USBEE AX Oscilloscope Logic Analyzer user's Guide

Note: Incorrect use can cause equipment damage and personal injury!

Using:

- Please make sure at least one GND line with your target board connected to GND; digital channels DCH1 - 8, TRG and CLK voltage range is 0-5.3V;

- Analog channel ACH 1 and 2, the voltage range is -10 to + 10V; USBEE AX digital output channel can drive, before use must not exceed the voltage and current range;

- First step, USBEE AX is connected to PC, and then connecting the target board to be tested..

1.1 Computer System Requirements

- Supported operating systems Win2000 / XP / Vista / Win7;   Celeron 4.2.0G , Pentium 4.1.8G or higher processor;

- USB2.0 high-speed interface, does not support USB2.0 full speed or USB1.1; 128MB RAM or more than 2G hard disk.

1.2 hardware parameters

PC Connection Requirements	USB2.0
power	PC USB power supply
USB line length	1.5m
size	103mm*53mm*28mm
Test clip	30cm

Note: Since the device is working at the highest sampling rate, the higher of the PC's USB bandwidth and processor resource requirements, so in order to ensure stable operation, do not connect other USB high-speed devices on PC; do not run other software at the same time of sampling and the output signal program.

1.3 Software Installation

When USBee software installation process, you will be prompted to install Windows .NET components, be sure to install the .NET components, or the software will not work. First download the online version of the installation, start the installation. When you can not properly downloaded online installation, it is necessary to go to Microsoft's official website to download and install the Microsoft .Net Framework 3.5 SP1.exe,

http://www.microsoft.com/downloads/details.aspx?displaylang=zh-cn&FamilyID=ab99342f-5d1a-413d-8319-81da479ab0d7

in the lower part, download the full version installed on the page, the size is 230MB.

When the USBee software is installed successful, USBEE AX connected to the computer, Windows Device Manager will recognize the new hardware, click on automatically install the driver, it will display USBee AX-Pro Test Pod if successful.
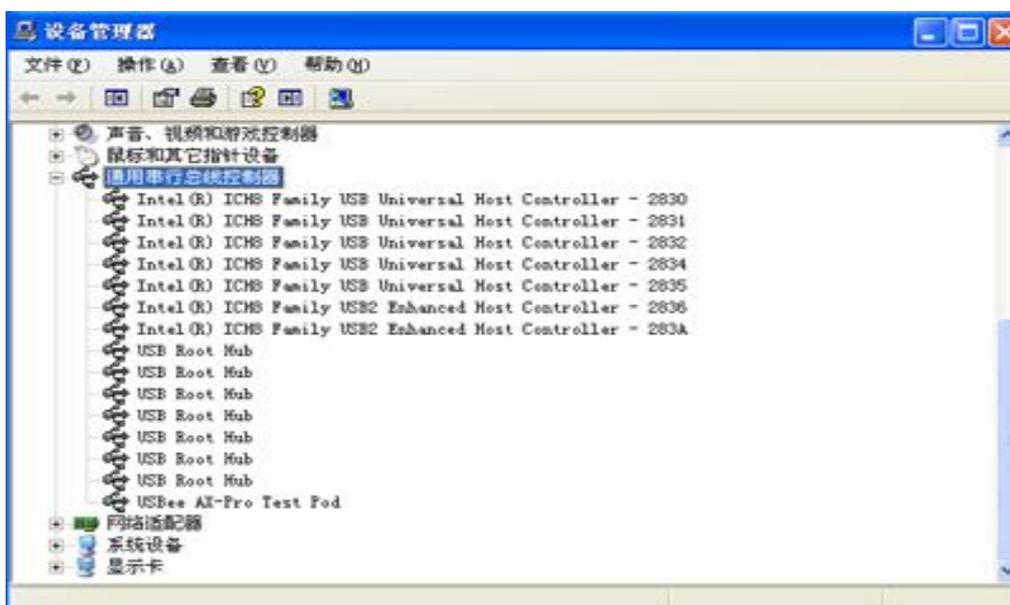
USBee Suite Register USBee Suite has many functions, it must be achieved after software registration. Open USBee Suite software, select Register USBee Suite Pro in the drop-down menu of Setup, in the middle of the page that pops up, find the software ID number, enter the registration software to calculate generate the registration number and registered to USBee Suite, you can get a complete USBee Suite Pro features.

This is a PC-based virtual oscilloscope, feature-rich, easy to use.

2. oscilloscope
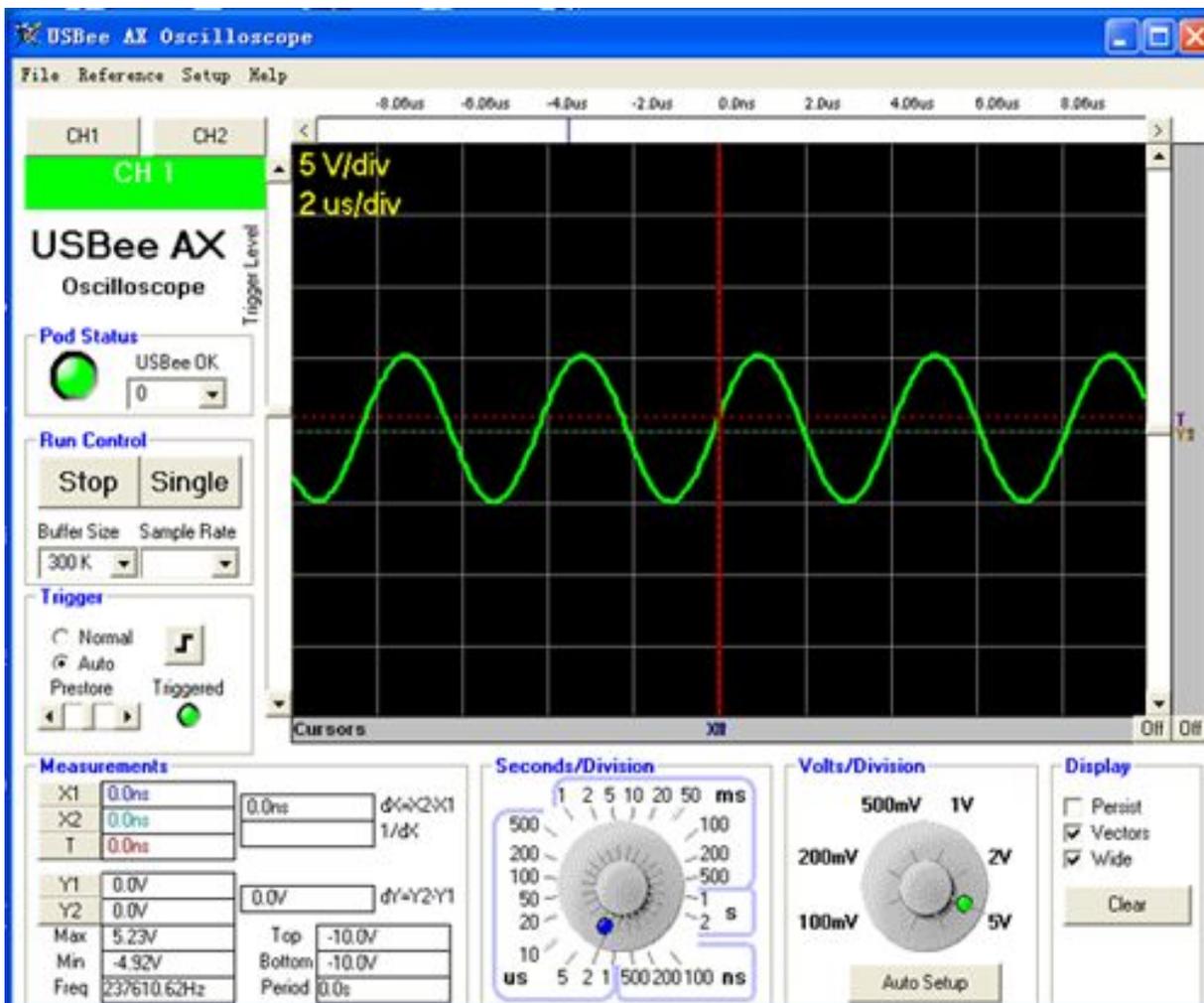
2.1 oscilloscope function parameters

Analog Input	2
Analog channels	1
The maximum sampling rate	16Msps
Analog Bandwidth	3MHz
Input voltage range	-10V ~ +10V
Analog Sensitivity	78mV
Analog resolution	256 degrees
Memory Depth	>1M

3. logic analyzer USBee Suite

3.1 Software installation and registration

USBee Suite Software link: http://www.usbee.com/download.html   download the software, unzip the installation. After USBee Suite software registration, will add more new features.

- First of all, device is connected to a PC; running USBee Suite software, click on the menu item Setup | Register USBee Pro in a pop-up window, you need to enter the registration code;

- Running crack software, in the ID box, enter numbers USBee Pro in pop-up window in the middle of the page, click operation, get the License Key and filled to USBee Pro, you can complete the registration process.

3.2 Quick Start

- first of all, device is connected to a PC; device GND connection with the target board; the signal on the target board is connected to the DCH 1 ~ 8 channels; run USBee Suite;

- Click the "Capture" button; check the waveform.

Note:

1. protocol analysis on the case of digital channels identified as DCH1 ~ 8, corresponding to the number of channels in the software from 0 to 7, note this difference.

2. I2C protocol analysis can decode display the content of communications I2C bus.

3. Sampled signal voltage range is 0-5V, any more than this range of voltage will damage the device. If the ground of target board level has a pressure level with the computer, can not be common ground, please set the sampling signal isolation to prevent the "hot land" effect caused by damage to the equipment. Be careful!