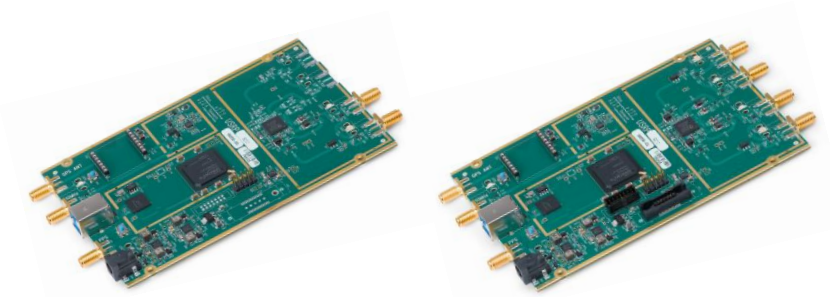


USRP™ B200/B210 Bus Series

FEATURES

- RF coverage from 70 MHz – 6 GHz
- GNU Radio, C++ and Python APIs
- USB 3.0 SuperSpeed interface
- Standard-B USB 3.0 connector
- Flexible rate 12 bit ADC/DAC
- Grounded mounting holes



USRP B200

- 1 TX & 1 RX, Half or Full Duplex
- Xilinx Spartan 6 XC6SLX75 FPGA
- Up to 56 MHz of instantaneous bandwidth
- USB Bus powered

USRP B210

- 2 TX & 2 RX, Half or Full Duplex
- Fully-coherent 2x2 MIMO capability
- Xilinx Spartan 6 XC6SLX150 FPGA
- Up to 56 MHz of instantaneous bandwidth in 1x1
- Up to 30.72 MHz of instantaneous bandwidth in 2x2
- Includes DC power supply
- GPIO capability

USRP B200/B210 Product Overview

The USRP B200 and B210 hardware covers RF frequencies from 70MHz to 6 GHz, has a Spartan6 FPGA, and USB 3.0 connectivity. This platform enables experimentation with a wide range of signals including FM and TV broadcast, cellular, Wi-Fi, and more. The USRP B200 features one receive and one transmit channel in a bus-powered design. The USRP B210 extends the capabilities of the B200 by offering a total of two receive and two transmit channels, incorporates a larger FPGA, GPIO, and includes an external power supply. Both use an Analog Devices RFIC to deliver a cost-effective RF experimentation platform, and can stream up to 56 MHz of instantaneous bandwidth over a high-bandwidth USB 3.0 bus on select USB 3.0 chipsets (with backward compatibility to USB 2.0). Because the B200 and B210 are enabled with our USRP Hardware Driver™ (UHD), users can develop their applications and seamlessly port their designs to high-performance or embedded USRPs such as the USRP X310 or USRP E310. UHD is an open-source, cross-platform driver that can run on Windows, Linux, and MacOS. It provides a common API, which is used by several software frameworks, such as GNU Radio. With this software support, users can collaborate with a vibrant community of enthusiasts, students, and professionals that have adopted USRP products for their development. As a member of this community, users can find assistance for application development, share knowledge to further SDR technology, and contribute their own innovations.

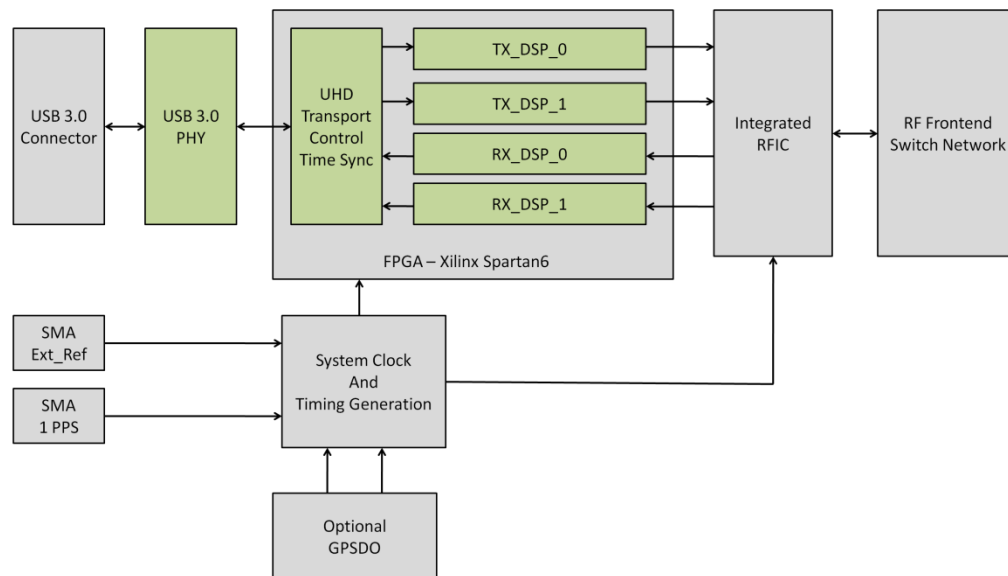
USRP™ B200/B210 Bus Series

Spec	Typ.	Unit
Power		
DC Input	6	V
Conversion Performance and Clocks		
ADC Sample Rate (max)	61.44	MS/s
ADC Resolution	12	bits
ADC Wideband SFDR	78	dBc
DAC Sample Rate (max)	61.44	MS/s
DAC Resolution	12	bits
Host Sample Rate (16b) **	61.44	MS/s
Frequency Accuracy	±2.0	ppm
W/ GPS Unlocked TCXO Reference	±75	ppb
W/ GPS Locked TCXO Reference	< 1	ppb

Spec	Typ.	Unit
RF Performance (single channel)		
SSB/LO Suppression	-35/50	dBc
3.5 GHz	1.0	deg RMS
6 GHz	1.5	deg RMS
Power Output	>10	dBm
IIP3 (@ typ NF)	-20	dBm
Receive Noise Figure	<8	dB
Physical		
Dimensions	9.7x15.5x1.5	cm
Weight	350	g

*All specifications are subject to change without notice.

** See benchmark results for sample rates in various configurations.



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 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 Santa Clara, California. As of 2010, Ettus Research is a wholly owned subsidiary of National Instruments.