Ettus Research™
A National Instruments Company

USRP™ B100 BUS SERIES

FEATURES:

- Use with GNU Radio
- Modular Architecture: DC-6 GHz
- Dual 64 MS/s, 12-bit ADC
- Dual 128 MS/s, 14-bit DAC
- DDC/DUC w/ 15 mHz Resolution
- USB 2.0 Interface to Host
- Spartan 3A-1400 FPGA
- Supported by Free Xilinx Design Tools
- Auxiliary Digital and Analog I/O
- 2.5 ppm TCXO Frequency Reference
- Configurable Reference Clock Frequency
- 1 PPS and 10 MHz Reference Inputs

B100 PRODUCT OVERVIEW:

The Ettus Research USRP™ B100 is a member of the USRP™ (Universal Software Radio Peripheral) family of products, which enables engineers to rapidly design and implement powerful, flexible software radio systems. The B100 hardware provides low-cost RF processing capability, and up to 16 MS/s of signal streaming through the USB 2.0 host interface.

The USRP B100 is an ideal model for users that require an entry-level software defined radio device for cost-sensitive applications. Utilizing the USB 2.0 interface, users can get the B100 up and running quickly. A reconfigurable clock also allows users to more easily target specific applications.

The USRP Hardware Driver™ is the official driver for all Ettus Research products, and supports rapid development in a comprehensive environment. The USRP Hardware Driver supports Linux, Mac OSX and Windows. UHD allows portability across the entire USRP product line, enabling application migration to higher performance platforms such as the USRP N200/N210.

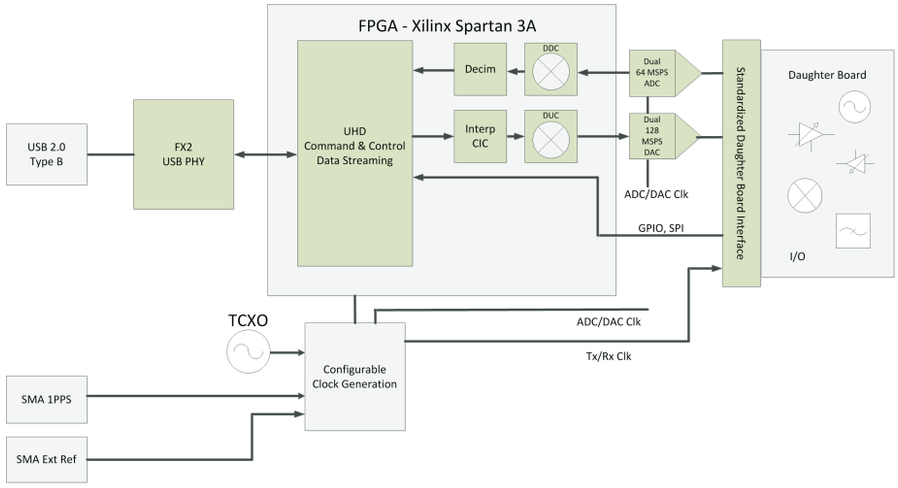
USRP™ B100 BUS SERIES

SPECIFICATIONS

Spec	Typ.	Unit
POWER		
DC Input	6	V
Current Consumption	0.6	A
w/ WBX Daughterboard	1.6	A
CONVERSION PERFORMANCE AND CLOCKS		
ADC Sample Rate	64	MS/s
ADC Resolution	12	bits
ADC Wideband SFDR	83	dBc
DAC Sample Rate	128	MS/s
DAC Resolution	14	bits
DAC Wideband SFDR	83	dBc
Host Sample Rate (8b/16b)	16/8	MS/s
Frequency Accuracy	2.5	ppm

Spec	Typ.	Unit
RF PERFORMANCE (W/ WBX)		
SSB/LO Suppression	35/50	dBc
Phase Noise (1.8 Ghz)		
10 kHz	-80	dBc/Hz
100 kHz	-100	dBc/Hz
1 MHz	-137	dBc/Hz
Power Output	15	dBm
IIP3	0	dBm
Receive Noise Figure	5	dB
PHYSICAL		
Operating Temperature	0 to 55°	C
Dimensions (l x w x h)	22 x 16 x 5	cm
Weight	1.2	kg

* All specifications are subject to change without notice.



Ettus Research™
A National Instruments Company

ABOUT ETTUS RESEARCH:

Ettus Research is an innovative provider of software defined radio hardware, including the original Universal Software Radio Peripheral (USRP) family of products. Ettus Research products maintain support from a variety of software frameworks, including GNU Radio. Ettus Research is a leader in the GNU Radio open-source community, and enables users worldwide to address a wide range of research, industry and defense applications. The company was founded in 2004 and is based in Mountain View, California. As of 2010, Ettus Research is a wholly owned subsidiary of National Instruments.

1043 North Shoreline Blvd
Suite 100
Mountain View, CA 94043

P 650.967.2870 www.ettus.com
F 866.807.9801