AN-1: Ant8/Ant16 EEPROM Configuration

The Ant8 and the Ant16 have onboard EEPROMs which are used to configure the USB connection when the device is first scanned by a USB driver. This note shows how to use the FTD2XXST.exe utility to reload the correct values into the EEPROM if it is erased.

Using FTD2XXST.exe

You can reprogram the Ant8 and Ant16 with the FTDI FTD2XXST.exe utility which can be downloaded from here: <u>http://www.ftdichip.com/Files/FTD2XXST4.zip</u> Unzip the utility to a suitable directory and run it. You will need to set the various parameter values as shown below, then press the *Program* icon to reload the EEPROM on the Ant8 or Ant16.

Settings

Here are the settings for FTD2XXST.exe:

Manufacturer	RockyLogic
Manufacturer ID:	RL
Vendor ID:	0403
Product ID:	F918
Description:	LOGIC PROBE

And, under Advanced Settings:

Max Power (mA): 450

All the other Advanced Settings should be unchecked.

Additional Information

Some of the settings are vital for the operating system to load the correct driver and for the driver to configure the hardware. Others are used by application software.

The operating system uses the Vendor ID/Product ID pair to locate and load the correct driver when the Ant8/16 is plugged into a system. All Ant8/16 units use the 0403h VendorID. Ant8 units shipped before the middle of January 2003 used 6001h - a generic Product ID. Later Ant8/16 units use the F918h Product ID which is specific to RockyLogic. The Product ID was changed because WindowsXP uses the generic ID to load a driver for a generic USB serial port adapter – not what the Ant8/16 needs.

Application software makes an initial identification of an Ant8/16 by asking the driver to list all connected USB devices which use the particular USB interface chip. Then, for each connected device performing the following tests:

- 1. Vendor ID is 0403h
- 2. Product ID is F918h or 6001h
- 3. Manufacturer ID is RL

Distinguishing between an Ant8 and an Ant16 is achieved by reading registers in a PAL on the Ant8/16, but that is not the concern of this application note.