



Total Phase 主要提供 USB Protocol Analyzer、I2C/SPI Host Adaptor、I2C/SPI Protocol Analyzer、CAN Bus solution 等。秉承其“Powerful & Affordable”的理念，Total Phase 为全世界工程师们提供了性价比极高的主机适配器、协议分析仪等。Total Phase 同时提供免费开放的 API 和 Library，全球无数工程师正在享用此 Feature。其所有工具都同时支持 Windows、Linux、Mac OS X 等操作系统。

USB 3.0 协议分析仪

Beagle USB 5000 SuperSpeed Protocol Analyzer



Part Number: **TP320910**

美国 Total Phase 公司的 Beagle USB 5000 超速协议分析仪物美价廉，采用了实时“Real time”处理数据的技术，配合 TotalPhase 专利的 state-of-the-art LiveDisplay™，LiveSearch™，以及 LiveFilter™技术，其配套的 Data Center™软件可以实时“Real time”抓取(capture)、解析(analysis)、过滤(filter)、搜索(search) USB3.0/2.0 的通讯信息和总线状态。

主要优点:

- **Affordable** • 价格业内超低
- **User-Friendly** • 极方便用户使用
- **Fast** • 工作效率极高，节省时间
- **True Real Time** • 真正的实时“Real Time”抓取、上传、解析、显示、过滤、搜索
- **Easy-to-Read Data** • 多种显示方式，解释详尽

主要特性:

- 支持协议: USB 3.0, 2.0, 1.1, 1.0，而且可自动判别、抓取、解析
- 配套有强大、易用的 Data Center™软件

- 实时抓取 “LiveCapture™” 技术会实时的把抓取到的数据上传到软件所在的电脑内，不多占用协议分析仪硬件内存空间
- 实时解析 “LiveDecode™” 技术将抓取的数据再软件里实时解析
- 实时显示 “LiveDisplay™” 技术可以在抓取并解析的数据的实时显示在软件界面里
- 实时过滤 “LiveFilter™” 工具可以实时、迅捷的过滤感兴趣的数据
- 实时搜索 “LiveSearch™” 工具可以实时、迅捷的找到感兴趣的信息
- 实时 “Real-time” 的类解析 “class-level decoding”，支持 Audio, CDC, DFU, HID, Hub, Mass Storage, UAS, Video, 等更多的类
- 精确的解析：USB3.0 的低于 2 纳秒，USB2.0 的低于 16.7 纳秒
- 自动支持：数据加扰，极性检测，扩频时钟，接收器检测等功能
- 与外部设备同步的多个数字输入输出
- 基于硬件的数据包抑制
- 基本的数据包和事件解析匹配，复杂的、基于状态的解析匹配
- 2 GB 内存可升级到 4 GB
- 有助于解决总线上的错误，有些错误可直接判断出原因：无效的 PID，错误的 CRC，时间超出，帧顺序错误，状态转换错误等等
- 支持多平台：Windows, Linux, Mac OS X

订购信息：

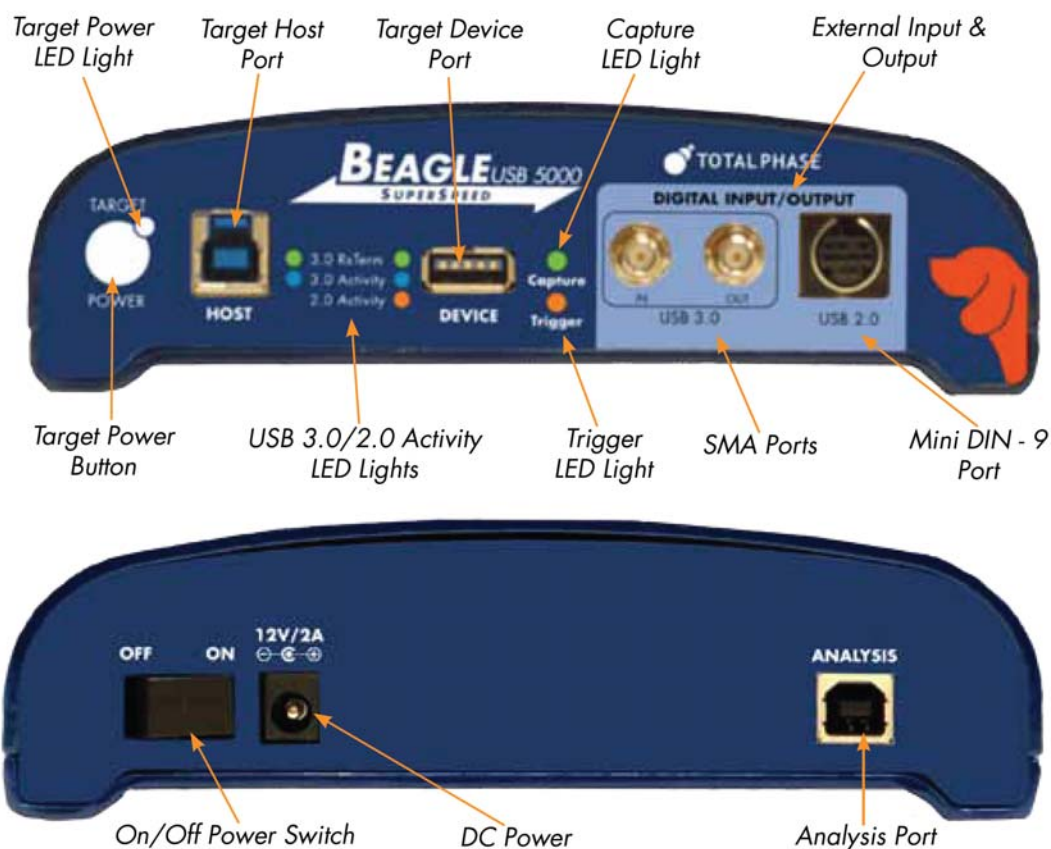
型号	产品描述
TP320910	Beagle USB 5000 SuperSpeed Protocol Analyzer - Standard includes hardware analyzer, software CD, 2 USB 3.0 cables, 1 USB 2.0 cable, 1 Mini-DIN-9 cable, AC adapter, power cord, and convenient carrying case
TP321210	Upgrade Option A includes advanced state-based matching and USB 3.0/2.0 simultaneous capture
TP321310	Upgrade Option B includes 4 GB memory upgrade and voltage/current measurement functionality

产品特性:

	Beagle™ USB 5000 SuperSpeed Protocol Analyzer	
	Standard	Advanced (available early 2011)
Monitoring Capability		
USB 3.0 Monitoring	Yes	Yes
USB 2.0 (Low-/Full-/High-speed) Monitoring	Yes	Yes
USB 3.0 and 2.0 Simultaneous Monitoring	No	Yes
Current and Voltage Monitoring	No [†]	Yes
Real-Time Class-Level Decoding	Yes [†]	Yes
USB 3.0 and 2.0 Real-Time Statistics Counter	Yes	Yes
LTSSM Tracking	Yes	Yes
Error Detection	Yes	Yes
Recording Capability		
On-Board Memory Buffer	2 GB [†]	4 GB
Total Recording Capacity	Limited by PC Memory	Limited by PC Memory
Spool to Disk Recording	Free Future Upgrade	Free Future Upgrade
USB 3.0 Match/Action Capability		
Packet-Based Simple Matching	Yes	Yes
Error-Based Simple Matching	Yes	Yes
Complex State-Based Matching	1 state [†]	8 states
Data Pattern Matching	2 per state [†]	6 per state
USB 2.0 Match/Action Capability		
Packet-Based Simple Matching	Yes	Yes
Data Pattern Matching	Yes	Yes
Other Features		
Cross-Platform Support for Windows®, Linux®, Mac OS® X	Yes	Yes
Native 64-Bit Operating System Support	Yes	Yes
Warranty	2 Years	2 Years

	Option A	Option B
Availability	December 2010	early 2011
Features		
Advanced State-Based Matching	✓	-
USB 3.0/2.0 simultaneous capture	✓	-
4 GB on-board memory	-	✓
Power and Current Measurement	-	✓

实物前后面板:



软件界面:

SYNCHRONIZED DATA

When a packet is selected, all panes are updated, allowing users to instantly see the data of interest

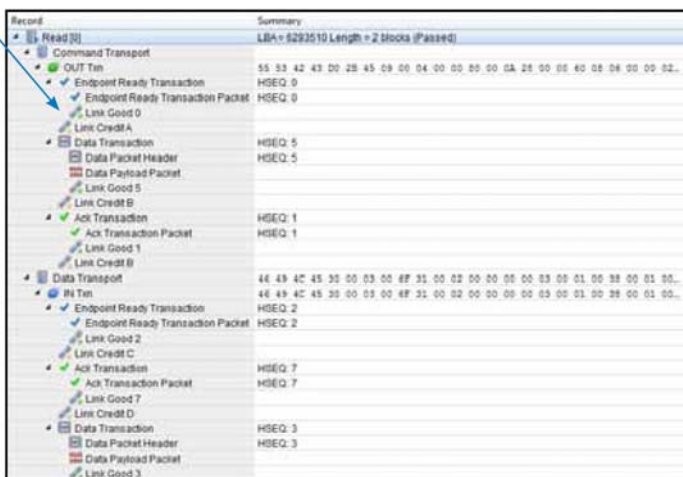


INFO NAVIGATION

Detailed information provided for each transaction in a convenient and configurable table view

EXPANDED DATA

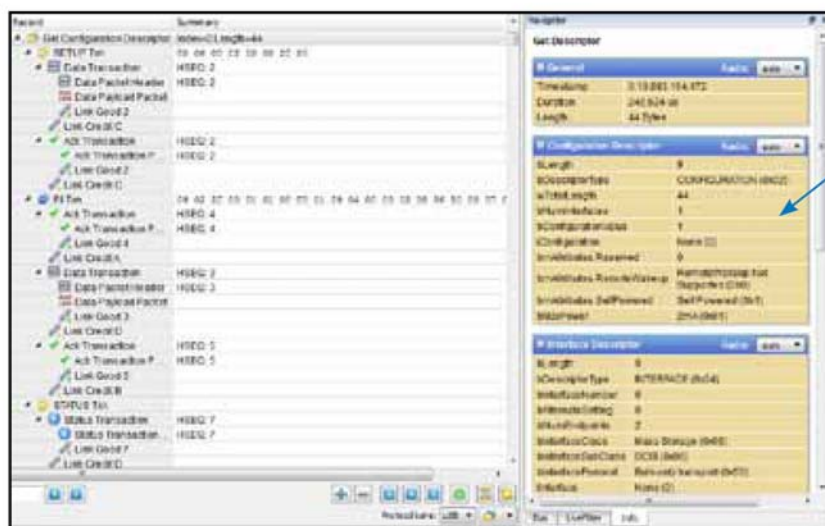
Instantly drill-down from class-level decoded data to low-level link commands by simply expanding transactions



BUS TREE

See all USB devices in a convenient tree hierarchy with configuration information and traffic statistics

Description	Time	Bytes
USB 3.0	16704	16261258
Unconfigured Device (0)	0	0
USB3.0 Hub (2)	0	0
Default Endpoint (EP 0)	0	0
BOS (3)		
Cfg L Self Powered 38mA	0	0
My Passport 0730 (3)	16704	16261258
Default Endpoint (EP 0)	111	2567
BOS (2)		
Cfg L Bus Powered 234mA	16592	16258881



ENUMERATION

Device information available immediately in the Info Pane

Device	Count	Available	Total
Packets	0	0	0
Errors	0	0	0
Unacknowledged	0	0	0
Data	0	0	0
Status	0	0	0
Control Transfers	20	20	20
Set Config	35	35	35
Set Feature	20	20	20
Clear Feature	170	170	170
Set Config (2)	0	0	0
Set Feature (2)	0	0	0
Clear Feature (2)	16	16	16
Set Feature (3)	0	0	0
Set Feature (4)	0	0	0
Set Feature (5)	0	0	0
Set Feature (6)	0	0	0
Set Feature (7)	0	0	0
Unspecified FE	0	0	0
Unspecified FE	0	0	0

STATISTICS PANE

View error counts, packet information, and data transfers