AVR487: AVRUSBRF01 Quick Start

Features

- 2.4 GHz RF
- Full Duplex Solution
- RS232 Emulation, No PC Driver Required
- Upgrade through the USB interface

1. Introduction

The AVRUSBRF01 reference design allows the user to build an RF application in a short time and reduce time to market.

This kit contains two dongles. These dongles are factory programmed with a CDC_RF application. Driver installation and demo starting are explained in this document.

Please refer to the web page www.atmel.com/avrusbrf01 for further information and product updates.





Application Note

8136A-AVR-04/08





2. Driver installation

The USB-RF dongles are delivred with a default demo. This demo uses the CDC class to communicate with the PC. To start this application with Windows[®] (2000 or later) you have to follow the following steps

- Start the www.atmel.com/avrusbrf01 web page to download the at90usbxxx_cdc.inf
- Copy the inf file in your hard disk
- · Connect the dongle to the USB port of your PC
- A New Hardware Wizard pops up:
- Step 1
 - Select "No, not this time"

Found New Hardware Wizard		
	Welcome to the Found New Hardware Wizard Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). Read our privacy policy	
	Can Windows connect to Windows Update to search for software? Yes, this time only Yes, now and every time I connect a device No, not this time Click Next to continue.	
	< <u>B</u> ack <u>N</u> ext > Cancel	

Figure 2-1. Step1 - Found New Hardware Wizard

Step 2 - Select "Install from a list or specific location"

۰.			
	Found New Hardware Wizard		
	This wizard helps you install software for: AT90USB xxx CDC USB to UART MGM If your hardware came with an installation CD or floppy disk, insert it now. What do you want the wizard to do? Install the software automatically (Recommended) Install from a list or specific location (Advanced) Click Next to continue.		
	< <u>B</u> ack <u>N</u> ext> Cancel		







- Step 3 Select "Include this location in search" and point to the location where you stored the *at90usbxxx_cdc.inf*
- Figure 2-3. Step3 Search Option

Found New Hardware Wizard			
Please choose your search and installation options.			
Search for the best driver in these locations.			
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.			
Search removable media (floppy, CD-ROM)			
✓ Include this location in the search:			
D:\CDC-INF Browse			
Don't search. I will choose the driver to install.			
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.			
< <u>B</u> ack <u>N</u> ext > Cancel			

- Step 4 Click on "Continue Anyway" (if you got this message)
- Figure 2-4. Step4 Complete Installation



 Once the install is done, you can see in your device manager a new COM Port as shown below:





Figure 2-5. New COM Port

3. Start the Demo

The demo can be performed using one PC or two. If you use one PC, please check that you have two available USB ports. If you use two PCs, the second PC will also require the driver install as explained in Section 2. on page 2.

Once both dongles are connected and the driver is installed, launch two Hyperterminal sessions, select the COM Port number (check the device manager to see which number was assigned to your device, see Figure 3-1). You are now able to send data from one hyperterminal to another (Full duplex solution):





Figure 3-1. Two COM Ports on the Secure PC

B Device Manager	
Eile <u>A</u> ction <u>V</u> iew <u>H</u> elp	
Image: NTOLT0047 Image: Ntole Network adapters Image: Ntole Network Net	<)
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Figure 3-2. Application data exchanged





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