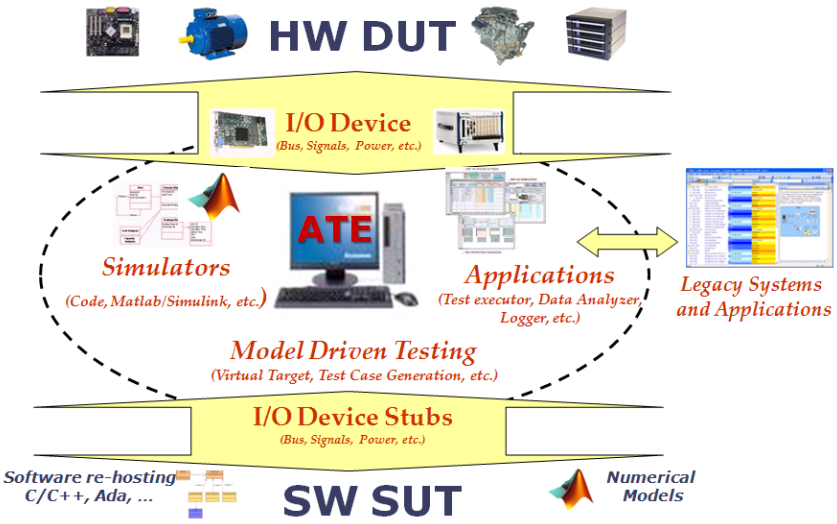
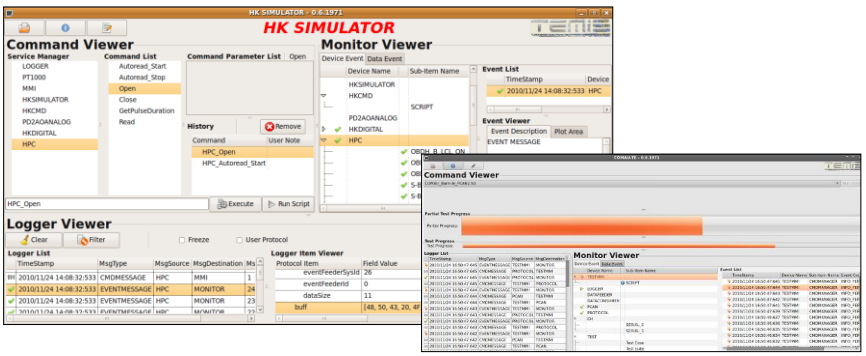
Automatic Test Equipments

Hardware & Software In the Loop systems

Sound experience in Motorsport & Racing, Automotive & Transportation, Aerospace & Defense markets makes Temis a **One Stop Solution Provider**, offering a complete service from ATE specification to test execution.



TEMIS has design experience for mechanical, electronic and software aspects of complex test solutions for *Hardware & Software In the Loop systems* based on standard **COTS and/or Custom Hardware** and **Open Source Software** technologies.



Our **fast**, **low cost** and **customer needs oriented** solutions are designed for a seamless integration with customer R&D and production processes and tools.

The same test harness can play different roles (Test Equipment, Front-End and Qualification Tool) offering an **unique environment** that allows cost & time reduction, flexibility and reuse.

TEMIS S.R.L. Via G. Donizetti 20, 20011 Corbetta (MI) Tel.+39-02-90380812/4097 Fax +39-02-9010059
www.temissrl.com **info@temissrl.com**

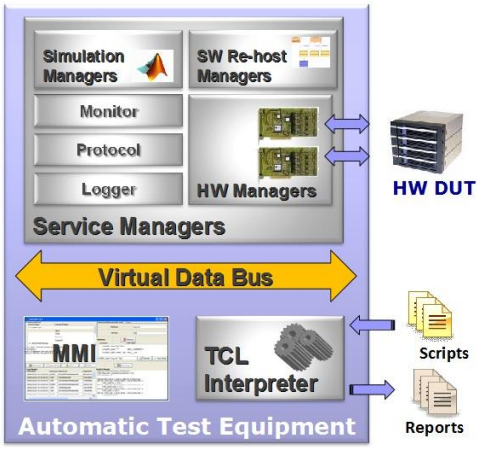
Software Highlights

➡ Service Oriented Architecture

- Service Managers handle physical/logical resources (services)
- TCL Commands are exposed by each managers and can be organized within script
- Virtual Data Bus is a component that allow high modularization and scalability

➡ Multi-platform software implementation

- Windows, Linux, Linux Real-Time
- Unique MMI in all platform



➡ Simulation

- Matlab®/Simulink ® models integration
- Target Software re-hosting
- Event-driven behavioral emulation

➡ Applications

- Legacy Systems integration
- TCL Test Sequence scripts execution
- Data Logging (file, DB, etc).
- Data Monitoring and Analysis (graphs, diagrams, etc.)

Hardware Highlights

➡ COTS Standard Interfaces

- Bus (RS232/422/485, CAN , Packetwire, MIL-STD 1553, etc.)
- Signals (Digital, Analog, etc.)
- Power (DCDC, ACDC, etc).
- Signal conditioning, Level Translators

➡ PC Rack Mount, single-board computer

➡ Custom Hardware

- PCI, VME, PCI Express, etc.
- LVDS, Gigabit Ethernet, FlexRay
- FPGA design and development for Xilinx Spartan3, Xilinx Virtex4FX (Hardo Core PowePC) ,Virtex4LX, Virtex5
- Firmware and embedded software development for Freescale MPC5554, MPC8270, MPC85xx, MCF52259, DSP Texas Instruments TMS320C64xx, TMS320F28xx, TMS320DM64xx, Renesas SH7058, SH7080, ST Teso STA2058

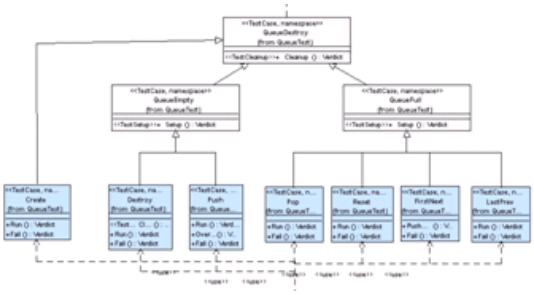
TRANSPORT ELECTRONIC MECHATRONIC INTEGRATED SYSTEMS

TEMIS S.R.L. Via G. Donizetti 20, 20011 Corbetta (MI) Tel.+39-02-90380812/4097 Fax +39-02-9010059
www.temissrl.com **info@temissrl.com**

Automation in Testing

➡ **Automation** - Repeating command sequence are implemented with TCL scripts.

➡ **Reporting** - Test results are collected into textual reports



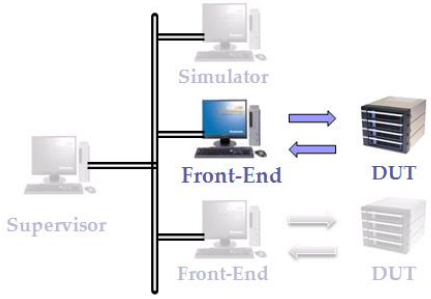
➡ **Model Driven Testing** - Test Procedures can be designed and documented with a UML/SysML models that support requirements *traceability* and *documentation*

Multi-modal Test Systems

The same test harness can be (re)used in different R&D and production phases (development, system integration, qualification)

Test equipment

- Development and Debug
- Full MMI for debugging
- One shot commands
- Step-by-step script execution



DUT Front-End

- For complex test scenarios of System integration
- Minimal MMI for DUT monitoring
- Remote command execution

Qualification Tool

- Minimal MMI for progress indication
- Acceptance test procedure execution
- Automatic reports generation

TEMIS S.R.L. Via G. Donizetti 20, 20011 Corbetta (MI) Tel.+39-02-90380812/4097 Fax +39-02-9010059
www.temissrl.com **info@temissrl.com**

Professional Services

➡ Test Sequence design, coding, execution & report

➡ Reverse Engineering of customer code

- UML Modeling
- Design refactoring
- Documentation according to customer standards

➡ Application Porting

- Functional features are moved from a platform to another
- Code translation from a language to another

➡ Application re-hosting

- Functional features and original code moved (as much as possible) from a platform to another

TEMIS

TRANSPORT ELECTRONIC MECHATRONIC INTEGRATED SYSTEMS

TEMIS S.R.L. Via G. Donizetti 20, 20011 Corbetta (MI) Tel.+39-02-90380812/4097 Fax +39-02-9010059
www.temissrl.com **info@temissrl.com**