

STSAFE-V110

Authentication solution for Qi V1.3 wireless chargers in vehicles



STSAFE-V110 secure element ensures user safety and convenience by authenticating certified Qi chargers in cars

STSAFE*-V110 is a secure, turnkey solution for automotive Qi chargers, which is compliant with Qi WPC 1.3 specification.

Embedded in Qi-chargers, it authenticates genuine Qi-certified chargers, thereby ensuring user safety and protecting devices from any damage caused by non-certified, wireless chargers.

STSAFE-V110 is a highly secure authentication solution with security features that are certified Common Criteria EAL4+ by independent third parties.

* STSAFE is a registered and/or unregistered trademark of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere.

KEY FEATURES

- Turnkey System-on-Chip solution
- Compliant with Qi WPC 1.3 specification
- Digital signature generation and verification
- Secure storage capability
- WPC manufacturer CA service provider
- Common Criteria EAL4+ certified
- Automotive-grade solution (AEC-Q100 Grade 2)

KEY BENEFITS

- Easy integration
- Ready-to-use for charger makers
- Supply chain reliability
- Tailored and optimized for Qi wireless charging in automotive applications

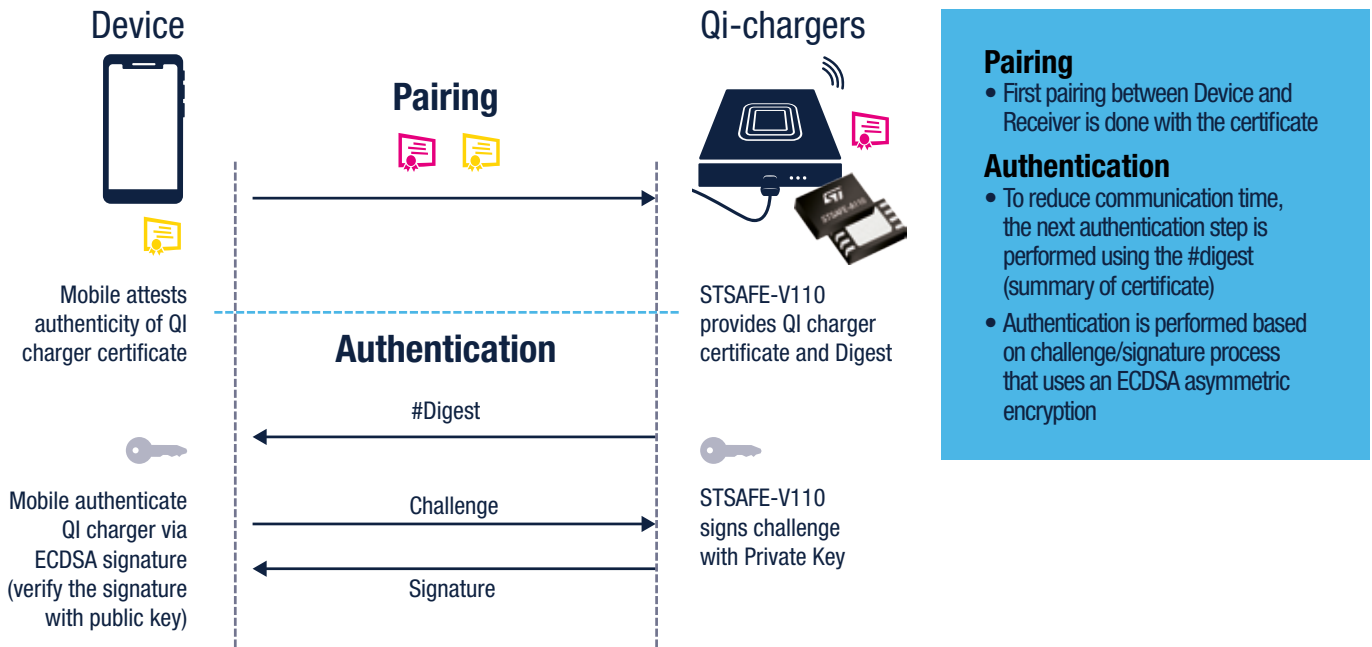
A cost-effective and high-performance authentication solution for automotive Qi-chargers

Designed to protect Qi wireless chargers against cloning or counterfeiting, the STSAFE-V110 is compliant with the Qi WPC 1.3 wireless charging specification, and provides proof that the mobile device is connected to a recognized system, thereby protecting it against potential damage related to counterfeit chargers.

The STSAFE-V110 secure element embedded in the Qi charger is loaded with certificates signed by the WPC CA in ST's secure manufacturing sites.

The STSAFE-V110 is a secure MCU based on smart card technology, which incorporates the Arm® SecurCore® SC300 processor for secure embedded systems with additional security features to help protect against advanced forms of attacks.

The authentication process for Qi



Product portfolio

Table Header	OS support	Interface	Certification	Package	Operating temperature range
STSAFE-V110	WPC 1.3 authentication compliant	I2C (200KHZ)	CC ELA4+ AEC-Q100 grade 2	TSSOP 20	-40°C to +105°C

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