

Bundesamt für Sicherheit in der Informationstechnik

Assurance Continuity Maintenance Report

BSI-DSZ-CC-0360-2006-MA-02

NXP Smart Card Controller P5CD009V2C and P5CC009V2C each with IC dedicated software

from

NXP Semiconductors Germany GmbH



Common Criteria Recognition Arrangement for components up to EAL4

The IT product identified in this report was assessed according to the *Assurance Continuity: CCRA Requirements,* version 1.0, February 2004 and the developers Impact Analysis Report (IAR). The baseline for this assessment was the Certification Report, the Security Target and the Evaluation Technical Report of the product certified by the Federal Office for Information Security (BSI) under BSI-DSZ-CC-0360-2006.

The change to the certified product is at the level of documentation and performance optimization, a change that has no effect on assurance. The identification of the maintained product is indicated by a new version number compared to the certified product.

Consideration of the nature of the change leads to the conclusion that it is classified as a <u>minor change</u> and that certificate maintenance is the correct path to continuity of assurance.

Therefore, the assurance as outlined in the Certification Report BSI-DSZ-CC-0360-2006 is maintained for this version of the product. Details can be found on the following pages.

This report is an addendum to the Certification Report BSI-DSZ-CC-0360-2006.

Bonn, 23 June 2009



Bundesamt für Sicherheit in der Informationstechnik

Assessment

The IT product identified in this report was assessed according to the *Assurance Continuity: CCRA Requirements* [1] and the Impact Analysis Report (IAR) [2]. The baseline for this assessment was the Certification Report of the certified product (Target of Evaluation, TOE) [3], the Security Target [4] and the Evaluation Technical Report as outlined in [3].

The vendor for the NXP Smart Card Controller P5CD009V2C and P5CC009V2C each with IC dedicated software, NXP Semiconductors Germany GmbH, submitted an IAR [2] to the BSI for approval. The IAR is intended to satisfy the requirements outlined in the document *Assurance Continuity: CCRA Requirements* [1]. In accordance with those requirements, the IAR describes (i) the changes made to the certified TOE, (ii) the evidence updated as a result of the changes and (iii) the security impact of the changes.

The NXP Smart Card Controller P5CD009V2C and P5CC009V2C each with IC dedicated software was changed due to:

- For identification and traceability the type identification name plate is changed from T027A to T027C.
- For performance reasons, the I-O pad cells and the highfrequency sensor had been modified. While operating with the internal clock, the HF-sensor connected to the external clock pad is disabled.

The changes are not significant from the standpoint of security, however Configuration Management procedures required a change in the version number from P5CD009V2A/P5CC009V2A to P5CD009V2C/P5CC009V2C.

Conclusion

The change to the TOE is at the level of documentation and performance optimization, a change that has no effect on assurance. Examination of the evidence indicates that the changes performed are limited to adapted mask layers.

The Security Target [4], the Security Target Lite [5], the User Guidance Manual [14], the Configuration List [6] and additional evaluation documentation of the vendor NXP Semiconductors Germany GmbH [7] - [13] and [15] were editorially updated.

The ETR [20] and ETR for Composition [21] were updated within the previous Maintenance process [19] and remain unchanged and valid.

Therefore, BSI agrees that the assurance as outlined in the Certification Report [3] is maintained for this version of the product.

Additional Note: The strength of the cryptographic algorithms was not rated in the course of the product certification and this maintenance procedure (see BSIG Section 4, Para. 3, Clause 2). BSI notes, that cryptographic functions with a security level of 80 bits or lower can no longer be regarded as secure against attacks with high attack potential without considering the application context. Therefore, for these functions it shall be checked whether the related crypto operations are appropriate for the intended system. Some further hints and guidelines can be derived from the 'Technische Richtlinie BSI TR-02102' (www.bsi.bund.de).

This report is an addendum to the Certification Report [3].

References

- [1] Common Criteria document CCIMB-2004-02-009 "Assurance Continuity: CCRA Requirements", version 1.0, February 2004
- [2] Impact Analysis Report BSI-DSZ-CC-0360-2006-MA-02, P5CD009V2C/ P5CC009V2C, Revision 1.0, NXP Semiconductors Germany GmbH, 12. March 2009 (confidential document)
- [3] Certification Report BSI-DSZ-CC-0360-2006 for Phillips Secure Smart Card Controller P5CD009V2A and P5CC009V2A each with IC Dedicated Software, Bundesamt für Sicherheit in der Informationstechnik, 19 May 2006
- [4] Security Target BSI-DSZ-CC-0360, Version 1.0, 06 March 2009, Evaluation of the NXP P5CD009V2C, P5CC009V2C Secure Smart Card Controllers, NXP Semiconductors Germany GmbH (confidential document)
- [5] Security Target Lite, BSI-DSZ-CC-0360, Version 1.0, 06 March 2009, Evaluation of the NXP P5CD009V2C, P5CC009V2C Secure Smart Card Controllers, NXP Semiconductors Germany GmbH (sanitised public document)
- [6] Configuration List, Version 1.1, 06 March 2009, Evaluation of the Phillips P5CD009V2C, Smart Card Controller, Philips Semiconductors, Business Line Identification
- [7] Customer specific Appendix of the Configuration List, Philips P5CD009V2C Secure Smart Card Controller, Version 1.0, 06 March 2009, Philips Semiconductors, Business Line Identification
- [8] Functional Specification for the P5CD00V2A, BSI-DSZ-CC-0360, Version 1.2, 06 March 2009, Phillips Semiconductors
- [9] Product Data Sheet Addendum SmartMX, Rev. 3.2, 06 March 2009, Wafer Specification P5CD009V2C, NXP Semiconductor GmbH
- [10] Product Data Sheet Addendum SmartMX, Rev. 3.2, 06 March 2009, Wafer Specification P5CD009 V2C/V0B, NXP Semiconductor GmbH
- [11] Product Data Sheet Addendum SmartMX, Rev. 3.1, 06 March 2009, Wafer Specification P5CD009V2C, NXP Semiconductor GmbH
- [12] Product Data Sheet P5CD009V2, SmartMX, Rev. 3.6, 06 March 2009, Secure Dual Interface PKI Smart Card Controller, NXP Semiconductor GmbH
- [13] Product Data Sheet P5CC009V2, SmartMX, Secure Smart Card Controller, Rev. 3.6, 06 March 2009, Product Specification, NXP Semiconductor GmbH
- [14] Vulnerability Assessment, V1.0, 15 March 2006, BSI-DSZ-0360/361, Evaluation of the Philips P5CD009V2A/B Secure Smart Card Controller, Philips Semiconductors, Business Line Identification
- [15] Production Flows P5CD009V2C/B (T027C) Smart Card Controller, Version 1.0, 06 March 2009, NXP Semiconductors, Business Line Identification

- [16] Guidance, Delivery and Operation Manual for the P5CD009V2C/V2B, P5CC009V2C Secure Smart Card Controller, Version 1.2, 06 March 2009, NXP Semiconductor GmbH, Business Line Identification
- [17] Order Entry Form, P5CD009, 08 October 2009, Release 4.0, NXP Semiconductors, Business Line Identification
- [18] Order Entry Form, P5CC009, 08 October 2008, Release 4.0, NXP Semiconductors, Business Line Identification
- [19] Maintenance Report BSI-DSZ-CC-0360-2006-MA-01 for NXP Secure Smart Card Controller P5CD009V2A and P5CC009V2A each with IC Dedicated Software, Bundesamt für Sicherheit in der Informationstechnik, 22 June 2009
- [20] Evaluation Technical Report, BSI-DSZ-CC-0360, Version 1.2, 28 January 2009, NXP P5CD009V2A Secure Smart Card Controller, NXP Semiconductors, Business Line Identification (confidential document)
- [21] Evaluation Technical Report lite for composition, BSI-DSZ-CC-0360, Version 1.3, 28 January 2009, NXP P5CD009V2A Secure Smart Card Controller, NXP Semiconductors, Business Line Identification (confidential document)