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## Getting Started with the USRP B200mini/B200mini-i/B205mini-i



### Kit Contents:

- USRP™ B200mini/B200mini-i/B205mini-i SDR Board
- USB 3.0 Cable

### You Will Need:

- A host computer with an available USB 2.0 or 3.0 port

### Verify the Contents of Your Kit

Make sure that your kit contains all the items listed above. If any items are missing, please contact your sales agent or Ettus Research Technical support immediately.

### Install and Setup the Software Tools on Your Host Computer

In order to use your USRP B200mini/B200mini-i/B205mini-i, you must have the software tools correctly installed and configured on your host computer. A step-by-step guide for doing this is available at “Getting Started”, on the USRP B200mini/B200mini-i/B205mini-i product page, or on the Ettus Research Knowledge Base.

If you have a USB stick with the LiveUSB SDR Environment installed on it, then you may boot your host computer from that. The LiveUSB SDR Environment does not require anything to be installed on your host computer, and contains a Linux-based environment with the UHD software and the GNU Radio framework already installed. More information about the LiveUSB SDR environment is available at the LiveUSB SDR Environment Product Page on the Ettus Research Knowledge Base.

### Connect the USRP B200mini/B200mini-i/B205mini-i to the Host Computer

The included USB 3.0 cable provides power and data connectivity for the USRP B200mini/B200mini-i/B205mini-i. The host-side of the cable must be plugged into either a USB 2.0 or 3.0 port. Note that the USB 2.0 link provides less bandwidth than the USB 3.0 link. More information about USB bandwidth constraints and power considerations is available on the USRP B200mini/B200mini-i/B205mini-i Product Page on the Ettus Research Knowledge Base.



## Test and Verify the Operation of the USRP

Once the software tools are installed on the host computer, or using the LiveUSB SDR Environment, verify the correct operation of the USRP by running the various utility programs on the host computer. More information is available at "Getting Started", on the USRP B200mini/B200mini-i/B205mini-i Product Page on the Ettus Research Knowledge Base.

## Proper Care and Handling

All Ettus Research products are individually tested before shipment. The USRP B200mini/B200mini-i/B205mini-i is guaranteed to be functional at the time it is received by the customer. Improper use or handling of the USRP B200mini/B200mini-i/B205mini-i can easily cause the device to become non-functional. Listed below are some examples of actions which can prevent damage to the unit:

- Never allow metal objects to touch the circuit board while powered.
- Always properly terminate the transmit port with an antenna or 50 $\Omega$  load.
- Always handle the board with proper anti-static methods.
- Never allow the board to directly or indirectly come into contact with any voltage spikes.
- Never allow any water, or condensing moisture, to come into contact with the boards.
- Always use caution with FPGA, firmware, or software modifications.



**Never apply more than -15dBm of power into any RF input!**



**Use extreme caution when connecting the transmit port to the receive port in a loopback configuration. The transmitter is capable of output powers that can damage the receiver unless necessary precautions are taken. The use of a 30dB attenuator is strongly recommended when using in a loopback configuration.**



**The USRP B200mini/B200mini-i/B205mini-i is a piece of test equipment that can transmit and receive on many frequencies. Each country has important legal implications to consider concerning radiated RF energy. See "Legal Considerations" in this document before using this device!**

## Technical Support and Community Knowledge Base

Technical support for USRP hardware is available through email only. If the product arrived in a non-functional state or you require technical assistance, please contact [support@ettus.com](mailto:support@ettus.com). Please allow 24 to 48 hours for response by email, depending on holidays and weekends, although we are often able to reply more quickly than that.

We also recommend that you subscribe to the community mailing lists. The mailing lists have a responsive and knowledgeable community of hundreds of developers and technical users who are located around the world. When you join the community, you will be connected to this group of people who can help you learn about SDR and respond to your technical and specific questions. Often your question can be answered quickly on the mailing lists. Each mailing list also provides an archive of all past conversations and discussions going back many years.



Your question or problem may have already been addressed before, and a relevant or helpful solution may already exist in the archive.

Discussions involving the USRP hardware and the UHD software itself are best addressed through the **usrp-users** mailing list at <http://usrp-users.ettus.com> .

Discussions involving the use of GNU Radio with USRP hardware and UHD software are best addressed through the **discuss-gnuradio** mailing list at <https://lists.gnu.org/mailman/listinfo/discuss-gnuradio> .

Discussions involving the use of OpenBTS<sup>®</sup> with USRP hardware and UHD software are best addressed through the **openbts-discuss** mailing list at <https://lists.sourceforge.net/lists/listinfo/openbts-discuss> .

The support page on our website is located at <http://www.ettus.com/support> .

The Knowledge Base is located at <http://www.ettus.com/kb> .

## Legal Considerations

Every country has laws governing the transmission and reception of radio signals. Users are solely responsible for insuring they use their USRP system in compliance with all applicable laws and regulations. Before attempting to transmit and/or receive on any frequency, we recommend that you determine what licenses may be required and what restrictions may apply.

## Sales and Ordering Support

If you have any non-technical questions related to your order, then please contact us by email at [orders@ettus.com](mailto:orders@ettus.com) , or by phone at +1-408-610-6399 (Monday-Friday, 8 AM - 5 PM, Pacific Time). Please be sure to include your order number and the serial number of your USRP.

## Terms and Conditions of Sale

Terms and conditions of sale can be accessed online at the following link:  
<http://www.ettus.com/legal/terms-and-conditions-of-sale>

