

Renesas Ready Ecosystem Partner Solution

Parasoft C/C++ Testing Solutions



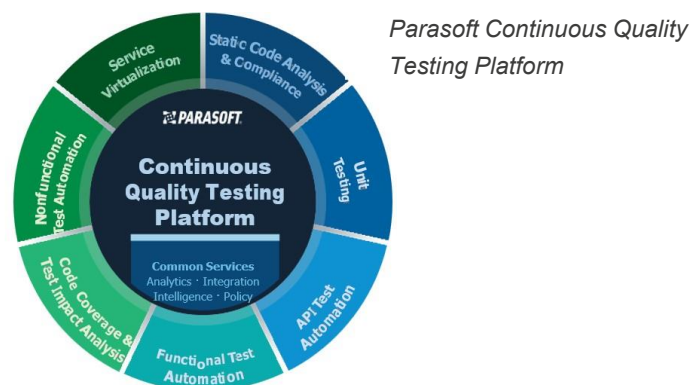
Solution Summary

Parasoft C/C++test and C/C++test CT test solutions provide an efficient, high-quality integrated platform for safety- and security-critical real-time embedded software. The tool suite brings together static analysis, unit testing, code coverage, requirements traceability, and compliance reporting into one seamless solution. With an open and extensible architecture, Parasoft seamlessly integrates directly into modern development toolchains and CI/CD pipelines, enabling continuous quality verification from the first line of code to the final product release. Get flexible integrations that work with any of Renesas's [RZ](#) MPUs and [RA](#), [RX](#) and [RL78](#) MCUs, ideal for safety- and security-critical software development across multiple domains.

Features/Benefits

- Static Analysis
 - Enforce coding standards (MISRA, AUTOSAR C++14, CERT, CWE, OWASP)
 - Perform deep dataflow and control-flow analysis to detect runtime defects early
- Unit Testing and Code Coverage
 - Automatically generate and execute unit tests on host or target hardware
 - Integrate with any unit testing frameworks like GoogleTest, CppUnit, etc.
 - Measure statement, branch, MC/DC, and assembly-level coverage
- Compliance and Certification Support
 - TÜV SÜD certified for use in IEC 62304, IEC 61508, and EN 50128.
 - Generate comprehensive audit-ready reports and documentation.
- Dashboards and Analytics
 - Provides centralized reporting with interactive dashboards.
 - Gives real-time insights into code quality, safety compliance, and test coverage.
 - Enables data-driven decisions for risk mitigation and release readiness.

Diagrams/Graphics



Target Markets and Applications

- Industrial & Energy
- Medical devices
- Rail transportation
- Consumer electronics

www.parasoft.com/products/parasoft-c-ctest/

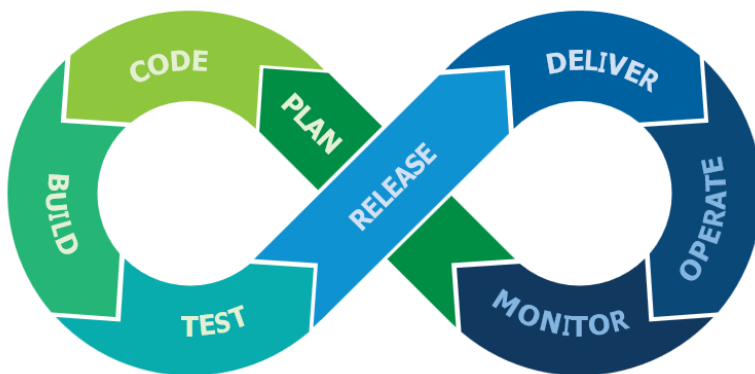


Seamless CI/CD Integration for Embedded Development

Streamline CI/CD pipelines for Renesas-based projects with Parasoft's C/C++ testing solutions, which enable automated quality checks in consistent, containerized environments. This approach accelerates time to market, reduces development costs, and ensures compliance with safety-critical standards, while minimizing integration risks and improving overall software reliability.

Your team will experience:

- Consistent, containerized toolchains for fast onboarding and reproducible certified environments
- Automated static analysis, unit testing, and coverage directly in CI pipelines to catch defects early
- Accelerated delivery with built-in compliance, reducing integration risk and supporting safety-critical standards



Seamless CI/CD Integration

Parasoft Services

Gain comprehensive services and expertise to accelerate compliance and improve productivity. Parasoft provides:

- Wide range of professional services
- Tool qualification services and certification evidence packages
- Hands-on training, workshops, and onboarding support
- Assistance with toolchain integration and custom plugin development

Take the Next Step

[Contact Parasoft](#) to learn more about how the Renesas-Parasoft partnership can benefit your embedded development team.