fime

SGP.23 Device Test Suite

Functional certification of GSMA Consumer eSIM devices.

GCF and PTCRB validation of GSMA Consumer eSIM devices.

Overview.

SGP.23 Device Test Suite tests the functionality of the GSMA Consumer eSIM device and Local Profile Assistant device (LPAd) defined in GSMA's SGP.21 Architecture and SGP.22 Technical Specification.

Unit test validation of your GSMA Consumer eSIM device implementation.

This test tool helps companies in the GSMA Consumer eSIM industry, such as mobile network operators (MNOs) and device vendors, test their devices and LPAds to achieve certification against GSMA's Consumer eSIM SGP.24 Compliance Process.

How it works.

SGP.23 Device Test Suite comprises several simulation modules that work together to test the device and LPAd.

Fime can help you at any stage of your project lifecycle.

Define   Design   Deliver   Test

Key benefits

- Simulates all required core GSMA Consumer eSIM architecture elements.
- Ensures that the device and LPAd comply with GSMA's SGP.21 architecture, and SGP.22 implementation specifications using the SGP.23 test specification.
- Reduce your time to market.
- Performs GCF and PTCRB validation to achieve Device/LPAd certification against GSMA's Consumer eSIM SGP.24 Compliance Process.

Key features

- Test individual GSMA ES interfaces with support for testing all functions on the ESeu, ES9+, ES10a, ES10b, ES10c and ES11 interfaces.
- Full coverage of SGP.23 Interface Compliance test cases for device and LPAd nominal and error test sequences.
- Provides full coverage of SGP.23 Section 4 Interface Compliance test cases including all device and LPAd nominal and error test sequences.

Libraries.

Tested GSMA ES interfaces	ES9+ – The SM-DP+ and LPAd use (SM-DP+ to LPDd) to securely transport the Bound Profile Package from the SM-DP+ to the eUICC via HTTP TLS v1.2 and the GSMA's Protocol for Profile Protection.
	ES10a – (LDSd to eUICC LPA Services) allows the LDS component of the LPAd in the device to request the eUICC authorization to generate a discovery request via the LPA services in the ISD-R.
	ES10b – (LPDd to eUICC LPA Services) allows the LPD component of the LPAd in the device to transfer a Bound Profile Package to the ISD-P via the LPA Services where ES8+ SCP03t-secured profiles are tunneled within ES10b.
	ES10c – (LUId to eUICC LPA services) allows the LUI component of the LPAd in the device to perform Local Profile Management by the end user via the LPA Services in the ISD-R.
	ES11 – (LDSd to SM-DS) allows the LPAd's LDSd component to retrieve Event Records for its eUICC.
	ESeu – (End User to LPAd) allows the end user to manage their eUICC profiles via the LUId.

Conclusion Test Manager.

SGP.23 Device Test Suite runs on Conclusion Test Manager.

- Conclusion Test Manager is a user-friendly test management application.
- Conclusion Test Manager consists of a test engine that can create and send messages in many variations via several interfaces to the system under test. It also includes a cutting-edge test management system to manage the entire test process and provides configurable test execution and test results.

What's in the box?

Supports.

- Automated and manual testing.
- Synchronous and asynchronous message flows.
- Complete device and LPAd testing.
- Communication support for HTTP TLS v1.2, Protocol for Profile Protection (including GSMA's Common Mutual Authentication procedure) and SCP03t.
- Comprehensive reporting.
- All testing is performed via Wi-Fi using a DNS Server installed with the tool.

Technical specifications.

Validations.

Use GSMA SGP.23 test specification to validate Device/LPAd compliance to:

- GSMA SGP.21 architecture specification.
- GSMA SGP.22 implementation specification.

Certification.

- GCF and PTCRB validation to achieve Device/LPAd certification against GSMA's Consumer eSIM SGP.24 Compliance Process.

GSMA Procedures.

- Device Power On and Profile Discovery.
- LPAd TLS testing.
- Local Profile Management procedure testing.
- Interface compliance testing for off-card interfaces.
- Profile Download and Installation procedure.
- Notification types and behaviors.
- SM-DS Event Record retrieval and deletion · Nominal and error test sequences for functional device and LPAd testing.

Contact

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