

The Main Program

The Dayton Hamvention 2007

Daytime Forums



Saturday, May 19, 2007

8:00 AM - 11:00 AM Software Defined Radio Forum

Open Source Software Defined Radios- the new wave in radio communications.

Introduction to the HPSDR Project – Lyle Johnson – KK7P



Starting as a discussion about an inexpensive evaluation board for an electronic component in late 2005, the High Performance Software Defined Radio project was born. This is a grassroots effort by volunteers to create hardware and software building blocks for customized, user-definable, user-configurable and user-programmable Software Defined Radios. This presentation will introduce the overall HPSDR Project, the accomplishments of the group in its year and half of existence, an overview of current developments and a look towards the near future

Lyle Johnson KK7P 2006 Dayton Presentation

Question & Answer session after presentation on HPSDR and SoftRock

Hardware and Documentation also available for viewing

Copies of these pages are available at -- <http://www.members.cox.net/k9ivb>

Current SoftRock Hardware That Is Available

SoftRock ver 6.2 Lite Receivers [only 180 kits left]

Tony Parks KB9YIG in Springport, IN offers the following 5 Kits

Tony Parks E-mail: - raparks@ctcisp.com – Takes PayPal

All kits are priced at \$10 US/Canada and \$11 for DX
And will tune the following ranges with the supplied crystal:

40 m Kit Option

when used with a soundcard that samples at 48 kHz - 7.032 to 7.08 MHz
when used with a soundcard that samples at 96 kHz - 7.008 to 7.106 MHz

80m kit option

when used with a soundcard that samples at 48 kHz - 3.504 to 3.552 MHz
when used with a soundcard that samples at 96 kHz - 3.48 to 3.576 MHz

160m kit option

when used with a soundcard that samples at 48 kHz - 1.819 to 1.867 MHz
when used with a soundcard that samples at 96 kHz - 1.795 to 1.891 MHz

30m kit option

when used with a soundcard that samples at 48 kHz - 10.100 to 10.148 MHz

20m kit option

when used with a soundcard that samples at 96 kHz - 13.968 to 14.094 MHz

The SoftRock Lite with the v6.2 circuit board is a single-board receiver kit that provides single-band coverage with each kit. The board size is 1.5 inches square and a height of about 0.6 inches.



K9IVB 20M mod for FCC-2 DDS [no crystals]



Typical 80M board

SoftRock ver 6.2 Tranceivers [Single and / or Dual Band]

[First round ~ 1000 kits sold out September 26, 2007 next round available about October 22, 2007]



RXTX kits below are \$30 US/Canada – \$31 for DX

160m kit with crystals for center frequencies of 1.812 MHz and 1.844 MHz and ~1.92MHz

80m kit with crystals for center frequencies of 3.514 MHz, 3.54 MHz and 3.579 MHz

40m/80m kit with crystals for center frequencies of 7.014 MHz and 7.055 MHz

40m/30m kit with crystals for center frequencies of 7.014 MHz, 7.055 MHz and 10.124 MHz (omit any crystal for \$1 price reduction)



Power Output 1 W typical all models

Board is 2½ " x 3½"

Operating modes depend upon [free] online DSP software

Rocky – RX: any mode – TX: CW & BPSK31 [for now]

PowerSDR [Flex Systems] any mode

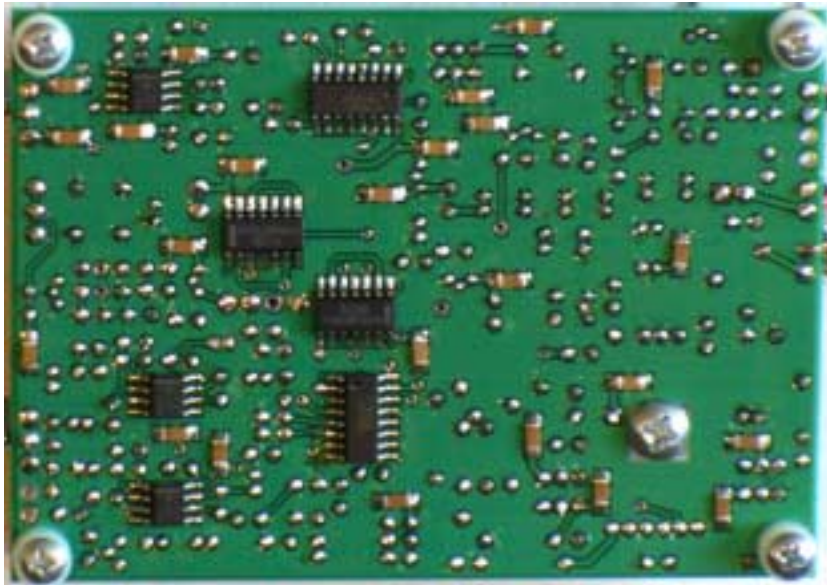
More software is available on line

RXTX kit for 20m/30m with additional daughter board is \$36 for US/Canada – \$37 for DX

20m/30m kit with crystals for center frequencies of 14.045 MHz, 10.124 MHz

New RXTX kits for 15m/17m and 10m/12m to be available in late October

Alpha 2 Version of Penelope
½ Watt Companion Exciter to Mercury



Bottom View of RXTX Board Showing SMT parts



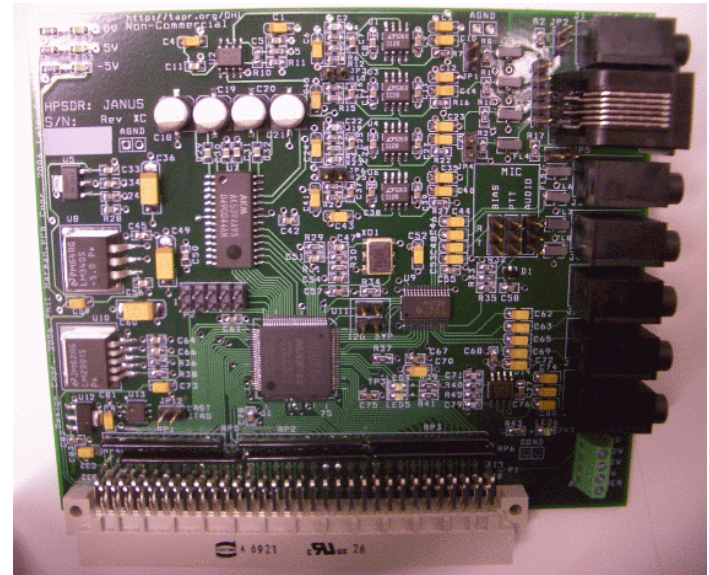
1.8 - 55MHz frequency coverage
0.5W pep output
Low level transverter output
AM, C-AM, FM, CW, PSK etc

Introduction to SoftRock and HPSDR WVARC – October 1, 2007

OZY –Janus – NorCal FCC-2 DDS - LINKS



OZY \$137 TAPR member - \$149 non member +S/H



Janus \$163 TAPR member - \$179 non member +S/H

Links

SoftRock: – <http://groups.yahoo.com/group/softrock40/>

Rocky Software – <http://www.dxatlas.com/rocky/>

HPSDR: – <http://hpsdr.org/>

TAPR – <http://www.tapr.org>

KK7P Power Point 2007 – <http://www.hamsdr.com/dnld.aspx?id=573>

KK7P MP3 Audio 2007 – <http://www.hamsdr.com/dnld.aspx?id=599>

Flex Radio Systems – <http://www.flex-radio.com/>

Tony Parks E-mail: - raparks@ctcisp.com – Takes PayPal for orders



FCC-1 & FCC-2 Frequency Counter and DDS