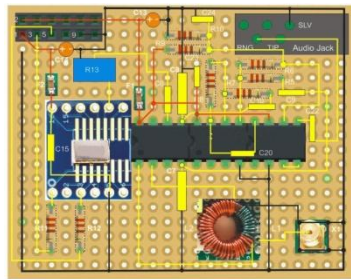


RpiZonia

SDR Software Defined Shortwave Receiver for Raspberry Pi 3B



Jeremy Clark VE3PKC

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Summary

This eBook discusses the design and construction of a direct conversion software defined shortwave radio for use with the Raspberry Pi 3B. The receiver circuit board fits on top of the RPi and plugs into the GPIO. The direct conversion software radio concept is studied. The receiver block diagram is examined along with the schematic diagram.

Construction techniques are discussed and a proto board layout is covered. A printed circuit board is introduced as well. The receiver is tuned by a Python controlled VFO communicating via the I2C bus on the GPIO. The software program is reviewed. Finally the receiver performance is demonstrated. All software used in this article is Open Source or freely available. Design files are available as a download zip.

Copyright Information

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Clark Telecommunications
Jeremy Clark
500 Duplex Suite 506
Toronto M4R-1V6, Ontario, Canada
416-488-5382
jclark@clarktelecommunications.com
www.clarktelecommunications.com

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