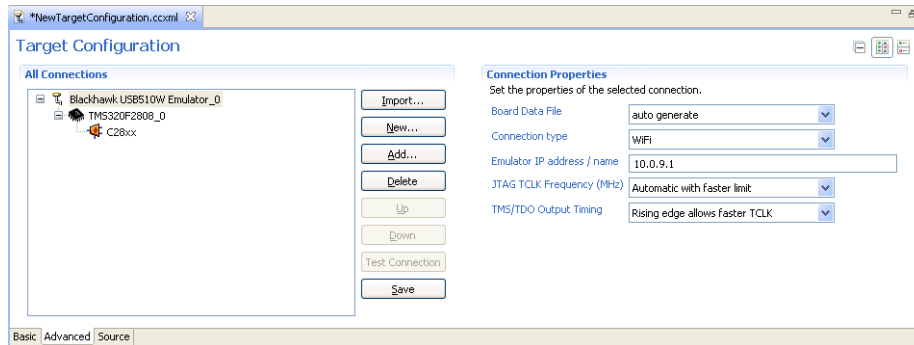


## 5 CCStudio Setup

### CCStudio v4 and later

1. In the CCS v4 or v5 bring up the New Target Configuration Window from the File Menu option.
2. From the connection drop down list select the **Blackhawk USB510W Emulator**
3. Select your board or device that is connected to the emulator.
4. Choose the Advance properties tab.
5. Select "WiFi" in the Connection Type drop down.
6. Enter the Emulator's IP address 10.0.9.1, if not already entered.
7. Save this setting and launch the TI Debugger.



### CCStudio v3.3 Service Release 12

1. Launch Setup Code Composer Studio v3.3.
2. From the platform drop down list select the **bh-usb510(w) emulator**.
3. From the family drop down list select your target device family.
4. Select your board or device from the middle pane and double click on it.
5. Right Click on the USB510W configuration and Choose Properties...
6. **Go to Connection Properties Tab in the new dialog menu.**
7. Select "WiFi" in the Connection Type drop down.
8. Enter the Emulator's IP address 10.0.9.1, if not already entered.
9. Save & Quick the setting to launch Code Composer.

## 6 Quick Diagnostic

The **USB510W** is a network device, so when it is powered and connected to your network, you can use the standard Windows PING command to test if the emulator is accessible from your PC. Just enter the command shown below, which uses the default address. Your **USB510W** may be configured with a different address, so check with your network administrator if you did not originally configure the device.

```
C:\>ping 10.0.9.1
```

## QUICK START GUIDE

## Blackhawk™ USB510W JTAG Emulator (USB510W)

### ▶▶ ETHERNET DEBUG INSTALL ◀◀

This ETHERNET debug installation portion of the **USB510W Quick Start Guide series** is intended to show how to configure the **USB510W Emulator for operation with Code Composer Studio using its LAN port.**

For emulator debugging via the USB interface, please refer to USB Debugging Quick Start Guide also included with the **USB510W JTAG Emulator.**

#### Inventory of Items Included

1. Blackhawk USB510W JTAG Emulator POD (**USB510W**) and 8 inch JTAG cable.
2. High-Speed USB 2.0 Compliant Cable
3. 5 Volt USB power supply
4. 20e\_cTI-14t\_TI Pin Converter
5. 20e\_cTI-20t\_ARM Pin Converter
6. Installation CD
7. Warranty Card.
8. Quick Start Guide.

#### Other Items Required

1. Target Board System—a self-powered board with a TI DSP and compatible JTAG header connection conforming to IEEE 1149.1 Standard.
2. Copy of Code Composer Studio Version 3.3<sup>†</sup> or later. (Recommended CCSv4/5)

#### Installation Requirements

- PC or Notebook computer with one free USB v1.1 or v2.0 port for USB debug or **USB510W** administration and/or free Ethernet port for LAN debug<sup>†</sup>.
- Windows® 2000 or XP/Vista/Linux Operating System
- Texas Instruments Code Composer Studio Version 3.3 or later.
- CD-ROM Drive.

<sup>†</sup> Ethernet connections to a local area network from the **USB510W** Ethernet port is made using a standard RJ45 patch cable (supplied). For direct connection (PC to **USB510W**) an RJ45 cross-over cable is required (not supplied). **USB510W** administration of TCP/IP address and subnet mask is done via USB port on the emulator.

#### IMPORTANT ENVIRONMENTAL CONSIDERATIONS

This equipment is designed to be operated under the following environmental conditions:

Temperature between 0°C –55°C.  
Relative Humidity of 20% - 70% non-condensing.

Operation of the unit outside of the above range may affect structural and mechanical integrity and cause permanent damage.

Caution is necessary to minimize ESD (Electro-static Discharge) which can damage electronic components. Use in a controlled environment where ESD materials and practices are employed is highly recommended.

# 1 Emulation Driver Installation

Skip this step if you are using Code Composer v4 or later, and it is already installed on your system

The **USB510W** Emulator shipped with its emulation drivers on CD ROM media that are needed by Windows and Code Composer Studio v3.3 for operation.

1. Insert the Emulation Driver CDROM into your PC's CDROM drive.
2. Follow the installation wizard, and when done, you can install the emulator hardware.  
If the installation executable fails to start automatically, run `X:\Setup\Setup.exe`, where [X] is the drive letter for your CD ROM drive.

# 2 Hardware Installation

If the **USB510W** is already installed on your network and connected to a target board, you can skip this section and move to section 3.

## WARNING

Be careful to connect interface cables with the correct orientation. Pin 1 on the interface cable should match Pin 1 on the DSP system connector. The JTAG cable assembly features a "keyed" connector to minimize the chance of error.

Make sure the target is not powered when connecting!

1. Place the **USB510W** module in desired location and connect the 5v USB mini B plug of the power supply to the 5-volt DC input on the **USB510W** (see figure 1).
2. Attach the emulator's JTAG cable assembly (the 20-pin, 2x10 JTAG connector shown in figure 2) to the pin converter with corresponding header on the target board. Make sure the target board is not powered when connecting!



FIGURE 1—WLAN,USB & Power Endplate



FIGURE 2—20-pin JTAG End

# 3 Ad-Hoc Create Mode Setup

The default WiFi setup for the USB510W is "Ad-Hoc Create". This will allow a computer to join to the USB510W network.

1. From your windows Start button, choose, Start > Settings > Control Panel > Open Windows Network connections
2. Right Click on the Wireless Network Connection, and choose properties, which will display the network properties dialog.
3. Highlight "Internet Protocol (TCP\IP)" entry and click the properties button
4. In the dialog, configure the settings to IP 10.0.9.2, Subnet Mask 255.255.255.0  
You should record your current settings to return them back to their original settings later.

5. Using the Windows wireless network connection, you can search for available Wireless Networks. You should see the USB510W-<serial> SSID as shown in figure 3.
6. Select the entry and choose connect. If you see *Acquiring network address for more than few seconds*, go back check you're IP settings for the USB510W and your PC's wireless adapter TCP/IP settings.



FIGURE 3—USB510W AD-HOC SSID

# Network Configuration 4

- This section describes how to customize the **USB510W** configuration
- Launch the **USB510W** Configuration utility from windows desktop shortcut

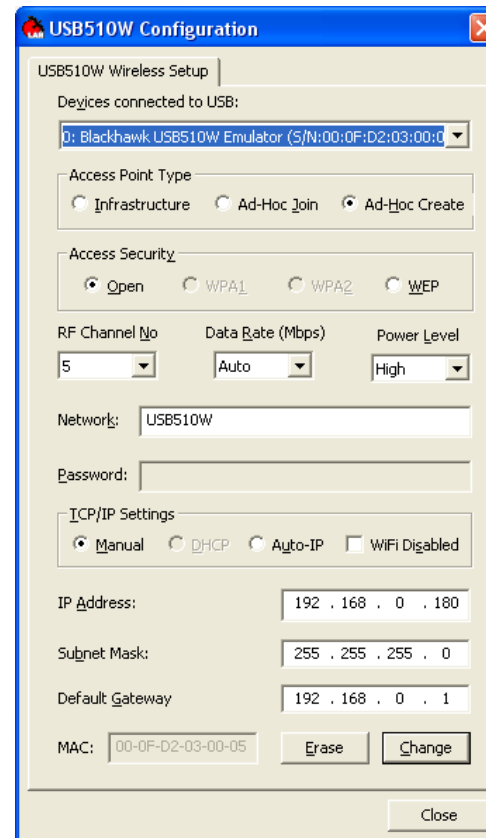


FIGURE 4—USB510W Configuration Utility

- Select your **USB510W** to be configured from the drop down menu
- Choose the Access Point Type you wish to use with the **USB510W**
- Select the Access Security Type you wish to use with your **USB510W** or is configured on your network
- **Optional**—Set the RF channel Number, The **USB510W** WiFi Data Rate, and the **USB510W** WiFi antenna Power level
- Type in the SSID for the Emulator to be connected too if you chose Infrastructure/Ad-Hoc Join modes, or the SSID the emulator will broadcast if you chose Ad-Hoc Create Mode.
- Type in the Password for your network if a Access Security option is not open.
- Setup the IP setting the emulator will use that bet matches your network, for Ad-Hoc mode it is recommended to use Manual static IP settings.