

Beagle USB 12 Protocol Analyzer Part Number: TP320221



The Beagle™ USB 12 Protocol Analyzer is a non-intrusive Full/Low-speed USB protocol analyzer that now includes real-time USB descriptor parsing. Developers can monitor what is happening on the USB bus as it happens with 21 ns resolution.

Thanks to the Beagle analyzer's low cost, every engineer can have his or her own. That means you do not have to schedule time to share your analyzer with other developers. Bottom line, your company saves time, effort and money.

Key Features

Overview

- Non-intrusively monitor Full/Low-speed USB (1.5 Mbps/12 Mbps)
- Real-Time USB Descriptor Parsing
- Real-Time Data Capture and Display
- Watch USB packets as they occur on the bus.
- Fully Windows, Linux, and Mac OS X compatible
- Includes full function monitoring tools
- Low Cost

What is Included

Every unit comes complete with the following items:

- Beagle USB 12 unit
- (1) 6 foot USB A->B cable
- (1) 1 foot USB A->B cable
- Software CD
 - Windows USB Drivers
 - Linux USB Hot Plug Configuration files
 - Data Center Software
 - Datasheets
 - Documentation

Specifications

Non-intrusive USB monitoring

The Beagle monitor is galvanically isolated so it will not affect the system under test or distort the results. Simply attach the Beagle USB 12 inline to passively monitor Full-speed and Low-speed USB devices. It is also possible to monitor High-speed devices by attaching the device through a Full-speed hub.

USB Descriptor Decoding

The class-level decoding feature of the Data Center Software provides real-time USB descriptor decoding for data captured with a Beagle USB 12 Protocol Analyzer. Full class-level decoding is available with the Beagle USB 480 Protocol Analyzer.

Nearly Limitless Capture

Captured data is streamed via High-speed USB directly to your computer. The amount of data captured is limited only by the amount of physical memory available on the machine.

Real-Time Display

See how your device interacts with the USB Host in real-time. Do not waste your time setting up complex triggers to capture data only to discover that the data of interest did not get captured.

With the Beagle USB 12 Protocol Analyzer, you can see the USB packets in real-time. Other analyzers claim to have real time capture, but the Beagle analyzer is the only low-cost analyzer that lets you see USB packets as they are sent over the USB bus in real time.

High-Speed USB 2.0



The Beagle monitor is a bus-powered, High-speed USB 2.0 device. This provides two major benefits. As a high speed device, all the data captured by the Beagle monitor are transferred to the test computer at 480 Mbps. As a low power device, the Beagle monitor does not require a power adapter. This makes the Beagle monitor the ideal tool for engineers in the field. Just plug it into a High-speed USB 2.0 port on your laptop and you are ready to go

Low Cost

No **Hidden** Fees

The Beagle USB 12 Protocol Analyzer comes complete with software only \$400 in single unit quantities. Additional discounts are available for larger volumes. There are no additional yearly support contracts and no fees for software updates.

This low price means that it is immediately affordable for a company to provide every developer with their own analyzer.

The benefits of the Beagle analyzer's low cost are:

- **Less time wasted** because developers do not have to share analyzers or go to the lab to debug simple problems
- **Shorter development cycles** because developers can identify and fix problems quickly and easily
- Less wasted time means **higher productivity**

Future-Proof

The Beagle monitor is completely field-upgradable via USB. Total Phase is committed to improving the Beagle USB analyzer and making these improvements available to our customers free of charge. There are no yearly support contracts and no software update fees.

Updates will be available for download from www.totalphase.com

Software

Data Center Software



The Data Center Software is the free software that is included with the Beagle™ USB 480 Protocol Analyzer. Everyone is welcome to download this software from the Total Phase website to allow for easy collaboration through the sharing of capture data files.

Features include:

- Capture and display USB traffic in true real time with LiveDisplay™ technology
- Interactive filtering and searching in real time with LiveFilter™ and LiveSearch™ tools
- Packets data grouped in an expandable tree view format

Rosetta Language Bindings - Development API

The full power of the Beagle analyzer is available for custom software applications through a free and royalty-free API. Developers have access to the same API that is used by the Data Center Software. Full functionality is available for automated test suites, production test fixtures, and more.

- Develop custom solutions in C/C++, C#, VB, .NET, Python
- Custom parsing of proprietary protocols
- Clean API is well-documented and easy to integrate
- Fully Windows, Linux, and Mac OS X compatible
- Separate 32-bit and 64-bit versions are available for all three platforms
- Royalty-free API can be used without licensing fees

Compatibility



The Beagle Protocol Analyzer was engineered from the very beginning to be a cross-platform device. The software and utilities for the Beagle Protocol Analyzer function on Windows, Linux and Mac OS X so that you can develop software for your preferred platform.

Windows

The software is officially supported on Windows XP (SP2 or later, 32-bit only), Windows Vista (32-bit and 64-bit), and Windows 7 (32-bit and 64-bit).

Linux

The software has been designed for Red Hat Enterprise Linux 4 and 5 with kernel 2.6. Customers have reported successful operation with SuSE and Ubuntu distributions. Please be aware that there may be significant differences and idiosyncracies in the way that different distributions of Linux operate. As such, Total Phase may not be able to support your particular distribution of Linux. Support will be offered on a case-by-case basis.

Mac OS X

The software is supported on Intel versions of Mac OS X 10.4 Tiger, 10.5 Leopard, and 10.6 Snow Leopard.

64-bit Support

The graphical software will run on 64-bit Windows, Linux, and Mac OS X systems as a 32-bit application. However, separate 32-bit and 64-bit versions of the API libraries are provided to allow custom applications to be built for either architecture.

You will never have to worry about being out of step with the latest software features. Software and firmware upgrades are always freely available in www.totalphase.com