

PICOCEPTOR™ WIDEBAND TUNER SOFTWARE PACKAGE



MEETING TODAY'S CHALLENGES TO PROVIDE A SECURE FUTURE

The Wideband Tuner Software Package provides all the necessary software loads to expand the Picoceptor bandwidth set up to 6 MHz and allow real-time in-phase/ quadrature-phase (I/Q) data streaming over the USB interface. The firmware provides filtering, decimation and gain control but does not provide demodulation or audio processing. Drivers and utilities are also available for collecting and recording the data to a hard drive in a Linux or Windows environment. The data from the unit can be read, saved and processed with custom software if desired.

The software allows the user to control and monitor various features of the wideband functionality via a simple and easy-to-use GUI. This



application allows the user to adjust parameters graphically by pointing and clicking with a mouse or keyboard entry.

The firmware is compatible with the 6-MHz versions of the Picoceptor and can be loaded or unloaded as desired. The supplied GUI operates on any standard PC or notebook PC running a Windows operating system.

A quick reference guide and detail Interface control document is also included in this software package. The documentation provides a general description of the package's functionality, the directions to load the software and firmware onto the Picoceptor and the procedures to load and

operate the graphical user interface GUI on an external controlling device.

- Wide bandwidth to capture several narrow band channels such as PTT FM or modern signals such as WCDMA
- Speeds algorithm development as algorithms can be developed on a PC and then converted to VHDL or C code for deploying inside the Picoceptor
- Broad compatibility with a variety of SDR frameworks
- Linux, Windows and Mac compatible
- Single USB interface cable for power, control and data
- 37.333 MBytes/sec maximum throughput
- Zero relative power penalty as data is carried over existing USB interface

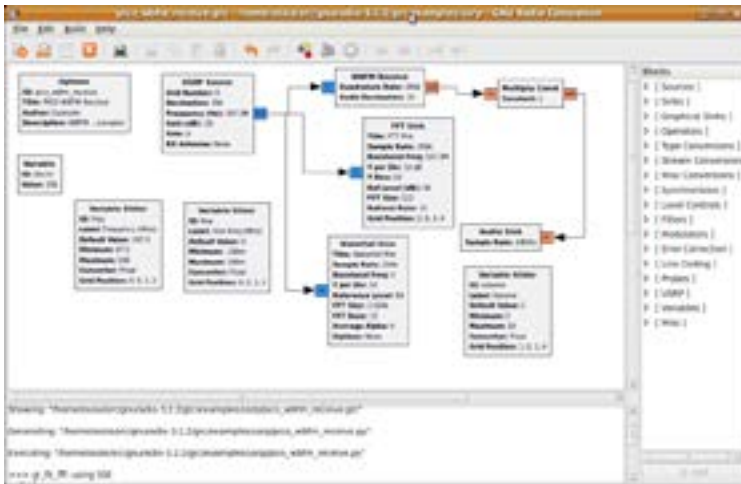
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CAPABILITIES PROVIDED BY LOAD

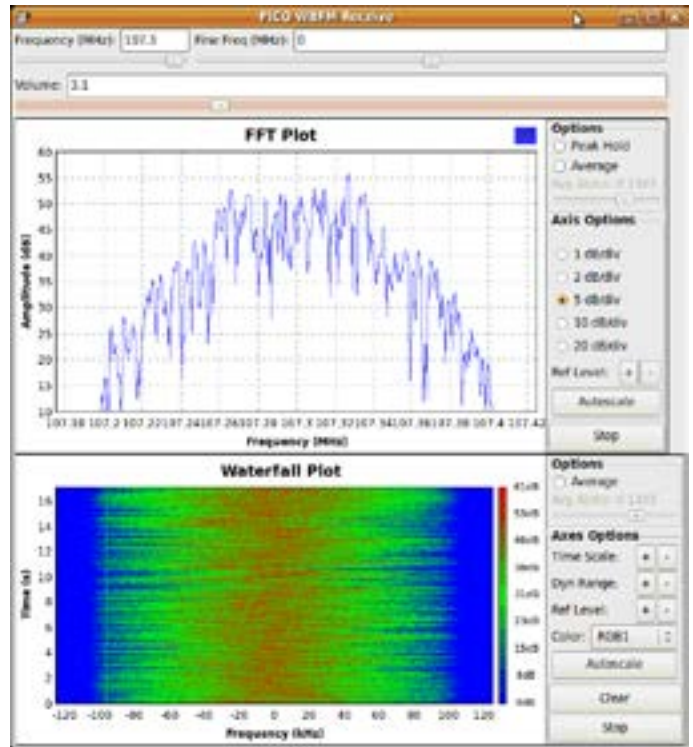
Bandwidths	6 MHz, 3 MHz, 1.5 MHz, 750 kHz, 375 kHz
Output	16-bit I/Q data
Gain Control	Manual

COMPATIBILITY

S3B6X12 or S3B6X60



GNU Radio Example Code Provided with Package

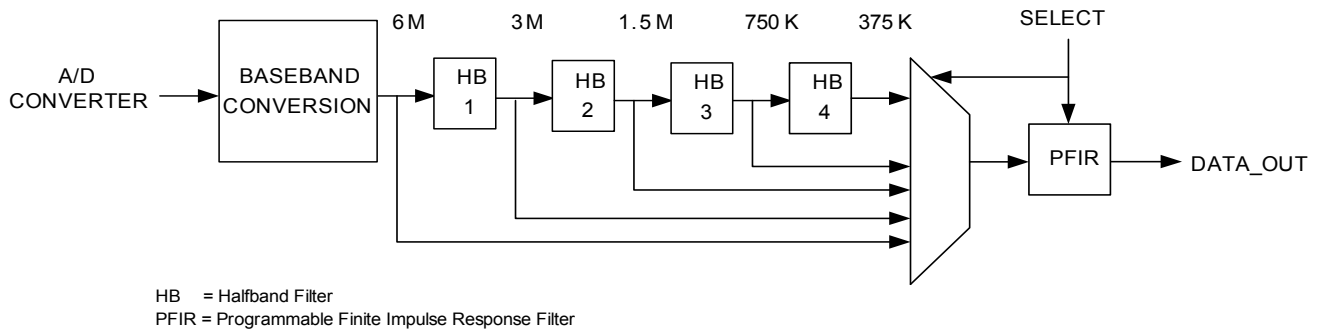


GUI Plots I/Q Data

ORDERING INFORMATION

8649A/SW/WBTUNER

Picoceptor Wideband Tuner Software Package



Picoceptor Wideband Tuner FPGA Block Diagram

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