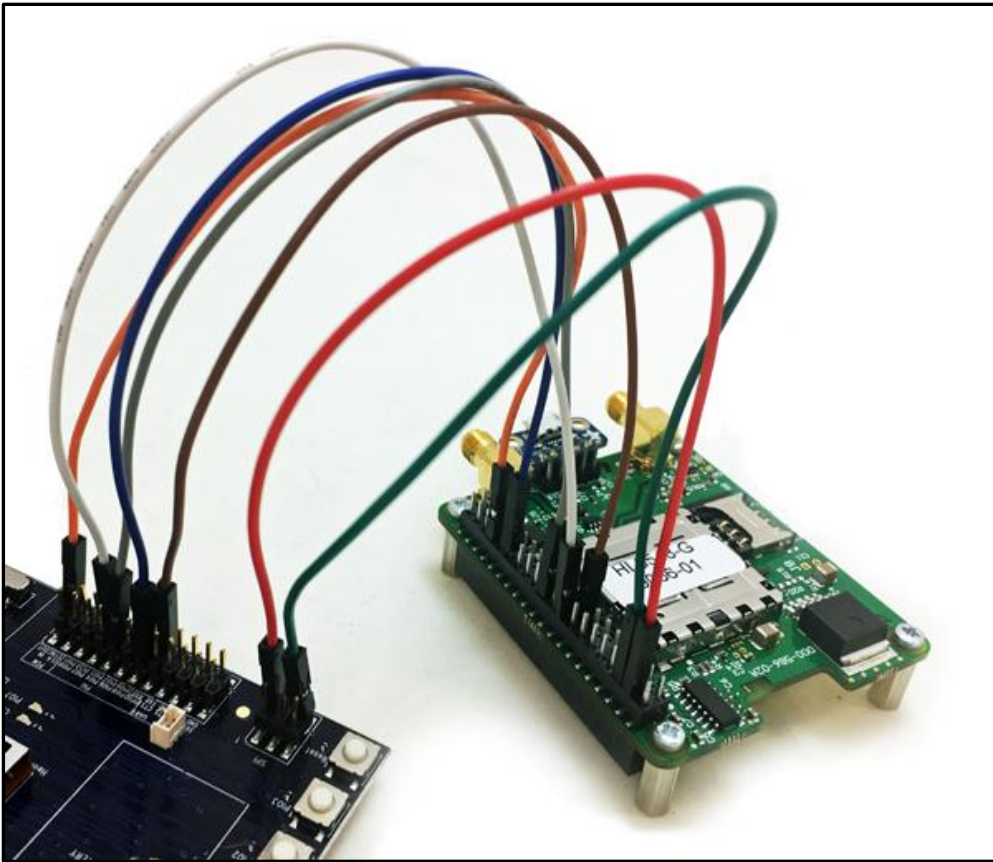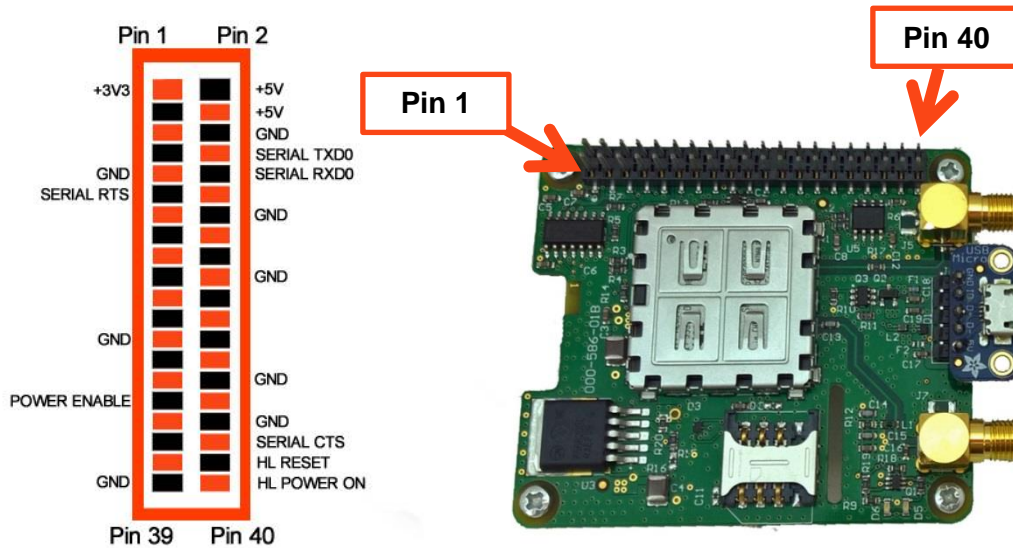# Using the PiloT as a Sierra Wireless HL module evaluation board

The PiloT is a WAN communications board which can be used in standalone mode to provide a 2G, 3G or 4G wireless interface to a range of development boards.

The PiloT uses a standard 3FF micro-SIM and supports Sierra Wireless' range of HL series modules. Serial and USB links are supported.

Connectors

Pin	Signal Name	Supply Voltage	Direction	Description
1	+3V3	1.65V – 5.5V	Input to PiloT	Pin 1 is used to set the serial interface voltages.
2,4	+5V	5V @ 2A peak current		PiloT power supply.
6	GND			Ground.
8	Serial TXD0	Nominal logic 1 voltage is same as pin 1	Input to PiloT	Serial TxD.
10	Serial RXD0	Output V logic 1 same as voltage on pin 1	Output from PiloT*	Serial RxD.
11	Serial RTS	Nominal logic 1 voltage is same as pin 1	Input to PiloT	Serial RTS.
31	Power Enable	1.3V – 5V	Input to PiloT	Power enable. May be pulled low to disable PiloT regulator. Pulled up by voltage applied to pin 1.
36	Serial CTS	Output V logic 1 same as voltage on pin 1	Output from PiloT*	Serial CTS.
38	HL Reset	Min 1.8V – 5V	Input to PiloT	HL Reset (inverted). Positive pulse will reset the HL module (see relevant HL module Product Technical Specification).
40	HL Power On	Min 1.8V – 5V	Input to PiloT	HL Power On (inverted). Used to control HL power state (see relevant HL module Product Technical Specification).
9, 14, 20, 25, 30, 34, 39	GND			Additional ground connections – can be used for signal returns etc.

*The level shifter used for the serial signals is a TXB0104D, which is an auto bi-directional device. Pull up or pull down resistors must not be attached to the signal pins identified.

Further details

HL voltage regulator - NCP5662DS33R4G:

Input is connected to pin 2 & 4.

Enable has a 100K pull up resistor to pin 1 and a 3K9 series resistor to pin 31.

LED:

LED1 is controlled by GPIO8 on the HL module.

LED2 is controlled by GPIO7 on the HL module.

Access further data about the HL modules at the Sierra Wireless technical information site (the Source) using the following link:

https://source.sierrawireless.com/