

Hand in Hand

MTest is our test management software that automates systematic testing in conjunction with TargetLink, the production code generator, during function development. Its main use is in the left-hand branch of the V-cycle, running tests in parallel to the development process. It is an indispensable time-saver for back-to-back tests during function development. MTest not only manages tests, it also generates reports.

Documenting Tests

of the test scenarios.

When tests have been run, MTest automatically

compiles and displays the results. These can be used

for automatic report generation in PDF or HTML

format, for documentation and for further analysis

Regression tests during function development

TargetLink and

MTest interact

Automated, systematic testing

TargetLink 2.0

Developing Tests

While functions are being developed with TargetLink, MTest can perform a wide variety of tests systematically and automatically for early function design validation. It does this by first generating a test frame, into which a copy of the function model is inserted. MTest then provides two methods of obtaining test vectors: the integrated Classification Tree Editor (CTE) and a second method based on signal behaviors. The CTE is a graphical method of test data creation, while in the signal behavior method, MTest either generates stimulus signals or imports test data, for example, from MAT, XLS, or CSV files.

Running and Managing Tests

MTest supports all TargetLink's simulation modes – from model-in-the-loop to software-in-the-loop and right through to processor-in-the-loop simulation – so backto-back tests can be run for all test phases throughout function development. MTest stores and manages all the tests belonging to one function model. The tests can be reused at any time, with an automatic plausibility check to ensure that the tests are suitable for the test object.

Versions and Download

MTest is currently available as an add-on to AutomationDesk. MTest 1.3, due out in the second half of 2005, will be a stand-alone version for use without AutomationDesk. Users of MTest 1.0.1 and 1.1 can update their versions to MTest 1.2 now, via download from www.dspace.de/goto?mtest12

▲ MTest user interface, model of the controlled system, and test frame with function model **■** MTest