TCS3200EVM
Quick Installation ⊘TAOS

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SOFTWARE INSTALLATION

On most PCs, installation will automatically start when the CD-ROM is inserted into the drive. If the installation does not begin:

1   Double-click the **Setup.exe** file on the CD-ROM, or
2   Click Start -> Click Run -> Type D:\taos\setup and press Enter. IMPORTANT: Use the appropriate drive letter in the above command to install the software. CD-ROMs are commonly D:

The installation program will guide you through the product installation.

The TCS3200EVM host application software is loaded, followed by the Parallax BASIC Stamp Editor, followed by the USB serial port drivers. Note that you will have the option to cancel the installation of the Parallax BASIC Stamp Editor, if desired. This application does not affect the operation of the EVM.
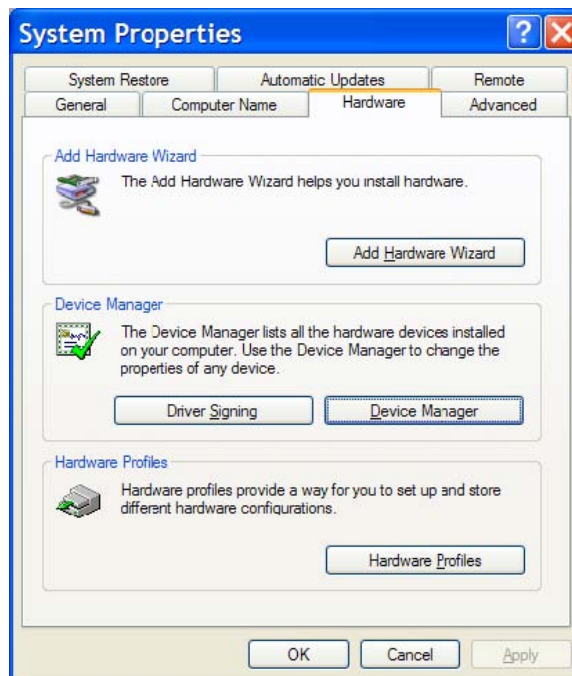
USB DRIVER INSTALLATION

Installation of the USB virtual COM port (VCP) drivers should take place automatically during the software setup. If the install needs to be performed manually, run the file "USBDriverInstallerV2.0.0.exe" found in the Parallax directory on the CD.

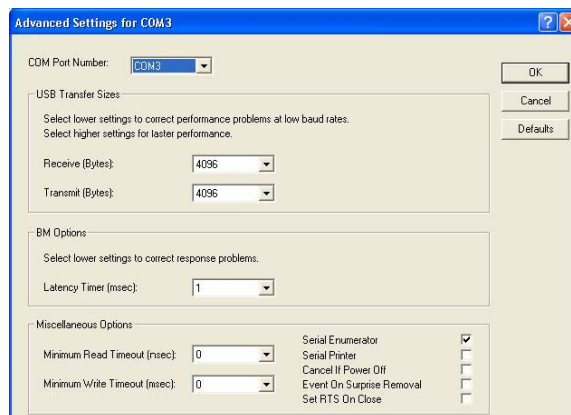For more information or to download the driver, visit the Parallax web site at:

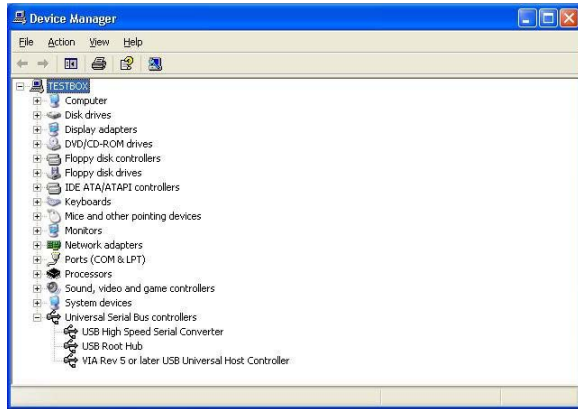http://www.parallax.com/html_pages/downloads/softw are/ftdi_drivers.asp

Using the enclosed cable, plug the mini-B connector into the EVM module. Using the other end of the cable, plug the USB A-connector into a USB port on the computer. The USB VCP driver should load automatically.

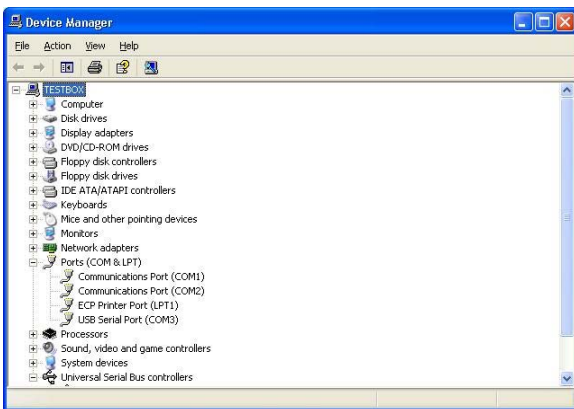To quickly check to see if the USB driver was installed properly:

1   Go to the 'Control Panel' and double-click the 'System' icon. Select the 'Hardware' tab at the properly top and click the 'Device Manager' button in the middle of dialog.
2   Scroll down to "Universal Serial Bus Controller" and expand the section by clicking on the adjacent "+". A **USB High Speed Serial Converter** device should appear. Close the "Device Manager" window, and execute the EVM software.

3. To verify that the COM port was properly configured, scroll up to the "Ports (COM & LPT)"

section and expand by clicking on the adjacent "+" icon.

4. The port will be listed as "USB Serial Port (COMx)" as shown above (note that the COM port number may differ from the image above).

TROUBLESHOOTING

Some installations may experience occasional connection problems that can be corrected through the virtual com port (VCP) driver properties. The following steps should correct these connection problems.

1 Click Start, Control Panel
2 Double-click on the "System" icon.
3 Click on the "Hardware" tab.
4 Click on the "Device Manager" button.
5 Expand the "Ports (COM & LPT) tree by clicking on the "+" icon.
6 Right-click on the USB serial port, then click "Properties" from the pop-up menu.
7 Click on the "Port Settings" tab, then click the "Advanced..." button.
8 Change the value of the "Latency Timer" under "BM Options" to 1 using the drop-down list.

HARDWARE CONFIGURATION

The TCS3200-DB daughterboard must be assembled to the motherboard before the EVM can be used. For detailed assembly instructions, please refer to the document "TCS3200-db_doc.pdf" in the root directory of the CD. Follow the "Getting Started" section, up to the bottom of the left-most column of the first page. Please note that you do not need to enter the program shown in this document into the BASIC Stamp; it already comes programmed with the application necessary to work with the EVM host software.

After the daughterboard and motherboard is assembled, plug in the USB cable and run the host application software. To run the host appliction:
1 Click Start, All Programs, TCS3200EVM, TCS3200 Color Sensor EVM.
2 The host application software will check all the available COM ports, up to port 16, on the machine and try to find the EVM.

Note: to change the COM port number of the FTDI VCP Driver:
1 Click Start, Control Panel
2 Double-click on the "System" icon.
3 Click on the "Hardware" tab.
4 Click on the "Device Manager" button.
5 Expand the "Ports (COM & LPT) tree by clicking on the "+" icon.
6 Right-click on the USB serial port that you want to change, then click "Properties" from the pop-up menu.
7 Click on the "Port Settings" tab, then click the "Advanced..." button.
8 Select a different COM port number (1-16) from the drop-down list at the top of the dialog box.

1 When the EVM is found, you will be prompted to perform a white calibration. This is necessary to normalize the RGB values. Place the EVM on a white surface, with all four standoffs squarely resting on the surface. Click the OK button to perform the white calibration.
2 The EVM should now be ready to use.
3 Please consult the ReadMe.txt file in the root directory on the CD for more information. For more information on the host application, please consult the Help file.

For more information on the TCS3200:
http://www.taosinc.com/contactus.asp