

Beagle I2C/SPI Protocol Analyzer Part Number: TP320121



The versatile Beagle™ I2C/SPI Protocol Analyzer is the ideal tool for the embedded engineer who is developing an I2C or SPI based product. The Beagle analyzer provides a high performance bus monitoring solution in a small, portable package. Perfect for engineers in the field and in the lab.

Total Phase has also expanded the functionality of the Beagle I2C/SPI Protocol Analyzer by adding the ability to monitor the MDIO bus at up to 20 MHz.

Key Features

Overview

- Non-intrusively monitor I2C up to 4 MHz
- Non-intrusively monitor SPI up to 24 MHz[†]
- Non-intrusively monitor MDIO up to 20 MHz (Clause 22 and Clause 45)
- Real-Time Data Capture and Display - Watch I2C, SPI, and MDIO packets as they occur on the bus.
- Bit-level timing down to 20 ns resolution.
- Fully Windows, Linux, and Mac OS X compatible
- Includes full function monitoring tools
- Low Cost

[†] Actual SPI capture performance is dependent on CPU speed and SPI bus throughput. 24 MHz SPI capture has been tested for typical applications (e.g., captures of a few hundred SPI packets). Depending on user configuration, the maximum achievable capture throughput for continuous streaming applications may be less than 24 MHz.

What is Included

Every unit comes complete with the following items:

- Beagle I2C/SPI unit
- (1) 6 foot USB A->B cable
- Software CD
 - Windows USB Drivers
 - Linux USB Hot Plug Configuration files
 - Data Center Software
 - Datasheets
 - Documentation

Specifications

Non-intrusive capture I2C, SPI, and MDIO data

The Beagle analyzer has high-impedance inputs so it will not affect the system under test and distort the results. Simply attach the Beagle I2C/SPI inline to passively capture the data traffic to the target devices.

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 that is available on the machine.

Bit-Level timing

Not only can you get timings for an entire packet, it is also possible to get timing for each individual bit in the packet. The Beagle analyzer can return bit-level timing down to a 20 ns resolution.

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 bus-powered 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 I2C/SPI Protocol Analyzer comes complete with software for only \$300 in single unit quantities. Additional discounts are available for larger volumes. There are no additional yearly support contracts. There are 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 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