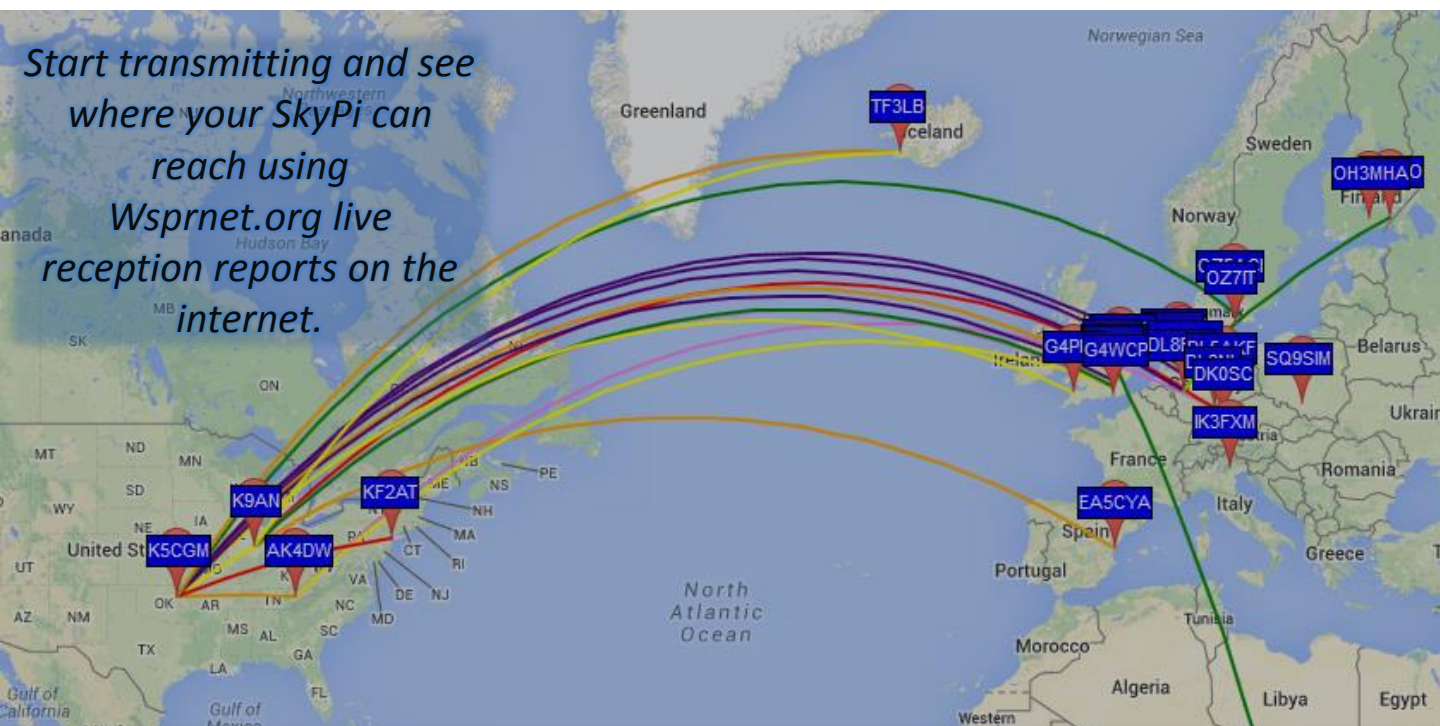SkyPi is designed for QRP enthusiasts and experimenters who want a modern and versatile software radio created for the **Raspberry Pi.**

The **latest digital modes**, including WSPR, have greatly extended how far low power radios reach. SkyPi is a **1 Watt** radio, as a **kit _or_ fully-assembled**, that transmits CW, RTTY, WSPR, and more using **open-source** software and with **no PC required**.

Start transmitting and see where your SkyPi can reach using Wsprnet.org live reception reports on the internet.
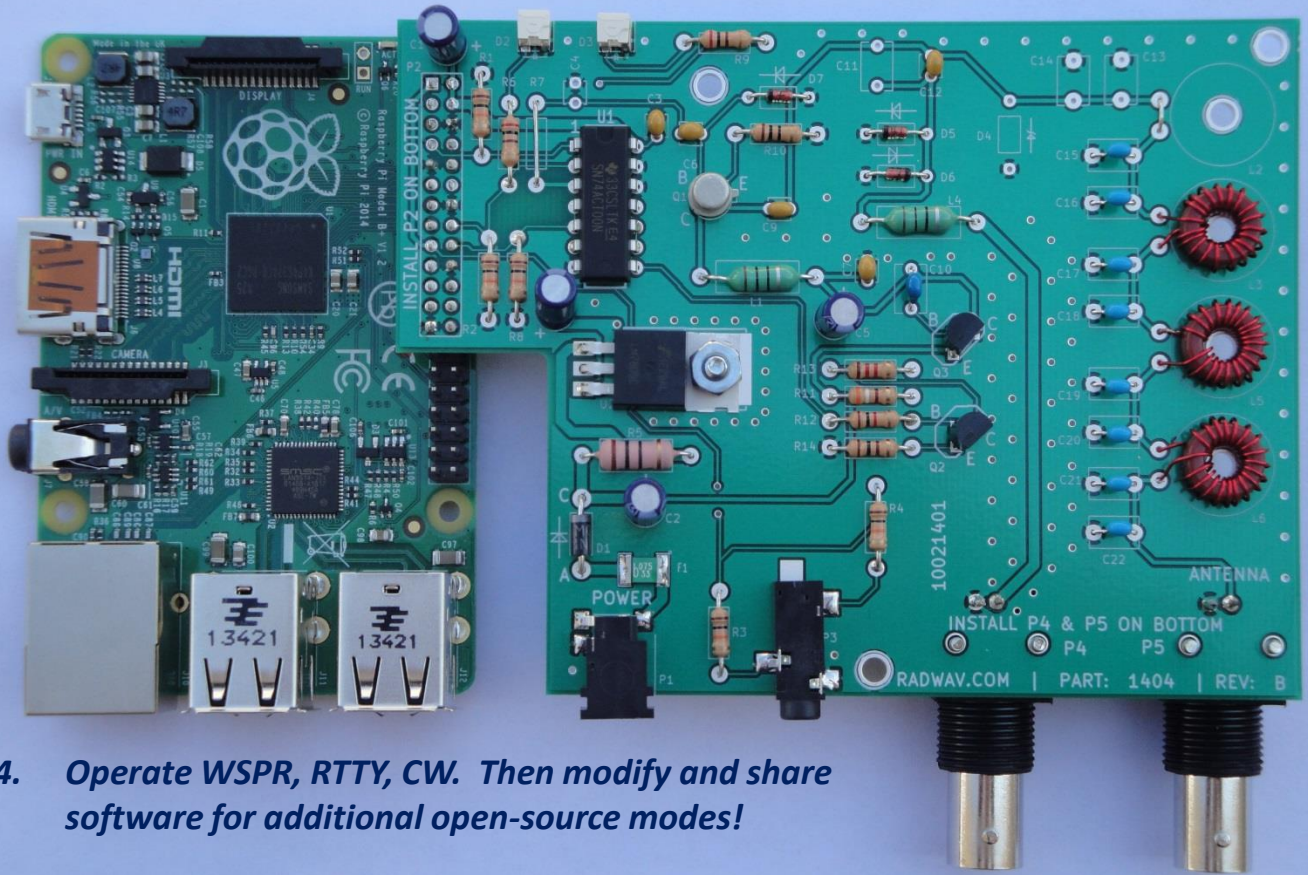

BUILD IT – SPAN THE GLOBE WITH DIGITAL QRP - CUSTOMIZE

- ❑ **ORDER SkyPi** – SkyPi is available fully-assembled or as an easy-to-built kit. Normally the kit can be completed in an afternoon. SkyPi connects to a Raspberry Pi.
- ❑ **SPAN the Globe** – Download free and open-source software that will transmit WSPR signals. Then watch distant stations post reception reports on the internet.
- ❑ **CUSTOMIZE** – Download additional free and open-source software that will transmit RTTY and CW. Then, modify the software to send other modes or create new modes.

Order On-line at **www.radwav.com**
Customer Service: sales@radwav.com

SkyPī

1. Order SkyPi   **2. Connect Raspberry Pi Model B/B+**   **3. Connect Antenna & +12V**
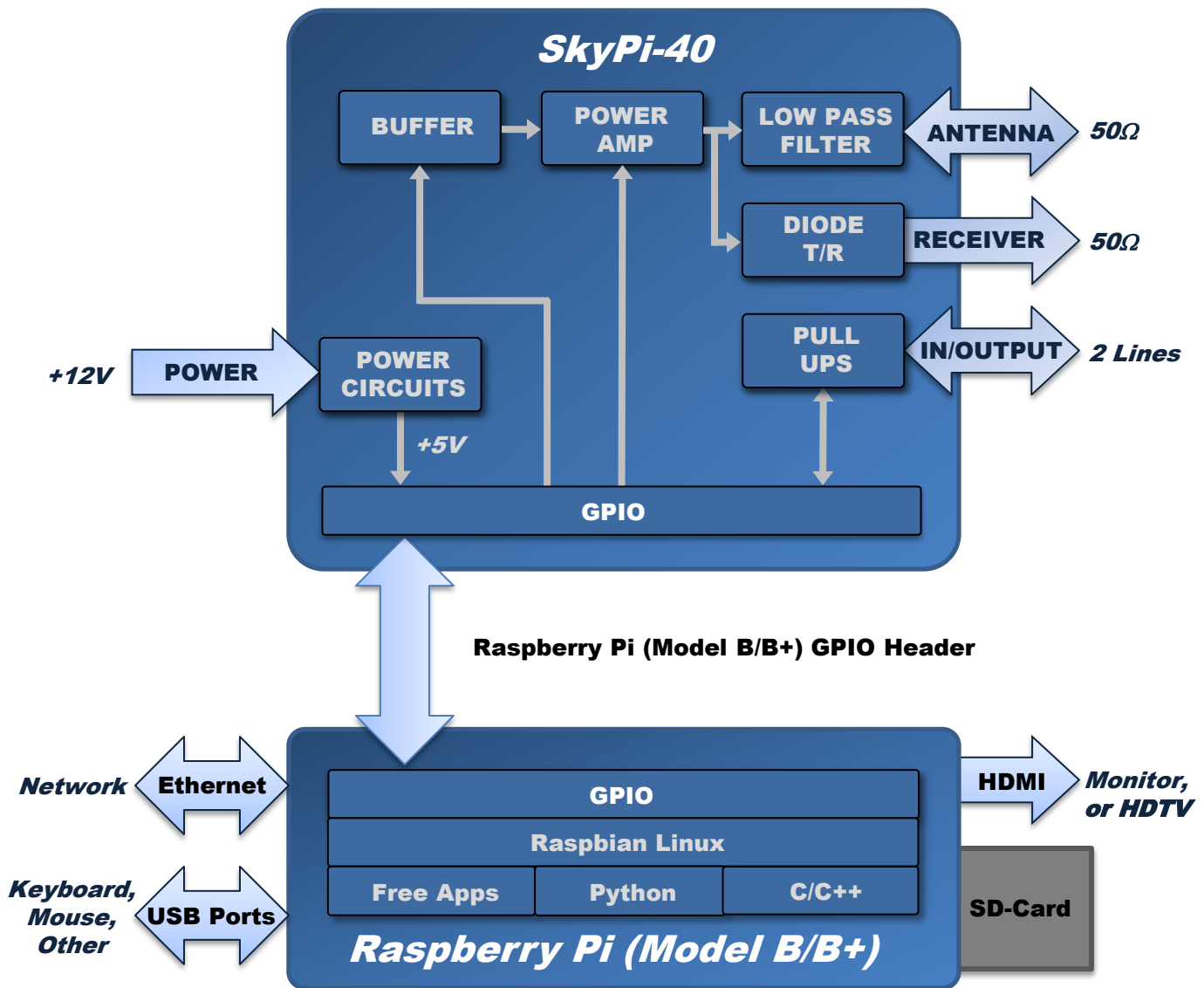

4. Operate WSPR, RTTY, CW. Then modify and share software for additional open-source modes!

GET STARTED

- ☐ **Order SkyPi** – SkyPi is available at www.radwav.com along with other helpful information and free open-source software downloads.
- ☐ **Raspberry Pi** – A Raspberry Pi Model B or Model B+ is needed for this kit. Users can simply plug SkyPi onto the Raspberry Pi they already own and remove it at any time. These computers cost approximately $40 in the US. About 2 Million of these have already been sold, so many SkyPi builders can use the one they already have.
- ☐ **Software and Support** – Visit www.radwav.com for the latest information and free downloads.
- ☐ **License** – Transmitting requires a valid license that will provide a unique call-sign. There are many clubs worldwide that provide fun and free classes to help anyone interested qualify for an amateur radio license.   Please send e-mail to RadWAV for more information.

SkyPi-40

BUFFER → POWER AMP → LOW PASS FILTER ⟷ ANTENNA   50Ω

DIODE T/R → RECEIVER   50Ω

PULL UPS ⟷ IN/OUTPUT   2 Lines

+12V → POWER → POWER CIRCUITS

+5V

GPIO

Raspberry Pi (Model B/B+) GPIO Header

Network ⟷ Ethernet

Keyboard, Mouse, Other ⟷ USB Ports

GPIO

Raspbian Linux

| Free Apps | Python | C/C++ |

HDMI → Monitor, or HDTV
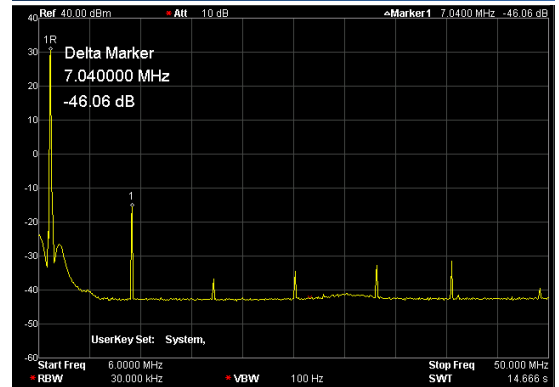
SD-Card

Raspberry Pi (Model B/B+)

- ❑ **Raspberry Pi** – *Use an HDMI display and USB keyboard/mouse to operate the radio. No PC is required to operate the radio or to create new software.*
- ❑ **Remote Control** – *Use the Ethernet port to remote control the radio over the LAN or Internet. Or, simply use the Ethernet to download software for SkyPi.*
- ❑ **Huge and Vibrant Open-Source Software Community** - *Program the Raspberry Pi using Python, C, C++, and more. Over 2 Million Raspberry Pi's have been sold, so the on-line community offers many tips and a massive code base.*
- ❑ **Spare Input/Output Lines** – *Add custom hardware. This could be a simple Morse Code key/Paddles, or it could be a custom display or a brand-new circuit design.*
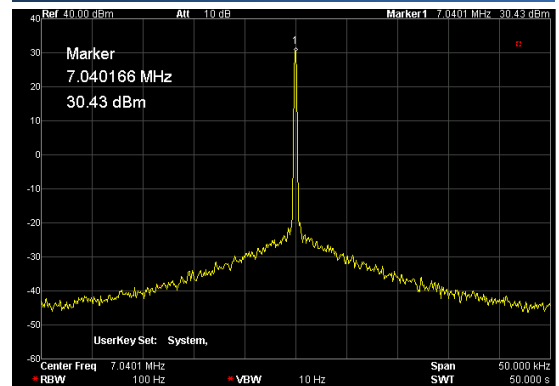
TYPICAL PERFORMANCE

SkyPi is designed to comply with FCC requirements for waveform purity and European RoHS standards for a cleaner environment.

FREQUENCY COVERAGE SkyPi-40: 7.0-7.3 MHz (at least)
- ❑ **POWER OUTPUT:** 1 Watt into 50Ω (±1dB)
- ❑ **HARMONIC SUPPRESSION:** -46 dBc
- ❑ **SUPPORTED MODES:**
    - ❑ **WSPR** – Weak Signal Propagation Reporter
    - ❑ **RTTY** – Radio Teletype
    - ❑ **CW** – Morse Code
    - ❑ **Open Source** – Can Develop any FSK mode
- ❑ **FREQUENCY ACCURACY:** ±700 Hz
- ❑ **FREQUENCY RESOLUTION:** <2 Hz
- ❑ **RECEIVER PORT:** Full QSK [Option]
- ❑ **POWER REQUIREMENTS [With Raspberry Pi]**
    - ❑ +12V @ 390mA- 650mA During Transmit
    - ❑ Resettable Fuse and Reverse Polarity Protection Included
- ❑ **PORTS**
    - ❑ Raspberry Pi GPIO
    - ❑ +12V Input [Cable Optional]
    - ❑ BNC - Antenna
    - ❑ BNC - Receiver Port [Port Optional]
    - ❑ Digital I/O Jack [1/8″ Stereo] for any two-line input/output device Key/Paddle/Other. [Cable Optional]
- ❑ **RoHS:** Components & Circuit Board are RoHS Compliant

HARMONIC SUPPRESSION

SYNTHESIZER SPECTRUM

ORDERING INFORMATION

Part Number	Kit	Assembled	Receiver Port	Raspberry Pi	Manual	SD-Card
SkyPi40-KIT	*Yes*	No	Not Included	Not Included	*PDF*	Not Included
SkyPi40-KIT-RX	*Yes*	No	*Included*	Not Included	*PDF*	Not Included
SkyPi40-Z	No	*Fully Assembled*	*Included*	Not Included	*PDF*	Not Included
SkyPi40-Z-PI	No	*Fully Assembled*	*Included*	*Included*	*PDF*	*Included & Programmed*

Order from the radwav.com on-line store. Deliveries within the U.S. ship via Priority Mail with package tracking. The full-color manual is delivered via e-mail. Please contact sales@radwav.com for questions or special requests.

SkyPi