

# Investigator™

## SATA Solutions

Revolutionary probe architecture overcomes  
SATA cabling limitations

- Only protocol analyzer entirely driven through a configurable protocol database
- 100% data capture at full line rate on duplex networks
- Time-correlate traffic across several protocols including Fibre Channel, Ethernet, iSCSI, and more
- 2 to 32 channel capacity, with up to 2GB memory per channel

## Investigator™ SATA Solutions

- ◆ Protocol Analyzer
- ◆ Protocol Editor
- ◆ Traffic Generator
- ◆ Network Connections
- ◆ API Library
- ◆ Platforms and Configurations

## SATA Protocol Analyzer

### Powerful. Efficient. Flexible.

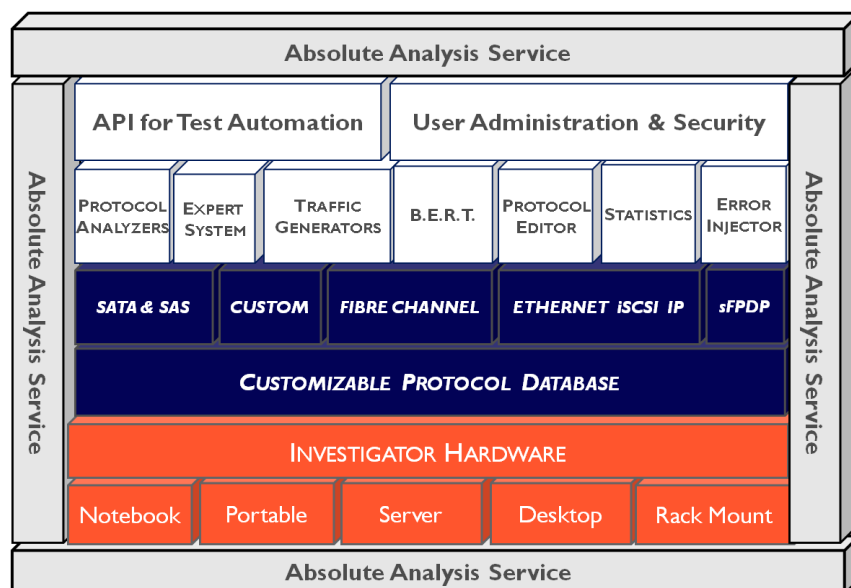
Investigator™ SATA Protocol Analyzer provides the most powerful and granular triggers and filters ever developed. Investigator’s efficient pre-filter memory management permits data capture over lengthy periods of time, while intuitive application software formats capture data in easily understood graphical and tabled display formats.

### Interface, Analysis and Test Support

Investigator™ SATA Protocol Analyzer supports network interfaces capable of full-line rate, multi-channel and multiple protocol testing. Investigator™ hardware supports analysis, traffic generation, statistics, impairment test, and BERT .

### Compatible Configuration

All Investigator™ features are fully unified under one architecture, making it easy to expand to meet future needs, whatever they may be. Multi-channel configurations support up to 32 independent ports of testing, with mixed protocol configurations also supported. Protocol analyzers feature time correlated views with cross-card triggering for channel synchronization, with each port able to sustain full-line rate data transfers to all supported protocols and devices.



# The Developer's Choice

Developers and engineers choose Absolute Analysis Investigator™ (AAI) solutions for their ease-of-use, flexibility, scalability, and versatility. To meet your test application needs, we offer a complete range of high speed serial test and verification solutions that support multiple protocols as well as the requirements of various network topologies.

## Expand and Customize

State-of-the-art FPGA technology is leveraged to facilitate flexibility and protect capital investments, while providing continued capabilities for development and support. User extendable Trace Buffer memory enables the Investigator™ system to be expanded to meet individual requirements.

## Statistics

A real time statistics module provides bookmarks, search, and tabular or graphical displays of link captures to further enhance Investigator's reputation for unrivalled flexibility, power and ease of use in high-speed data capture, decode and analysis.

## Trace Viewer

Documented trace files can be shared, filtered and studied with ease using our freely distributable Trace Viewer software.

*Link status and utilization*

*Frames transmitted*

*Bytes transmitted*

*Frames transmitted by size*



### Data Capture

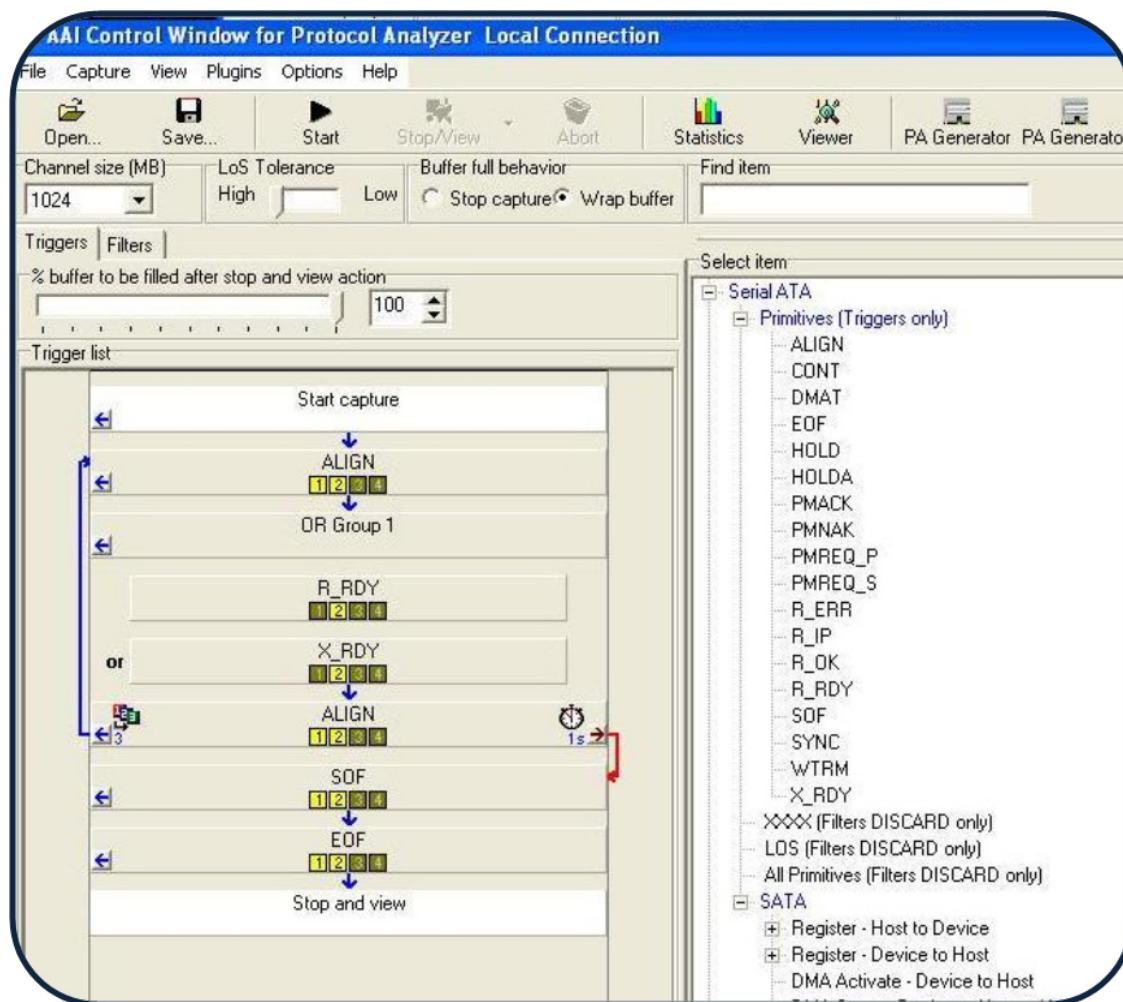
Capture 100% of data at full line rate and in raw 10-bit format, and stop with “buffer full” or “buffer wrap” options. Captured traces can be viewed on any Windows PC using a standalone viewer. The hardware compression algorithm makes efficient use of trace memory resources. Network topology can be displayed through analysis of captured traces.

### Triggering

- Multi-level triggering
- Trigger on multiple consecutive events on, or across, all channels
- Select from a list of predefined trigger events
- Loop backward or forward in a trigger event list
- Re-arm trigger if condition is not met
- Independent channel triggers

### Upper Layer Protocol (ULP) Support

- Supports sequential and direct access devices
- Automatic decodes
- Add new and proprietary protocols using Protocol Editor option



## Test Configuration Library

- Build and save away custom trigger, filter and capture configurations to server

## Alarm Feature

- User definable alarms for link utilization, frames and bytes
- Ability to set high and low limits
- Ability to set alarms on all statistical data

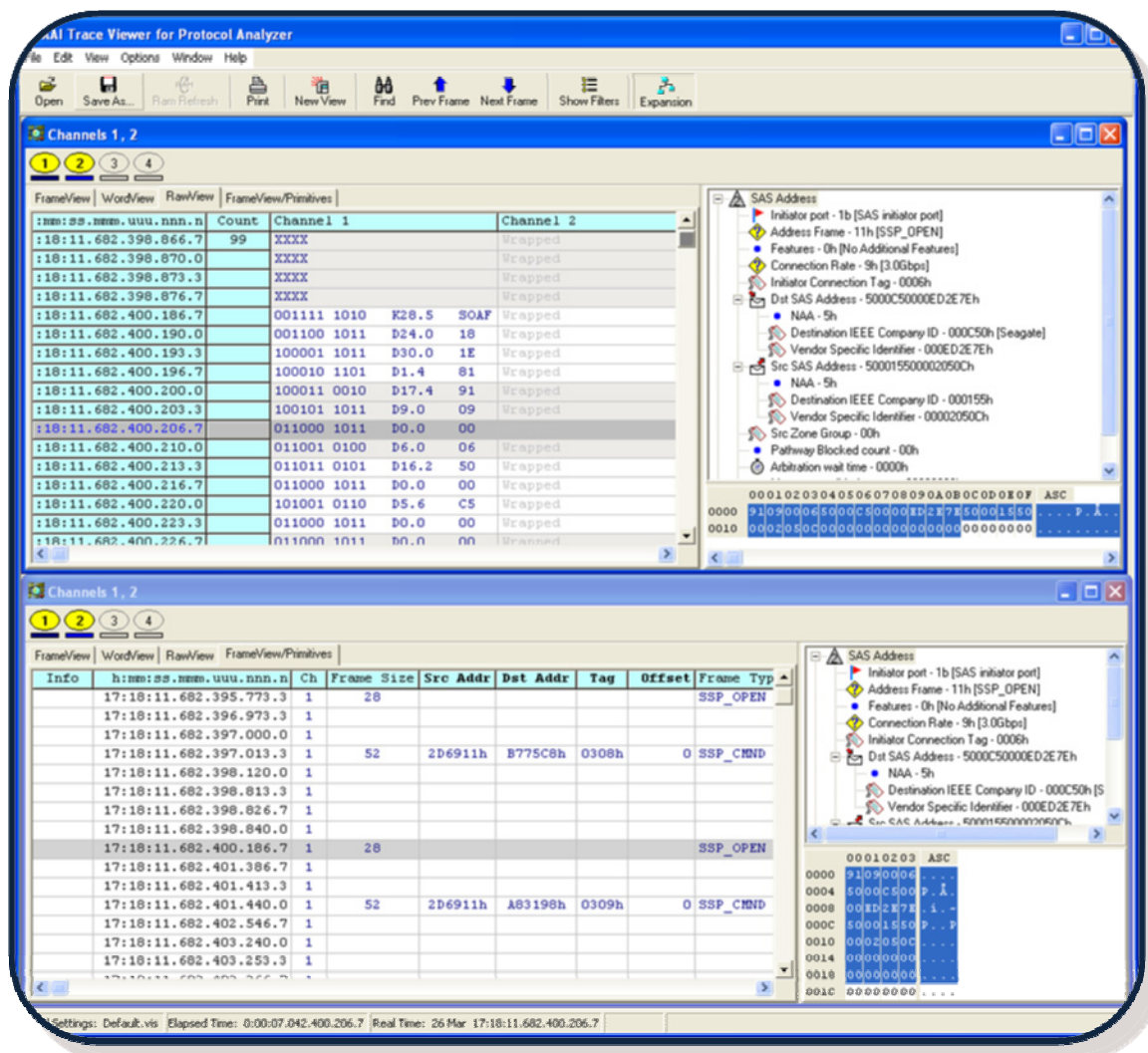
## Data Display Formats

- Raw, 8B/10B, hexadecimal, and frame modes
- Detailed decode of each frame down to individual bit level
- Highly configurable trace display with color coded channel data
- Independent or merged channel views
- Save/print trace segments or entire capture

## Search Facilities

- Find next and previous frames
- Go to and create bookmarks
- Search for source or destination address
- Search for any data within a frame
- Library of predefined search items
- Find trigger events

Filter  
Bookmark  
Disseminate  
Share  
Identify  
Resolve



## Features

- ◆ 1.5Gbps, 3.0Gbps today and 6.0Gbps in development
- ◆ Simple intuitive GUI — capture and display data in just two mouse clicks
- ◆ True 100% line rate traffic capture with concurrent traffic generation
- ◆ Share, filter and study trace files using standalone viewer software (freely distributable)
- ◆ Copper and optical interface support
- ◆ External triggering input and output
- ◆ Capture only key events using multi-level, multi-channel triggers and filters
- ◆ Real time display of statistical data in customizable tabular and chart formats
- ◆ Time correlated analysis on up to 32 simultaneous ports of any supported protocol
- ◆ 1GB Trace Memory per port
- ◆ Multi-protocol capable hardware



## Applications



### Storage Networking & Enterprise Storage

Network Device Test and Troubleshooting

NAS/SAN Application Performance

### Computer Equipment Manufacturers








OEM

**SATA API Library**

The SATA API Library is a 'C' API that provides the user with programmatic control over all the Investigator™ tools. Using the API Library, the user can write custom applications that function over the platform or create code for test automation.

**Platforms and Configurations**

Absolute Analysis Investigator™ SATA Analyzers are available in several platforms ranging from highly portable to high port count rack mounts.

INVESTIGATOR SYSTEMS		dimensions	approx weight	# of blades
laptop		10" x 2.6" x 15.1"	5 lbs	2
mini-DESKTOP		12.6" x 3.7" x 13"	19 lbs	2
small PORTABLE		16.7" x 13.1" x 6.8" ruggedized plastic	23 lbs	2
large PORTABLE		17" x 13.6" x 9.6" ruggedized aluminum	38 lbs	4
19" RACKMOUNTS		1U x 19" x 17.5"	25 lbs	1
		2U x 19" x 20"	35 lbs	2
		4U x 19" x 18"	45 lbs	8

### Training

Absolute Analysis provides comprehensive training courses for products and protocols. Training can be provided at your location or remotely, and can be customized to your requirements.

### Service and Support

Absolute Analysis provides unsurpassed service to all Investigator™ users including remote diagnostics, extended warranties and upgrade paths to current offerings from any Investigator™ system.

**For more info contact your Local Rep:**

Sierra Technologies LLC  
864-458-9035 - Office  
864-551-2415 - Fax  
Sales@SierraTechnologies.com

### For More Information

**Phone**

805.376.6048

**Fax**

805.376.6041

**Email**

AASales@absoluteanalysis.com

**Web**

www.absoluteanalysis.com

**Address**

2393 Teller Road, Suite 109  
Newbury Park, CA 91320