



Assurance Continuity Maintenance Report

BSI-DSZ-CC-0882-V2-2019-MA-02

S3CS9AB 32-Bit RISC Microcontroller for Smart Cards, Revision 0 with specific IC Dedicated Software

from

Samsung Electronics



SOGIS
Recognition Agreement

The IT product identified in this report was assessed according to the *Assurance Continuity: CCRA Requirements*, version 2.1, June 2012 and the developer's 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-0882-V2-2019 updated by the Maintenance BSI-DSZ-CC-0882-V2-2019-MA-01.

The certified product itself did not change. The changes are related to an update of life cycle security aspects covered by updated audits and newest site certificates.

Consideration of the nature of the change leads to the conclusion that it is classified as an ALC re-evaluation and that certificate maintenance is the correct path to continuity of assurance.

The resistance to attacks has not been re-assessed in the course of this maintenance process. Therefore, the assurance statement as outlined in the Certification Report BSI-DSZ-CC-0882-V2-2019 dated 11 December 2019 is of relevance and has to be considered when using the product. Details can be found on the following pages.

This report is an addendum to the Certification Report BSI-DSZ-CC-0882-V2-2019.



Common Criteria
Recognition Arrangement
recognition for components
up to EAL 2

Bonn, 23 November 2021

The Federal Office for Information Security



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], its Security Target and the Evaluation Technical Report as outlined in [3].

The vendor for the S3CS9AB 32-Bit RISC Microcontroller for Smart Cards, Revision 0 with specific IC Dedicated Software, Samsung Electronics, 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 certified product itself did not change.

The changes are related to an update of life cycle security aspects. The ALC re-evaluation was performed by the ITSEF TUV Informationstechnik GmbH. The procedure led to an updated version of the Evaluation Technical Report (ETR) [5]. The ETR for Composition [6] was not renewed.

The Common Criteria assurance requirements for ALC are fulfilled as claimed in the Security Target [4]. The Security Target did not change.

The development and production sites of [3] were updated by this partial ALC re-evaluation as listed below:

Site ID	Company name and address	Functions of site
Development		
Samsung Hwaseong Development	Samsung Electronics Hwaseong Plant / DSR Building 1, Samsungjeonja-ro, Hwaseong-si, Gyeonggi-do, Korea	<ul style="list-style-type: none"> Design Center
	Hwaseong Tera Tower, secure room and secure server room 452, Nongseo-Dong, Giheung-Gu, Yongin-siy, Gyeonggi-Do, Korea, Samsung occupies the complete 3rd and 4th floor.	<ul style="list-style-type: none"> Design Center
	Samsung Electronics Giheung Plant/ SR3 Building 95, Samsung 2-ro, Giheung-gu, Yongin-si, Gyeonggi-do, Korea	<ul style="list-style-type: none"> Test program development
Production		
Samsung Giheung & Hwaseong Factory	<p>Samsung Electronics Giheung & Hwaseong Factory (FAB 1, FAB 2, FAB 6, FAB S1) Samsung Electronics. Co., Ltd. (Giheung) 1, Samsung-ro, Giheung-gu, Yongin-si, Gyeonggi-do, 17113 Korea,</p> <p>Samsung Electronics. Co., Ltd. (Hwaseong) 1, Samsung-jeonja-ro, Hwaseong-si, Gyeonggi-do, 18448 Korea</p>	<p>Giheung:</p> <ul style="list-style-type: none"> Wafer Fabrication, Inking, DC test, Inspection, Grinding, Scrap, Stock. <p>Hwaseong:</p> <ul style="list-style-type: none"> Receipt of GDS file provided by clients (i.e. IC manufacturers), GDS file checking and optimisation for mask data generation, Mask Data Preparation, Data Center / IT (Server room).
Samsung Onyang	Samsung Electronics. Co., Ltd. 158, Baebang-ro, Baebang-eup, Asan-si, Chungcheongnam-do, 31489 Korea	<ul style="list-style-type: none"> Warehouse / Delivery, Grinding, Sawing, Assembly, Module testing.
Photronics Cheonan (was previously PKL)	Photronics Cheonan 493-3 Sungsung-Dong, Cheonan-City, Choongcheongnam-Do, 330-300, Korea	<ul style="list-style-type: none"> Mask house.

Site ID	Company name and address	Functions of site
Toppan Icheon	Toppan Photomasks Korea Ltd. 91, Wonjeok-ro 290 beon-gil, Sindun-myeon Icheon-Si, Gyeonggi-do 467-842 Korea	<ul style="list-style-type: none"> Mask house.
Toppan Round Rock	Toppan Printing Company America, Inc. Round Rock Site 2175 Greenhill Drive Round Rock, Texas 78664 USA	<ul style="list-style-type: none"> IT administration
HANA Micron Asan	HANA Micron Inc. 77 Yeonamyulgeum-ro, Umbong-Myeon, Asan-Si, Chung-Nam, 336-864 Korea	<ul style="list-style-type: none"> Grinding, Sawing, Assembly, Module testing.
Inesa Shanghai	Inesa Co., Ltd. No. 818 Jin Yu Road, Jin Qiao Export Processing Zone Pudong, Shanghai, China	<ul style="list-style-type: none"> Grinding, Sawing, Assembly (COB), Warehouse.
Eternal Packaging Centre Shanghai	No. 3576, Zhaolou Road, Minhang District Shanghai, 201112 People's Republic of China	<ul style="list-style-type: none"> Packaging, Warehouse / Packing.
Tesna Pyeungtaek	TESNA Co., Ltd. No. 450-2 Mogok-Dong, Pyeongtaek-City, Gyeonggi, Korea	<ul style="list-style-type: none"> Wafer testing, Initialization, Pre-personalization.
ASE Korea	ASE Korea Inc. Sanupdanjigil 76, Paju, Korea	<ul style="list-style-type: none"> Grinding, Sawing, Packaging.
ATK K4/K5	Amkor Technology Korea, ATK K4 / K5 K4, located at 100, Am-kor-ro, Buk-gu, Gwangju, Korea, ATK K5, located at 150, Songdomirae-ro, Yeonsu-gu, In- cheon, Korea	<ul style="list-style-type: none"> Grinding, Sawing, Packaging.
SFA Semicon	SFA Semicon Co. Ltd. Bumping Factory, 30, 2gongdan 7-gil, Seobuk-gu, Cheonan-si, Chungcheongnam-do, Korea 31075	<ul style="list-style-type: none"> Wafer Bumping.

Table 1: Relevant development/production sites for the TOE

As a result of the partial ALC re-evaluation, the following sites are integrated per their updated site certificates:

- Samsung Electronics Giheung & Hwaseong Factory (FAB 1, FAB 2, FAB 6, FAB S1), Site Certification BSI-DSZ-CC-S-0192-2021.
- Toppan Round Rock, Site Certification CCN-CC-21/2019.
- Inesa Shanghai, Site Certification NSCIB SS-21-210064.

As a result of the partial ALC re-evaluation, for the following Sites a new on-site audit was completed:

- Samsung Hwaseong Development with STAR [7]
- Photronics Cheonan (was previously PKL) with STAR [8]
- Toppan Icheon with STAR [9]
- ATK K4/K5 with STAR [10]

The Site Tesna Pyeungtaek has not been re-audited, only the Site Visit Report and the STAR [11] was updated.

In the event of reusing site audit results of this partial ALC re-evaluation in product evaluations, it is mandatory to consider the STARs to fulfil the requirements of a CC evaluation and certification.

Conclusion

The maintained change is at the level of life cycle security aspects. The ITSEF has audited sites and evaluated the described changes or integrated existing site certificates to provide an updated ETR [5] which has been approved by the Certification Body of BSI. The ETR for Composition was not updated and remains as included in the Certification Report BSI-DSZ-CC-0882-V2-2019 [4].

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

The resistance of the TOE to attacks has not been re-assessed in the course of this maintenance process. Therefore, the assurance statement as outlined in the Certification Report BSI-DSZ-CC-0882-V2-2019 dated 11 December 2019 is of relevance and has to be considered when using the product.

Obligations and notes for the usage of the product:

All aspects of assumptions, threats and policies as outlined in the Security Target not covered by the TOE itself need to be fulfilled by the operational environment of the TOE.

The customer or user of the product shall consider the results of the certification within his system risk management process. In order for the evolution of attack methods and techniques to be covered, he should define the period of time until a re-assessment for the TOE is required and thus requested from the sponsor of the certificate.

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

References

- [1] Common Criteria document “Assurance Continuity: CCRA Requirements”, version 2.1, June 2012
- [2] Impact Analysis Report (IAR), Version 0.2, 10.03.2021, Samsung Electronics (confidential document)
- [3] Certification Report BSI-DSZ-CC-0882-V2-2019 for S3CS9AB 32-Bit RISC Microcontroller for Smart Cards, Revision 0 with specific IC Dedicated Software from Samsung Electronics, 11 December 2019, Bundesamt für Sicherheit in der Informationstechnik
- [4] Project Kansa Security Target of Samsung S3CS9AB 32-bit RISC Microcontroller for Smart Card with specific IC Dedicated Software, Version 2.2, 14 October 2019, Samsung Electronics (confidential document)
- [5] Evaluation Technical Report Summary (ETR Summary) BSI-DSZ-CC-0882-V2-2019-MA-01, S3CS9AB Revision 0, Version 9, 19.10.2021, TUV Informationstechnik GmbH
- [6] Evaluation Technical Report for Composite Evaluation (ETR COMP) for the S3CS9AB Revision 0, Version 3, 02.12.2019, TUV Informationstechnik GmbH
- [7] SITE TECHNICAL AUDIT REPORT (STAR) Samsung Hwaseong (Development / Delivery), Version 2, 19.10.2021, TUV Informationstechnik GmbH
- [8] SITE TECHNICAL AUDIT REPORT (STAR) Photronics, Korea, Cheonan for Samsung Electronics. Co., Ltd., Version 6, 15.09.2021, TUV Informationstechnik GmbH
- [9] SITE TECHNICAL AUDIT REPORT (STAR) Toppan Photomasks Korea Ltd., Icheon, Korea for Samsung Electronics. Co., Ltd., Version 2, 09.07.2021, TUV Informationstechnik GmbH
- [10] SITE TECHNICAL AUDIT REPORT (STAR) for ATK K4 & K5 – IC ASSEMBLY SERVICES & RELATED DATA CENTER, Version 2, 19.10.2021, TUV Informationstechnik GmbH
- [11] SITE TECHNICAL AUDIT REPORT (STAR), TESNA Co., Ltd., Pyeongtaek, Version 4, 30.06.2021, TUV Informationstechnik GmbH