Product Focus

Real-Time Measurement Data Logging with MDF and PCAPng

The exponentially increasing data volumes in measurement data acquisition pose major challenges for many industrial fields. Dedicated file formats are crucial tools for such tasks in order to efficiently storage specialized data sets and—in conjunction with hard real-time capabilities—get maximum value out of measurement solutions.

From the sensor directly onto the drive—Kithara RealTime Suite combines the Storage Module, specially developed for Big Data applications, with the file formats MDF and PCAPng for highly optimized real-time measurement data management. This synergy allows for large amounts of complex hierarchically structured data to be immediately stored and accessed. The real-time capability is responsible for the deterministic raw data acquisition and thus for the generation of lossless data sets. Even data-intensive applications such as hardware-in-

the-loop simulations can be optimally fed with large volumes of data.

With MDF and PCAPng, two powerful file formats are provided, that each fulfill different requirements. The binary format MDF (Measurement Data Format) is the de facto standard for measurement tasks in automotive engineering and excels at space-saving storage, scalability as well as complex configurations. Built much more simple and straight-lined, PCAPng (PCAP Next Generation) is a flexible, Wireshark-supported file format for capturing data packets within networks. Being essential for storage tasks, Kithara Storage Module enables real-time data storage via NVMe SSDs with several gigabytes per second during continuous operation.

The latest information about Kithara products as well as a free 90-day trial version can be found ›**on our website**.