KiwiSDR is a software-defined radio (SDR) covering shortwave, the longwave & AM broadcast bands, various utility stations, and amateur radio transmissions, world-wide, in the spectrum from 10 kHz to 30 MHz. The KiwiSDR is a custom circuit board (cape) you connect to the BeagleBone Green or BeagleBone Black computer. You simply add an antenna, power supply and network connection. The KiwiSDR is available in two versions: the cape alone and a more complete version including BBG, enclosure and GPS antenna. Both versions include software supplied on a micro-SD card.

An HTML5-capable browser and internet connection will let you listen to a public KiwiSDR anywhere in the world. Up to four people can listen simultaneously to one radio — each listener tunes independently.
Try it right now! Listen to KiwiSDR registered on the sdr.hu website.

Features
- 100% Open Source / Open Hardware.
- Browser-based interface allowing four simultaneous user web connections.
- Each connection tunes an independent receiver channel over the entire spectrum.
- Waterfall tunes independently of audio and includes zooming and panning.
- Multi-channel, parallel DDC design using bit-width optimized CIC filters.
- Good performance at VLF/LF since we personally spend time monitoring those frequencies.
- Automatic frequency calibration via received GPS timing.
- Easy hardware and software setup. Browser-based configuration interface.
- Extension interface for adding decoders and utilities.

Technical details

Weight	G.W 310g
Battery	Exclude
SDR	Covers the 10 kHz to 30 MHz (VLF-HF) spectrum.
Web interface	Based on OpenWebRX from András Retzler, HA7ILM.
Demodulation modes	AM, AMN, LSB, USB, CW, CWN, NBFM.
Extensions at present	WSPR viewer/decoder, IQ display, Loran-C viewer.
RF antenna connector	SMA and terminal block.
Integrated software-defined GPS receiver	From Andrew Holme's Homemade GPS Receiver.
GPS receives the Navstar system	on L1 frequency 1575.42 MHz.
GPS antenna connector	SMA, 3.3V powered for active antennas.
Voltage	+5V DC, 2.1mm jack, center pin positive.
Current	1.5A including Beagle, KiwiSDR powers Beagle through header connectors.

Dimensions	KiwiSDR PCB 117mm * 55mm, SMA connectors additional.

Part List

KiwiSDR Board	1
Beaglebone Green	1
Unassembled enclosure	1
Skyworks SE4150L GPS front-end antenna	1
Micro-SD Card	1

ECCN/HTS

ECCN	5A991.b
HSCODE	9023009000
USHSCODE	90230000
UPC	841454119340