Overview

Quickly get started with the validation of the vehicle vision sensor stack.

Challenges

- Integrating sensors.
- Sensor speeds and data volumes.
- Ease of identifying corner cases.

Solution

With Intempora RTMaps* running on TRX D8 2.0, developers can efficiently get started and access key R&D data with tagged corner case scenarios from RTMaps.

Benefits

With RTMaps running on TRX D8 2.0 out of the box, developers get a jump start on their R&D programs, by eliminating the hassle and time spent installing, configuring, and debugging access to the vehicle sensor stack.

* Requires Intempora license



Executive Summary

In partnership with Intempora, RTMaps is available as a certified appliance for vehicle data logging on the TRX D8 2.0, enabling developers to easily and quickly get started with validation of the vehicle sensor stack.

RTMaps optimized design allows users to fully exploit the unmatched performance provided by the TRX D8 2.0 with its 100 Gbits/s of sustained storage bandwidth.

With RTMaps turnkey support of many sensors from the market, its numerous built-in features and its graphical development interface, developing and maintaining such high performance data logging solutions becomes much easier.

Developer Requirements

TRX D8 2.0 is an open architecture vehicle data logging platform, on which developers can deploy and integrate their own software stack alongside RTMaps for the continuous integration and continuous delivery of ADAS/AD functionality.

With minimal time and effort spent on setting up the development environment and integrating to the vehicle sensor stack, developers can focus on the core objectives of delivering the next generation of ADAS/AD capabilities.



Figure: TRX D8 2.0 (100Gbps data logger) and RTMaps user interface.



TRX D8 2.0 versatile vehicle logging devices

TRX D8 2.0 is a versatile vehicle data logging platform that supports PCI and network based logging.

TRX D8 2.0 enables developers to connect to high-bandwidth vision sensors, and reliably capture data at 100 Gbps (12.5GB/s) write speeds and store up to 240TB of data in a single test drive.

With a hot-swappable cassette, technicians can easily transfer the data off the vehicle, for ingest to local developer workbenches, HIL/SIL, or transfer to the cloud.

RTMaps

RTMaps™ stands for Real-Time Multisensor Applications, it is a highly-optimized component-based development and execution software tool.

With RTMaps™ design, develop, test, benchmark and validate multisensor applications for Advanced Driver Assistance Systems (ADAS) and Highly Automated Driving (HAD) software functions but also advanced features in other domains such as autonomous and mobile robotics, energy, system monitoring, complex instrumentation and human factors.

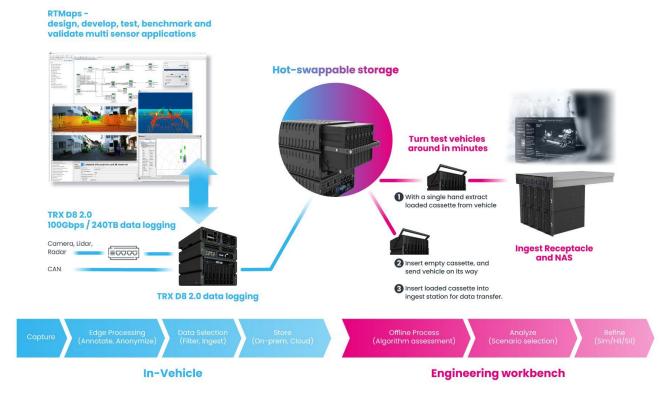


Figure: RTMaps running on TRX D8 2.0 enables efficient R&D data capture of corner cases for developers.

Conclusion

The TRX D8 2.0 platform and the RTMaps software running in the vehicle, allows developers to quickly get started with:

- Multi-sensor data capture with accurate timestamping.
- High bandwidth data logging including support for multiple file formats.
- Smart data logging (event based triggered recording, pre-triggered recording).
- In-line processing & application diagnostics.
- Tagging & monitoring of the datalogger and software status.

For more information on Intempora RTMaps, visit: https://intempora.com/products/rtmaps/

For more information about Klas automotive, visit: www.klasgroup.com/automotive/

