

Integrated with Leading Compiler and Embedded Environments including:

- > Green Hills MULTI[®] IDE, INTEGRITY[™], INTEGRITY[™] 178B, GMART
- > Wind River Systems VxWorks[®], VxSim, VxWorks 653, Diab with SingleStep
- > LynuxWorks[™], LynxOS[®], LynxOS[®] 178B, LynxOS[®] SE
- > AdaCore GNAT Pro
- > Texas Instruments Code Composer Studio[™]
- > Analog Devices Visual DSP++[™]
- > Rational APEX IDE[®], APEX Exec[®]
- > Metaware[®] ARC
- > ARM[®]
- > IAR
- > Cosmic
- > Freescale[™] CodeWarrior[™]
- > KEIL[™]
- > NEC
- > QNX[™]
- > Microchip[™]
- > Paradigm
- > Renesas
- > ST Microelectronics
- > HighTec TriCore[®]
- > TASKING[™]
- > Windows CE

VectorCAST/RSP[™]

Software Testing In Real-Time Embedded Environments

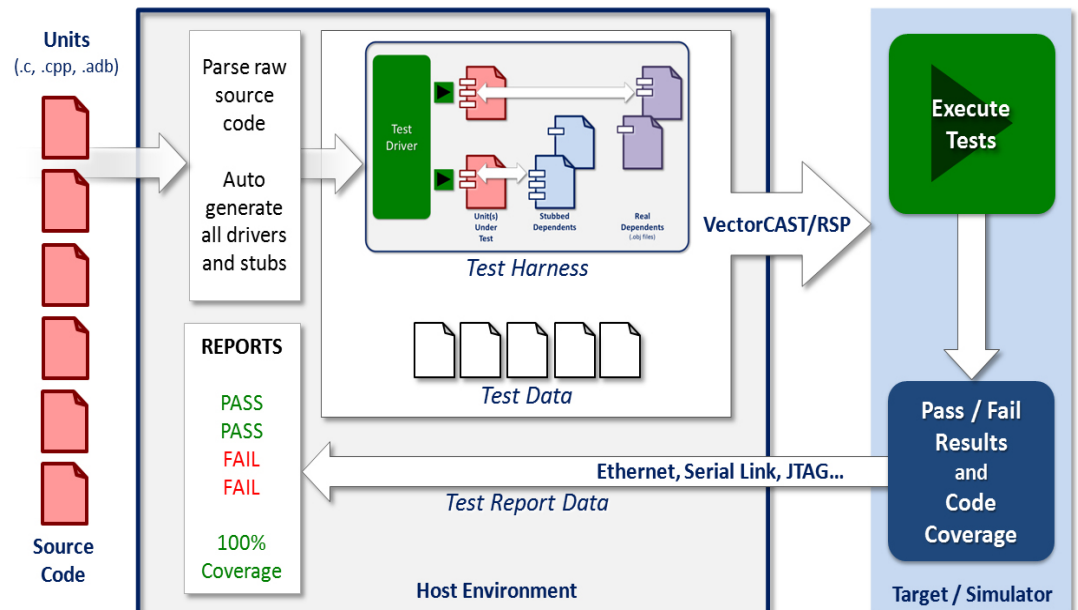
<What is VectorCAST/RSP>

VectorCAST/RSP is a Runtime Support Package add-on to the VectorCAST toolset that enables testing of real-time applications directly in an embedded target or simulator environment.

VectorCAST/RSP is used in conjunction with VectorCAST/C++ or VectorCAST/Ada to provide automated module testing in a real-time embedded environment. VectorCAST/RSP has been ported to industry-leading compiler and run-time combinations.

VectorCAST/RSP Features:

- > **Cross-Compiler Specific** test-harness generation for execution on a target or simulator
- > **Automatic Download** of test harnesses and test cases for execution on a target by way of the compiler interface or a user-specified download mechanism
- > **Execution Controlled from GUI** provides an ease-of-use not common to component target testing
- > **Customized I/O Facilities** are provided on both the host and target sides to allow communication between the host and target processors for test reporting



VectorCAST/RSP Capabilities

<Target Download>

VectorCAST is integrated with the development environment and the debugger, simulator, or emulator to download executable programs to the target board.

All download commands are integrated within VectorCAST to provide a completely automated solution. Integrating VectorCAST with the download facilities allows tests to be run as easily on the target as on the host.

<Processor Chip>

The specific processor chip is of no special concern to VectorCAST. All harness components are high-level source code that is simply compiled and linked for the specific target processor.

<Target Code Generation>

In cases where all language facilities are available in the target run-time kernel checks made during the VectorCAST code generation to ensure that non-supported features are not used in the VectorCAST test harness code (for example, signal handling).

<IO Facilities>

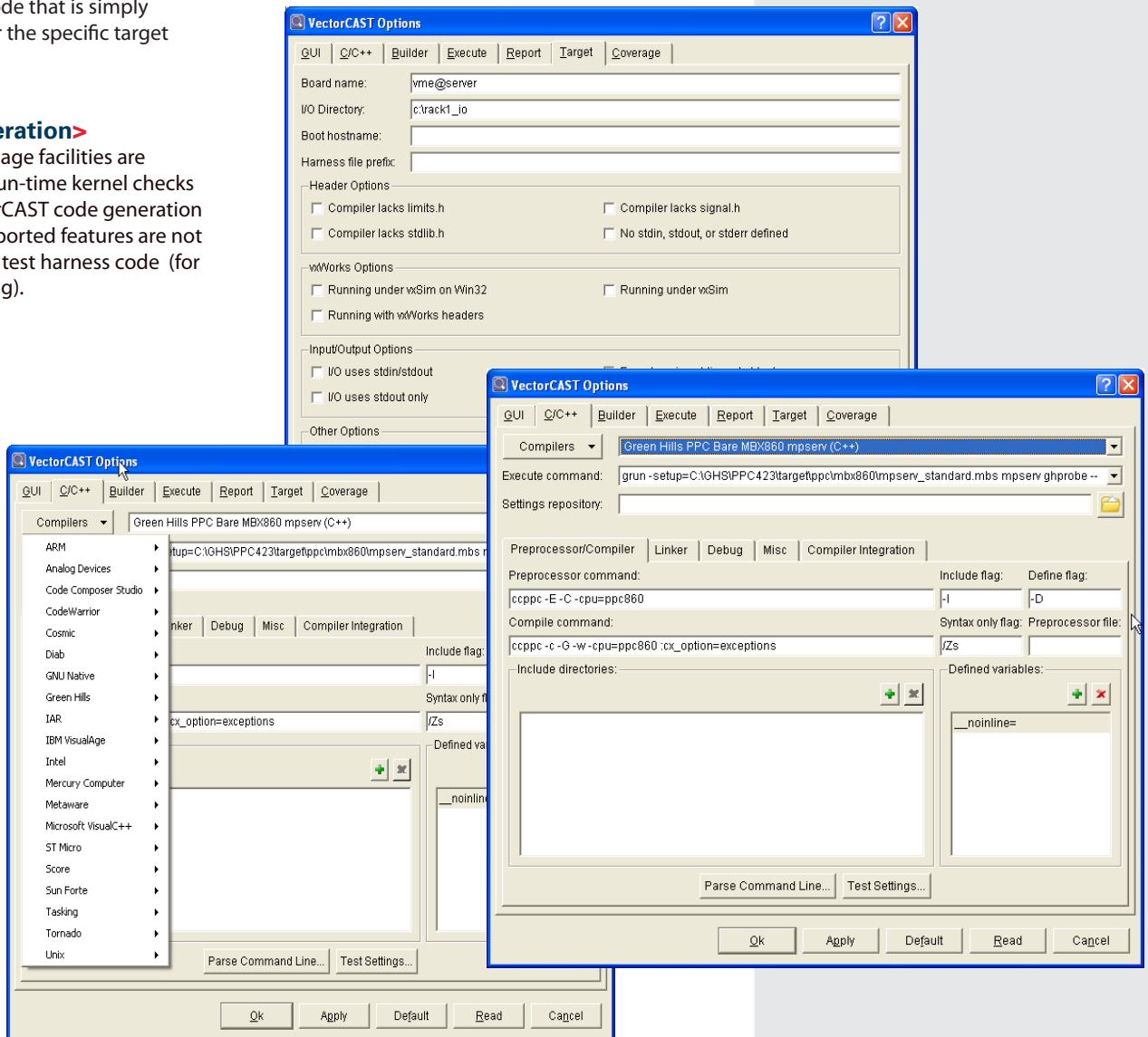
VectorCAST/RSP provides customized I/O facilities to support target communication using JTAG probes, emulators, ethernet, serial ports, or any other communication link available on your target.

<Porting New Targets>

The modular nature of VectorCAST/RSP makes porting to new compiler run-time combinations simple, and is usually accomplished with minimal lead time.

Product Features:

- > Seamless integration with cross-development tools
- > Cross-platform test execution on a simulator, emulator, or live target board
- > Supports reduced capability run-time environments for High Integrity Systems (For example, Ravenscar and ARINC 653 profiles)
- > Allows test cases generated in a native environment to be re-run on the target automatically



Supports industry-leading compiler and run-time combinations