

Feb 27, 2001, Munich, Germany

by Christian Weishaeupl, Keil Elektronik GmbH

support.intl@keil.com ++49 89 456040-0

US Software is providing a small Webserver Example program for the Keil MCB167-NET evaluation board that demonstrate some of the Ethernet capabilities of the board. The example project is available on the Keil Development Tools CD-ROM in the directory CDROM:\MCB167Net\USSW. Here is a list of things you need to run the Webserver on a Keil MCB167-NET Board:

- Keil MCB167-NET Board with power-supply
- The Keil  $\mu$ Vision2 C166 Evaluation Software (or Full Version)
- A 10Mbit-Ethernet Adaptor with 10BaseT-Jack
- A Category-3 or 5 RJ45/RJ45 **crossover** cable
- A Browser with JAVA-support (e.g. MS Internet Explorer 4+, Netscape Navigator 4+)

### How to set up the board

You have to make sure that the jumpers on the board are set to the default settings (described on page 9 of the MCB167-NET Eval Board User's Guide).

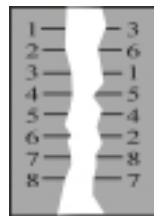
Then connect the board to the PC via a serial cable (which is shipped with the board). On the PC-side plug the cable into the Comm Port 2(if possible); use an adaptor if the PC only has 25-pin jacks. On the **MCB167 Net** use the **COM** jack.

Connect the Ethernet cable to **B1** on the **MCB167-NET** and to the Ethernet-card in the PC.

#### ***The wiring of a CAT.5 RJ45/RJ45 cross-over cable (T568B)***

The crossover cable is an 8-wires cable with RJ45 plugs on both sides. The graphic on the right shows you how the cable is wired exactly.

You may buy this cable from an network accessories dealer.



Power up the board with the power-supply.

---

## Setting up the Software requirements

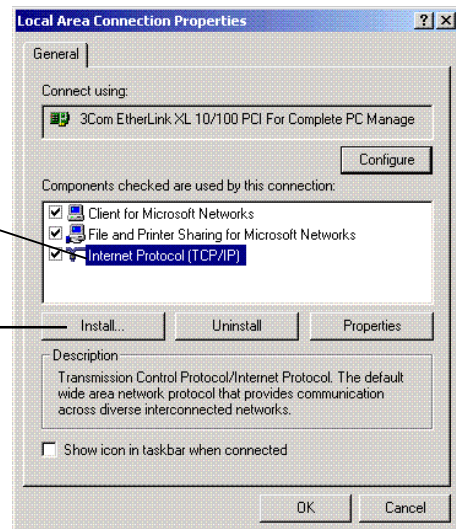
Install the  $\mu$  Vision2 C166 evaluation software from the Keil CD-ROM.

Make sure that you have installed the TCP/IP protocol.

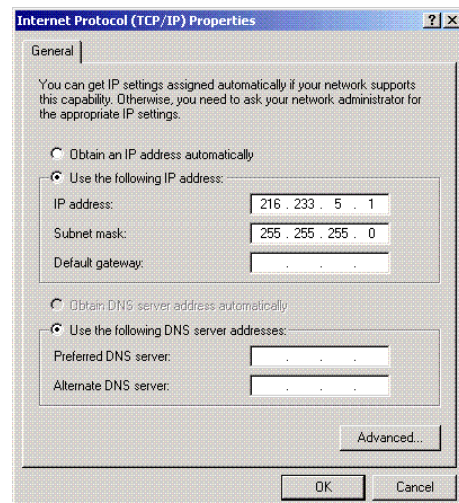
Click on Start -> Settings -> Control Panel -> Network and Dial up Connections and do a right click on your Lan connection.

Open the TCP/IP settings with a right click here

If you don't have the Internet Protocol listed, then you need to install it with a click on this button.



After opening the TCP/IP settings, by double-clicking on the entry, you will get a dialog like this:



---

### Note:

*Please write down your current settings before you change something.. That makes it easier for you to set it back later.*

---

Check the option **Use the following IP address** and enter *198.107.35.xxx* (the last number can be chosen by your please. 191 is not possible because the IP of the board will be *198.107.35.191*).

If Windows doesn't fill the Subnet mask entry by itself, enter *255.255.255.0*.

The other settings are unnecessary. Close the Window.

If Windows asks you to reboot, do this first.

---

Now you have to install the example project. Just copy the files you find on the CD under.  
CDDRIVE:\MCB167Net\USSW to C:\Keil\C166\NetUSSW .

Then open up your browser. Go to the proxy settings there (refer to browser help if you can't find them). Make that the browser is not connecting over a proxy server.

## Start the Example

Now open in  $\mu$ Vision2 with **Project – Open Project: \MCB167NET\USSW\test167.Uv2**.



The project is setup for Monitor communication with COM2. You can change this setting in the dialog with **Project – Options for Target –Debug – Keil Monitor-166 Settings**.



The program is already translated; you can directly start the debugger.  $\mu$ Vision2 will download the Monitor and the program to the **MCB167 Net** board. After that, start program execution with **Debug – Run**.

---

### **NOTE**

*Do not use the PING command, since the program might not work anymore after that!*

---

Open your Browser-Window again and enter <http://198.107.35.191> in the address line.