



KiwiSDR Board

SKU 110060489

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



Description

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.

Specification

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

1 x KiwiSDR Board

1 x Micro-SD card