

EARTH PEOPLE TECHNOLOGY

DUAL CHANNEL FTDI BREAKOUT BOARD

USB To Serial Adapter

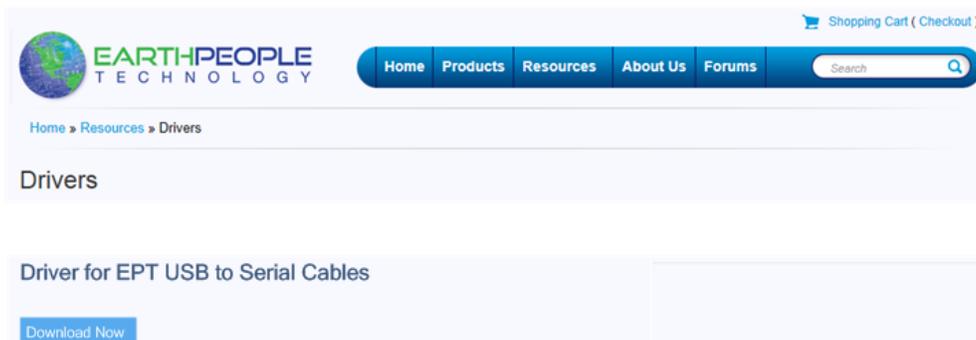
User Manual



The Dual Channel FTDI Breakout Board is a USB To Serial Adapter Module that is compact in size and programs any Arduino. It's small size allows it to fit into bread board applications where other programmers are too big and bulky. It uses the FTDI VCP driver to behave like a built in COM Port. Once the Dual Channel FTDI Breakout Board is connected to the PC and the driver is loaded, you can use a serial Terminal application such as HyperSerialPort to set the baud rate, number of data bits, flow control, etc and communicate with your microcontrollers UART serial port.

Dual Channel FTDI Breakout Board USB Driver

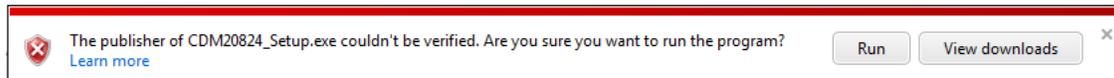
The Dual Channel FTDI Breakout Board uses the ftdibus.sys driver. This driver is loaded upon connection of the Dual Channel FTDI Breakout Board to the PC by the ftdibus.inf file. To install these two files onto your PC, use the FTDI Combined Driver Model CDM 2.12.00 WHQL Certified. The installation of the CDM 2.12.00 is easily accomplished using the executable. Just download the executable



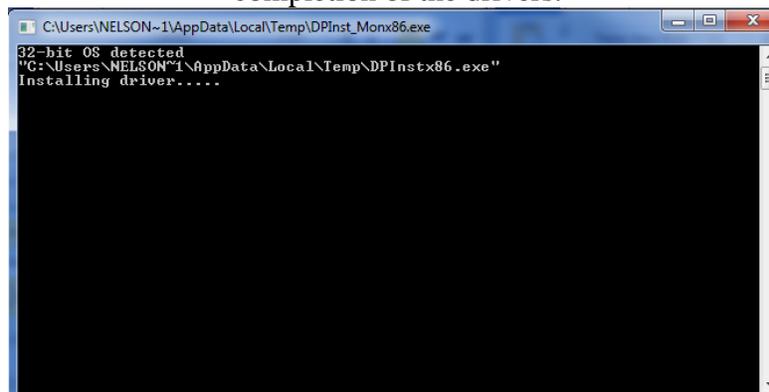
When the download is complete, click Run on the banner to start the install of the driver files.



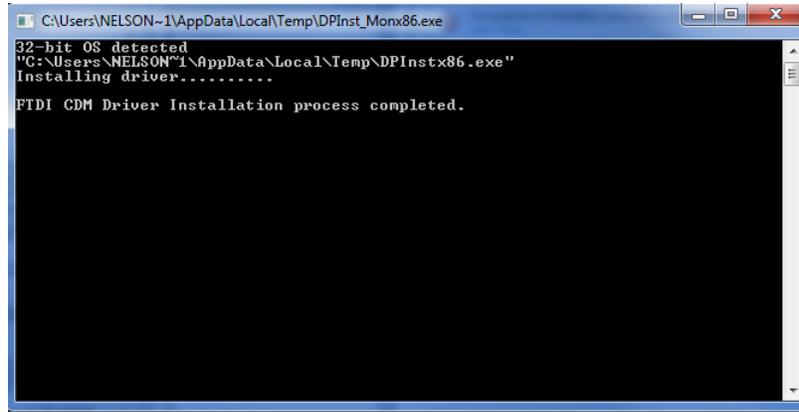
Click on the Run button.



Click on the Run button again. The Console will come up and indicate the installation and completion of the drivers.



The driver files will automatically install in the System Registry.



```
C:\Users\NELSON~1\AppData\Local\Temp\DPInst_Monx86.exe
32-bit OS detected
"C:\Users\NELSON~1\AppData\Local\Temp\DPInstx86.exe"
Installing driver.....
FTDI CDM Driver Installation process completed.
```

When this is complete, the drivers are installed and the Dual Channel FTDI Breakout Board can be connected to the PC and used.

Dual Channel FTDI Breakout Board Programming the ATmega, ATtiny

Programming the Atmel family of 8 bit microcontrollers is quite easy with the Dual Channel FTDI Breakout Board. First, download and install the latest version of AVRdude. The Windows version is located here:

http://www.nongnu.org/avrdude/user-manual/avrdude_19.html

Follow the instructions in the user manual to install AVRdude on you PC.

Then connect the Dual Channel FTDI Breakout Board to your ATmega or ATtiny..

TCK/SK (ADBUS0) goes to the SCK pin.

TDI/DO (ADBUS1) goes to the MOSI pin.

TDO/DI (ADBUS2) goes to the MISO pin.

You are free to use which ever free pin you want for RESET. I use TMS/CS (ADBUS3).

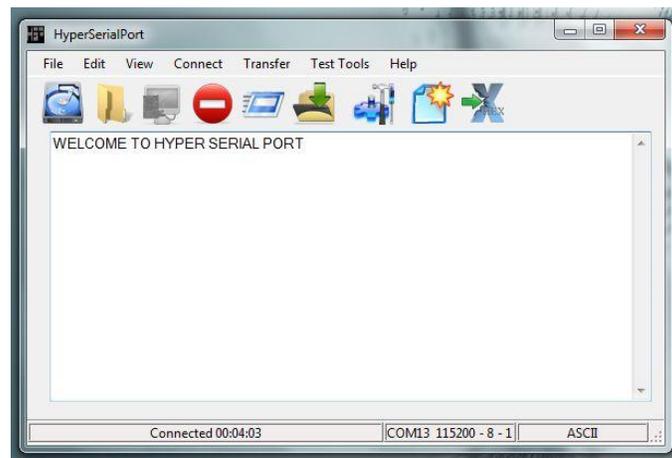
The at the end of ADBUSn is the pin number in the avrdude.conf file. If you encounter a new letter you just keep on counting. For example ACBUS7 becomes pin 8 in avrdude.conf.

The first three pins have a fixed function and cannot be changed. (You can change them, but then it won't work anymore.)

Next, connect the USB cable to the Dual Channel FTDI Breakout Board. Select your file to download into the ATmega or ATtiny. Then click on the download button of AVRdude.

Dual Channel FTDI Breakout Board Communications

The HyperSerialPort allows you to view characters and send characters from the serial terminal of a Windows PC.



This serial terminal allows you to connect directly with the COM Port that is associated with the Dual Channel FTDI Breakout Board. It's advanced features include the ability to view the characters received as hex values, freeze the screen, record the serial terminal session, and send complete files to the Arduino.

You can download [HyperSerialPort here](#).