO_GCLK)		(TXD0) GPIO14	08
09	Ground		(RXD0) GPIO15	10
11	GPIO17 (GPIO_GEN0)		(GPIO_GEN1) GPIO18	12
13	GPIO27 (GPIO_GEN2)		Ground	14
15	GPIO22 (GPIO_GEN3)		(GPIO_GEN4) GPIO23	16
17	3.3v DC Power		(GPIO_GEN5) GPIO24	18
19	GPIO10 (SPI_MOSI)		Ground	20
21	GPIO09 (SPI_MISO)		(GPIO_GEN6) GPIO25	22
23	GPIO11 (SPI_CLK)		(SPI_CE0_N) GPIO08	24
25	Ground		(SPI_CE1_N) GPIO07	26
27	ID_SD (I ² C ID EEPROM)		(I ² C ID EEPROM) ID_SC	28
29	GPIO05		Ground	30
31	GPIO06		GPIO12	32
33	GPIO13		Ground	34
35	GPIO19		GPIO16	36
37	GPIO26		GPIO20	38
39	Ground		GPIO21	40

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29/02/2016

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Parts List:

- 1x Raspberry Pi 3
- 1x 5-30V Battery (depending on decided input voltage)
- 1x UBEC 5-30V IN / 5V 5A OUT
- 1x MIC29302 – Variable Output Voltage, Linear Regulator
- 1x SIM800L – GSM Module
- 1x MCP3208 – 12 Bit ADC
- 1x 2N3904 NPN Transistor
- 1x 22uF Polar Capacitor
- 2x 10uF Polar Capacitor
- 1x 2.2k0hm Resistor (1/8 Watt)
- 11x 1k0hm Resistor (1/8 Watt)

Revision 2 by: Dave Goldsmith
KiloWatts for Humanity Data Acquisition Lead

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File: datalogger.sch

Title: KiloWatts for Humanity RPi Data Logger / RTU

Size: A4 Date: 23 Oct 2017

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