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TSMaster



CAN/CAN FD Automotive Ethernet Flexrav

CCP/XCP SOME/IP

TSMaster is a virtual instrument software platform, which can connect, configure and control all TOSUN's hardware tools and equipment. TSMaster apply to various functional requirements, automotive bus monitoring, simulation, diagnostic, calibration, Boot-Loader, I/O control, measurement test, EOL, etc.

TSMaster's own applets supports user-defined simulation test panel, test process, test logic and whole test systems, even automate report generation. Each line of code written by users in TSMaster can be hardware-independent, you can share and reference codes freely, even cross hardware platforms.

In addition, TSMaster support co-simulate with Matlab Simulink, and joint with CarSim to implementation of the ECU algorithm simulation test with vehicle dynamics model (so called soft real-time HIL) . You can even execute ECU code directly in TSMaster with built-in C and Python script editor .

Application Scenario:

- •Vehicle bus system design
- Vehicle network verification
- Parts PV/DV verification
- •Road test and Calibration
- Information security verification
- •ADAS data acquisition and playback

TSMaster supports Vector, Kvaser, PCAN, IntrepidCS, ZLG's CAN bus products and the mainstream instruments like oscilloscope, waveform generator, digital multi-meter and the board of AI, DI, DO, etc. TSMaster can be use to multi-hardware and multi-channel co-simulation and testing. Highly meet the requirements of PV/DV testing and verification, various automotive electronic components and assemblies, as well as production line testing requirements.

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C/Python Script

The pure C language script can implement the various function of test cases, and the Checksum, E2E, SecOC and other related functions.

Residual bus simulation

Simulation and verify the planned vehicle communication system, even can simulate whole ECU code with the TSMaster's innovative software HIL function.



Data analysis

Support different data display and analysis, like numerical display, graph curve, custom graph panel, etc.



UDS Diagnostic

Configuration of diagnostic-related parameters and services, execution of diagnostic services with Console; configure FBL flashing based on UDS diagnosis; Will support ODX/CDD files.

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Graphical programming

Access and operate all signals of the CAN/CANF-D/LIN/RBS, system variables, API function of applet in graphical programming way.



Embedded code generation

Support automatic code generation under simple configuration, like the code of CAN/LIN communication driver, UDS/BootLoader/CCP/XCP protocol stack code, etc.

Message transmit

Support manual sending, periodic sending, C script sending;The signal of DBC message carry a signal generator, which can generate sine wave, square wave, triangle wave and custom data, etc.

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Record and Playback

Recording and playback uses BLF format by default, can be converted into ASC format, support offline playback and online playback.

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CCP/XCP Calibration

Support A2L files import, DAQ/Polling measurement, MDF/MF4 recorder and playback, characteristic parameter curve, MAP diagram, data management, etc.



Encrypted Publishing and App Builder

Encrypted Publishing and App Builder are mainly used to cooperate among R&D, production, and after-sales scenarios. the corresponding development and configuration of develop project are completed by R&D, it is directly released to the subsequent users by Encrypted Publishing and App Builder. there is no more extra workload to customize the non-standard software.

Shanghai TOSUN Technology Ltd.