

Movimento Pantera™



Pantera is a cost effective development tool with a wide range of functionality. Combined with the Movimento Puma hardware it's a powerful solution for engineers working with development and testing of vehicle networks.

The software tool Pantera solves several important tasks within the area of vehicle networks. Pantera is able to execute advanced and automated test sequences on CAN, LIN and MOST™ network nodes and supports both closed-loop and open-loop testing. With an automated test process it is possible to save time and resources while providing consistently carried out tests with accurate test reports.

With support for off the shelf hardware from industry leading suppliers, Pantera is especially powerful when used with a Puma due to the Puma's ability to run E-script standalone.

Test Automation

Pantera is able to execute advanced and automated test sequences on CAN, LIN and MOST™ network nodes. By interacting with Microsoft Word and Excel documents, test report generation is easy. With an automated test process it is possible to save time and resources while providing consistently carried out tests with accurate test reports.

Network Verification

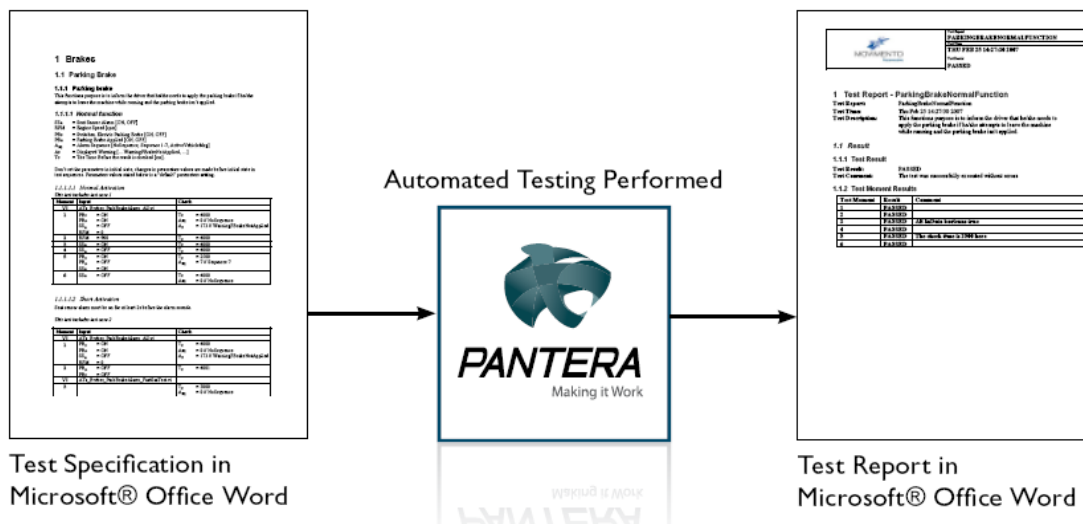
Pantera is an ideal platform to perform verification and validation of protocol usage on the network bus. This preventive testing action secures that network communications will not cause any ECU failure due to the use of non-approved bus messages.

Logging and Replay

With a connected vehicle communication interface such as the Puma, Pantera is able to log network data. To review the recorded data in its context, Pantera can replay the recorded data to visualize the time flow of network activities.

Analysis view in Pantera with CAN Trace and Signal Graph





Rest-bus Simulation

During development of complete vehicle network environments, missing nodes may delay development progress. With Pantera it is possible to simulate a missing node, or even a complete network of non-existing nodes, allowing testing in a fully controlled network environment. After testing the ECU in a perfect network environment Pantera is able to simulate network faults to test the unit's behavior during controlled incorrect network communication.

Rapid Prototyping

The simulation functionality can be used as rapid prototyping tool, simulating either network or node behavior according to the node's specifications before prototypes are manufactured.

Analysis

Pantera is a capable tool for analysis of real-time traffic or recorded logs. It supports measurement and logging of network communications, with capability to perform playback of existing log files to reproduce experienced network errors.

The E-script

The smart programming language E-script is used for creating powerful and fast scripts that can be executed in the Movimento Pantera application or on a stand alone Movimento Puma. E-script is created, edited and compiled in Pantera.

The E-script is easy to program and uses a syntax similar to C and Java. One of the benefits of using E-script is that complex test scenarios can be constructed and carried out while test setup remains flexible and easy to maintain.

Creating tasks for E-script, such as stand alone flight recording, traffic generation/manipulation and event handling, are easily done by using templates.

Handling Legacy Software

Pantera supports integration of third party software components by a DLL-importer and support of API to use COM/OLE/ActiveX components.

Features

Applications

- Test Automation
- Rest-bus Simulation
- Network Verification
- Measurement
- Analysis
- Logging
- Replay
- Instrumentation

Benefits

- Automotive bus support, CAN, LIN, J1708, MOST
- Combination of network and physical signal measurements, closed-loop/open-loop testing and diagnostic simulation
- Possible to share hardware to multiple workstations with server solution
- Supports off the shelf hardware
 - Movimento Puma
 - Kvaser
 - Vector
 - National Instruments