

OPTIGA™ Trust Charge Auto

OPTIGA™ Trust Charge Autoは、最新のQi 1.3仕様に準拠したセキュアな車載用ワイヤレス充電ソリューションです。最大15 Wの電力をサポートし、WPCのセキュリティ要件を上回るCommon Criteria EAL6+認証ハードウェアを採用しています。インフィニオンのセキュリティ製品は、主要な物流とセキュリティの統合を簡素化し、ソフトウェアとドキュメントを含むターンキーソリューションです。これは、携帯電話、タブレット、アクセサリ、およびQi規格に従って充電するその他の小型電子機器に適しています。
追加情報: NDAが必要です。



主な特長

- > WPC Qi 1.3認証
- > コモンクライテリアEAL6+ (高) 認証ハードウェア
- > AEC Q100認証
- > ECDSA P-256認証
- > NIST P-256、SHA-2暗号技術
- > VQFN-32またはVQFN-8パッケージ

主な利点

- > Qi 1.3ワイヤレス充電に対応
- > コモンクライテリアEAL6+ (高) 認証を受けたハードウェア
- > セキュアなインフィニオンの工場においてWPC固有のパーソナライズされたキーと証明書を事前書き込み
- > 組み込みソフトウェア、ホストソフトウェア、開発ボード、ドキュメントを含む完全なターンキーソリューションにより、簡単に実装可能

対象アプリケーション

- > 携帯電話、タブレット
- > Qi規格準拠の充電可能なアクセサリやその他の小型パーソナル電子機器

競合製品に対する優位性

- > CCEAL6+認証ハードウェア、WPCプロセスサポート、Qiテストサポートにより、Qi規格を可能な限り簡単に満たすことができます: CCEAL 6+ 認定ハードウェア、WPC プロセスのサポート、Qi 試験のサポートにより、お客様の労力とコストを削減します。
- > 設計が容易: BOMの削減、容易な統合/ホスト サポート、すぐに使えるリファレンスデザイン
- > 高速充電を実現する独自プロトコルへの互換性

製品関連情報/オンライン サポート

[製品ページ](#)

製品概要およびデータシートリンク

発注可能な部品番号	SP 番号	パッケージ
SLS37CSAE20TCVQFN32XTMA2	SP005734532	PG-VQFN-32

【 OPTIGA™ Trust Charge Auto 】

FAQ

➤ **For which applications can OPTIGA™ Trust Charge be used?**

- > OPTIGA™ Trust Charge is a highly optimized solution for wireless charging of small personal electronic devices (e.g. smartphones, tablets, cameras, accessories) and health tech devices as well as industrial applications

➤ **What are the benefits of OPTIGA™ Trust Charge for consumers and for device manufacturers?**

- > Standard provisioning in CC certified Infineon sites
- > With product and host code combined, it is easy for customers to meet Qi 1.3 authentication requirements.
- > With its higher security level, OPTIGA™ Trust Charge reduces the risk of successful attacks against the secure element and with that reduces the risk for manufacturers of having to revoke the charger certificates, leading to slower or no charging of the charged device.

➤ **Which advantages does the Infineon solution provide compared to other available solutions?**

- > Real turnkey solution ready to implement.
- > Complete certificate chain stored inside the chip
- > High performance at authentication execution
- > Extensive support

➤ **How can Infineon maintain compliance of OPTIGA™ Trust Charge with the Qi security requirements?**

- > Infineon is member of the WPC. We actively watch and drive the standard. We continuously adapt our product according to the latest changes.

➤ **Will the OPTIGA™ Trust Charge be also compliant to the Qi 2 authentication requirements?**

- > According to the latest status, authentication requirements will not change in the upcoming Qi 2 standard. OPTIGA™ Trust Charge will therefore be fully compliant to Qi 2 authentication requirements as well.

➤ **Does Infineon have an automotive qualification for OPTIGA™ Trust Charge? Is this necessary for wireless charging in the car?**

- > An automotive version of OPTIGA™ Trust Charge is available with AEC Q-100 qualification and PPAP:
<https://www.infineon.com/product/optiga-trust-charge-auto/>

➤ **Does Infineon supply other components for wireless charging as well?**

- > Infineon offers a wide range of products for wireless charging applications. For more information visit our website:
<https://www.infineon.com/applications/wireless-charging>

➤ **What exactly does the Qi1.3 wireless charging standard mandate in terms of security and how does this relate to Common Criteria certification?**

- > The specification contains a specific protocol concerning authentication. Private keys have to be stored in a “provisioned secure storage subsystem”. WPC Qi 1.3 mandates certification / white box vulnerability assessment via one of multiple options defined in the manufacturer CA Agreement of the “secure storage subsystem”, one of them being CC EAL 4+ (high) with PP0084 protection profile.

➤ **Will also higher power devices above 15W require authentication in the future?**

- > Currently there is no specification that mandates this, but we foresee that this might change in the future, as authentication for safety reasons becomes even more important with higher power supply

➤ **Where can I learn more about the Qi specification?**

- > Visit the website of the Wireless Power Consortium: <https://www.wirelesspowerconsortium.com/>