dap TECHNOLOGY

# FireSpy®

## Single-Bus
## Triple-Bus
## Multi-Bus

1394 SM

MIL1394

# FireSpy Family Overview:

DapTechnology offers a series on IEEE1394 data analyzers which have proven their capabilities in several areas of 1394 testing. Focusing primarily on Link, Transaction and Protocol layer analysis all FireSpys feature a suite of analysis and testing functions unmatched in the industry!
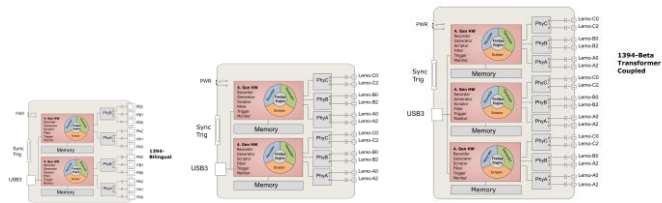
With enormous amounts of data transferred on a FireWire bus, engineers need powerful tools to understand and analyze transactions between nodes. The FireSpy family of analyzers encompasses a small, powerful device with an easy to use graphical user interface that runs on a PC.

Over the years a rather large variety of analyser have been developed in order to meet the industries demands. With rising analysis demands also the analyser platforms have been updated. Our latest HW and FW platform is the 4th generation comprising the most powerful data analysis and storage platform so far.

We differentiate the different models by how many 1394 data buses they can monitor simultaneously. In each series various models exist to meet customers' needs with respect to connectivity, transmission rates, support for AS5643, etc.
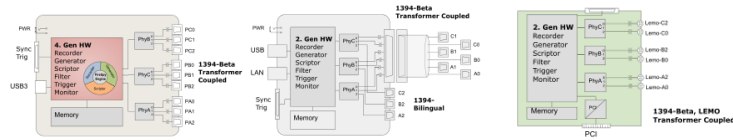
## Multi-Bus Series

The Multi-bus analyzers are designed to monitor and analyze the data on a large number of buses. They offer to allow to connect to up to 9 buses making the tools perfectly suited to analyze all data traffic of an entire AS5643 avionics system.
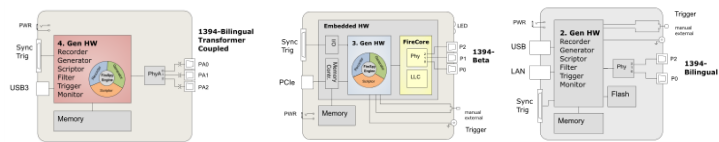


## 3- Bus Series ("Triple")

Triples allow to connect your analyzer to up to three independent buses. Such an tool is well suited to analyze the 3 buses of a typical AS5643 avionics subsystem or an industrial application with triple redundancy. Triples come with USB, PCIe, PCI or CPCI host connectivity.



## 1- Bus Series ("Single")



Please refer to the FireSpy Comparison Matrix and the FireSpy Selection Chart to find the most suitable analyzer for your IEEE1394 and AS5643 testing and analysis requirements.
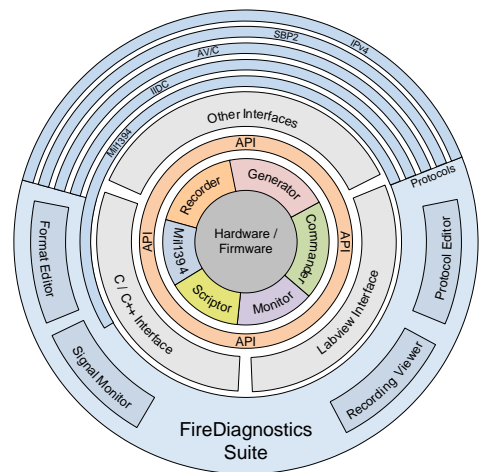
The **FireDiagnostics Suite** is the most comprehensive collection of 1394 analysis, simulation and interface tools for a wide range of applications. Apart from well-established and hardware assisted analyzer tools like Monitor, Recorder, Generator, Commander and Scriptor, the suite also offers a set of software tools designed to integrate the FireSpy products in a wide variety of testing applications, as well as extend customization of its functionality beyond the baseline feature set provided by DapTechnology.

The foundation for all software tools included in the FireDiagnostics Suite is formed by the **Application Programming Interface** (API). With its interfaces for a wide range of development environments like C/C++ and support for the Windows operating system, the application of FireSpy analyzers is extremely flexible. With its feature-rich function library, all hardware assisted analyzer tools like the Recorder and Generator can be controlled as well as more low-level 1394 bus functions.

The **Recording Viewer** is a standalone application designed to permit trace (recorded data) analysis offline, i.e. without a connected FireSpy. The same comprehensive set of analysis tasks is available but allows for a much smaller PC footprint than having the entire FireSpy application installed.

The **Signal Monitor** is an easy-to-use Mil1394 sub-system monitor and analysis tool that benefits from the hardware-implemented Mil1394 protocol. A customizable set of status signals can be pulled from the bus and displayed in near real-time on a customizable graphical Control Panel. Alarms can be setup to alert the operator of out-of-range values.

Another cornerstone of the FireSpy products is the unparalleled high-level **protocol support**. Besides the hardware-assisted integration of AS5643 the FireSpys also support software-based analysis capabilities for consumer and industrial control based applications. The different protocols require very different implementation details and are therefore very unique in their implementation.



DapTechnology also offers certain analyzer models with support for AS5643. This solution which is part of DapTechnology's more generic and much wider **Mil1394** package offers transformer coupled ports and decoding/verification/generation features for the higher level ASM protocol including transmission and timing. Check the following table for analyzer models which are specifically supporting AS5643!

# Other Products:

Besides the Analyzer products DapTechnology also offers a variety of specialty products for various applications in the aerospace as well as embedded market.

## AS5643 INTERFACE SOLUTIONS

DapTechnology offers a new line of flexible interface solutions. They include **media converter** / repeater as well as specialty multi-channel **host adapter cards** (PCI and PMC) with transformer coupling.
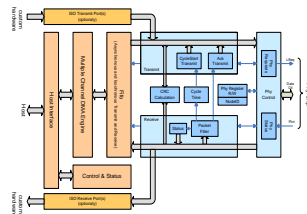
## IEEE1394b IP solutions

DapTechnology's IP solutions are based on the need for a reliable data capture, verification and analysis engine developed for the FireSpy® product line. This solution has been shipped on all of DapTechnology's analyzers, has been tested over and over again. It has been a great starting point for FireLink®.

FireGate was developed because of the need for faster bus speeds. Off-the-shelf silicon has maxed out at S800, yet the imaging industry required speeds of S1600 and S3200. For many years DapTechnology has been the only vendor of such high speeds.

In recent years the Aerospace industry challenged the IEEE-1394 technology with some unique requirements which can be addressed with IP approaches.

## TRAINING

DapTechnology offers IEEE-1394/AS5643 and product related Training Workshops which provide a rich hands-on forum for existing FireTrac and FireSpy users, both novice and experienced, to learn new tricks, share ideas and stay tuned to current technology/feature updates to the products. The course Training offers a modular structure that can be adjusted according to the customer's educational requirements. Three major building blocks form the backbone structure of the 1394 Technology Training.

- IEE-1394 & AS5643 Technology Training (typically 1 day)
- FireSpy Analyzer Workshop (typically 0.5 days)
- FireSpy Scriptor Workshop (typically 0.5 days)
- FireTrac API Workshop (typically 1 day)

# About DapTechnology:

Founded in 1998 in Nijmegen, Netherlands, DapTechnology B.V. is a company specializing in products, systems and solutions based on the IEEE-1394 Standard. Ever since, the company has been working closely with the IEEE-1394 standards development organizations, strategic industry partners and key customers to develop world-class products using IEEE-1394. The DapTechnology FireSpy IEEE-1394a and IEEE-1394b Protocol Analyzer products have gained worldwide acceptance and are currently being used in various aerospace & defense, industrial, consumer electronics and automotive product development efforts. DapTechnology's business growth in recent years is a testament of the company's commitment to meticulous engineering disciplines, exceptional quality and customer satisfaction.

DapTechnology has been a long-time member company of the 1394Trade Association and is actively participating in standards organization like the Society of Automotive Engineers.

## Customer Commitment:

In an ongoing effort to be a leading provider of leading edge 1394 Test and Simulation products, DapTechnology is committed to producing only the highest quality products focusing on high reliability, broad-based applications and spanning a wide range of product implementations.

## Quality:

DapTechnology delivers high quality and highly reliable products. And as part of the Dap solution, excellent service and support is provided before and after any product delivery.

In 2018 DapTechnology has received ISO 9001:2015 certification for its Netherlands Offices. By receiving ISO 9001:2000 certification, DapTechnology meets the requirements of the International Standards Organization

## CONTACT INFORMATION:

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