



Structural Core Self-Test (SCST) Library

SCST

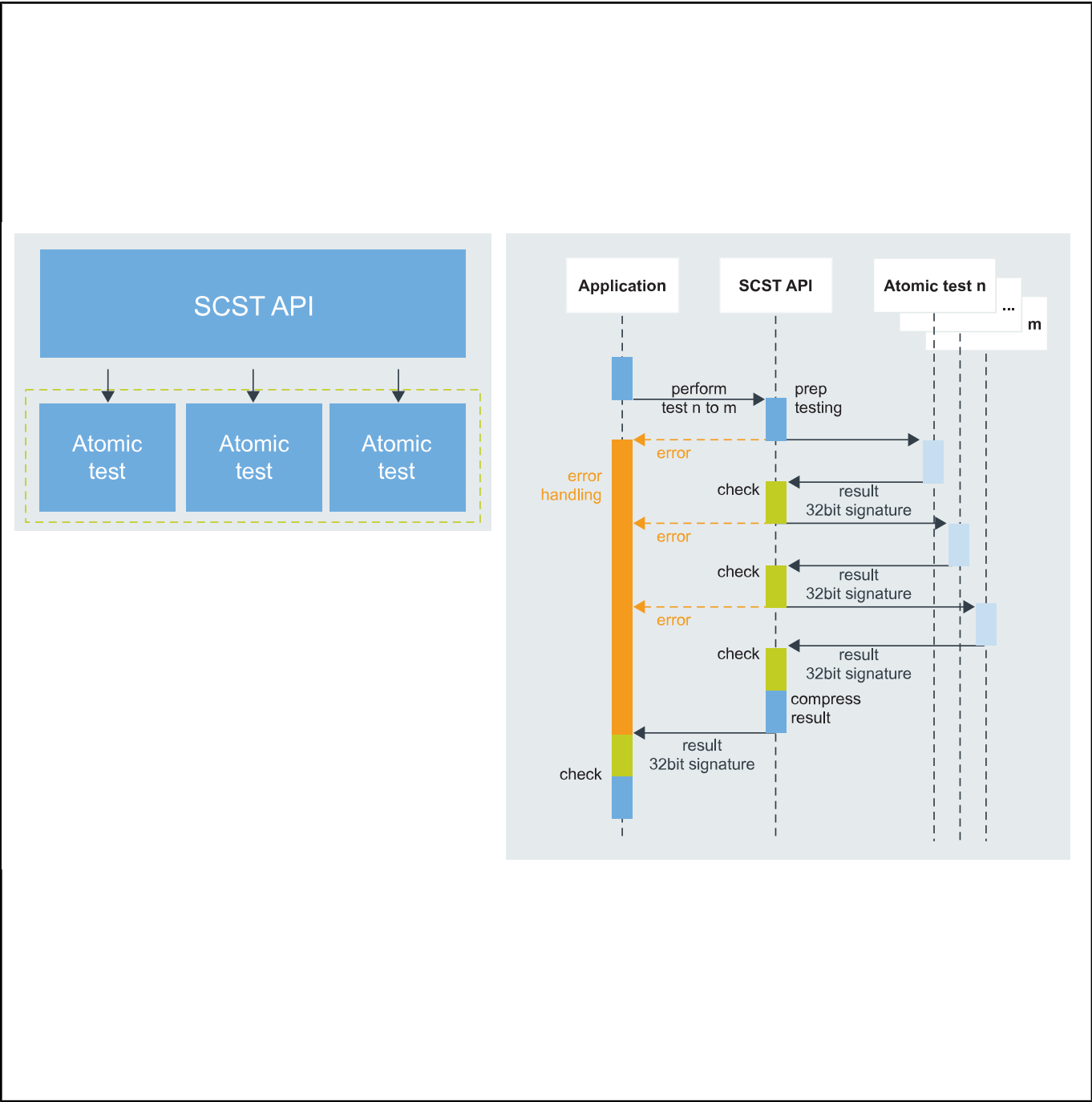
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Structural core self-test (SCST) library is the software product used for the runtime detection of permanent hardware faults in the MCU core. Developed as safety element out of context (SEooC), the SCST library contains test codes (atomic tests) that stimulate the MCU core submodules with the predefined test vectors and observes and evaluates the core logic response.

The SCST library can detect single-point faults or latent faults; in both cases, SCST only detects permanent faults. It is primarily intended for MCUs that do not use hardware techniques that support safety in terms of permanent fault detection, like delayed lockstep:

- To detect single-point faults, SCST should be executed periodically in runtime.
- To detect latent faults, SCST should run during start-up or shut-down.

SCST Architecture Block and Execution Diagram Block Diagram



View additional information for [Structural Core Self-Test \(SCST\) Library](#).

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