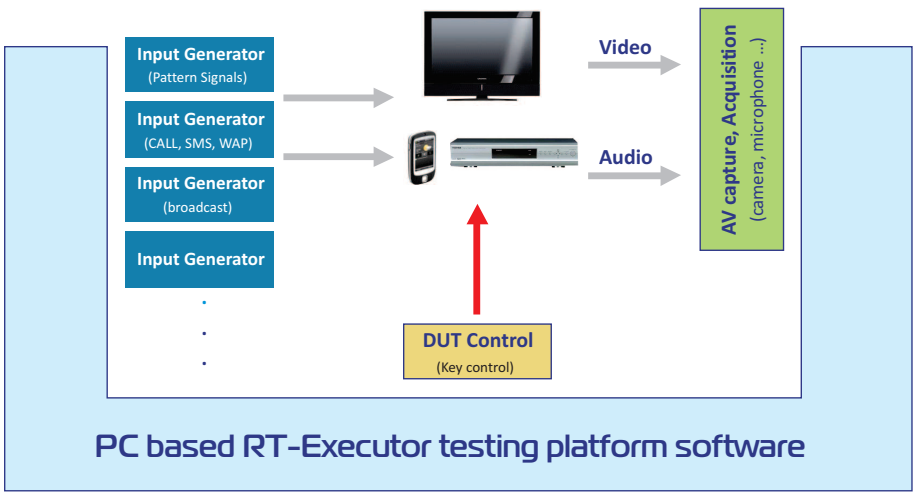
Black Box Testing



PC based RT-Executor testing platform software

Software for Test Creation, Execution and Reporting

RT-Executor is a software framework for functional and system testing of multimedia devices.

RT-Executor is open and modular platform easy extendable and easy for deployment for different application.

RT-Executor is software tool for hardware in the loop testing, focusing on black box test approach.

RT-Executor basic version is ready for system testing of TV Set, STB, DVD and BR players, supporting more than 40 drivers for: A/V signal generators, grabbers and image processing algorithms

www.bbt.rs

RT-Executor

KEY FEATURES AND BENEFITS

Fully automated Test Execution System

Supports more than 50 different devices

- Input devices - generators
- Output devices - grabbers capture cards
- Control device - RC emulator, UART, I2C

Single application for test creation, execution and reporting

Open for further development and customization

- Available Software Development Kit
- Customer gets training and documentation to:
  - develop own test cases
  - develop drivers for new devices
  - develop new forms of reports

Variety of algorithm available

- High performance and high reliable algorithms
- Optical character recognition & verification
- Pattern matching

Software designed for 21st century

- Highly modular software
- Clear hierarchical organization
- Fully transparent for front application
- Easy extendable with support for new device drivers
- Includes new device driver without changing the application

Additional features

- Easy system configuration
- Results stored to local database
- Results tracking during execution
- HTML or Excel test execution report

Black Box Testing

Features

- System Test (HW+SW) - testing of a completed application
- Focus is on functional correctness - inputs are given to "black box" and outputs are checked against expected outputs (golden reference)
- Test scripts in: BBT_SCRIPT language and PYTHON
- Manual, semi-automatic and automatic test execution supported
- Modular solution supports easy extension without changing GUI application
- Provides graphical interface for Test cases and Project/Suits creation
- Automatically referent pictures update mechanism
- Supports more then 50 different devices (generators, grabber devices and algorithms)
- Easy configurable test system description
- Single test execution or test project/suite execution
- Provided SDK: binaries, samples and documentation
- Storing test results to local database
- Excel and HTML report generation

Supported Device Drivers

Fluke 54200
Multi standard video and TV signal generator

Rohde & Schwarz SFQ
Digital signals generator for antenna, satellite and cable

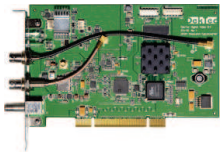
QuantumData 882
Multi standard programmable video signal generator

Rohde & Schwarz SFU
Broadcast test system

Astro VG-84
Multi standard programmable video signal generator

Audio Precision 2722
Audio analyzer

Master MSPG1025
Multi standard programmable video signal generator



DekTec DTA 115
Multi standard modulator with VHF/UHF up converter

RT-Executor

How RT-Executor Works?

Test execution steps*

- Load Test system configuration
- Initialization and control of input devices (generators)
- Initialization and control of output devices (grabbers)
- Configuration and control of Device Under Testing (DUT)
- Test scenario execution – semiautomatic or automatic
- DUT A/V output collection and processing

*RT-Executor Application available from **www.bbt.rs**

System requirements

- Microsoft™ Windows® XP
- Microsoft™ Windows7 32 bits
- 2GHz Intel™ or AMD™ DualCore CPU
- 2GB RAM
- 100MB free disk space

Package Content

- CD with sw installation and documentation
- USB node lock

Software
- GUI Application
- Device Manager
- Device drivers (more than 50 drivers)

Documentation
- User Manual
- Test creation manual
- Tests samples

3-day Test Project Training Course

Day 1: System Introduction
Test system introduction: HW + SW setup

Day 2: Tests creation and run
Practical demonstration of test creation, test project preparation and test execution

Day 3: Device driver creation
Exercise how to write proprietary device driver

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