

# NXP Global Distribution Center Malaysia (MYGDC)

## Site Security Target

Rev. 1.9 — 23 February 2023

NXPOMS-1719007347-4181

PUBLIC

Evaluation document

### Document information

Information	Content
Keywords	NSCIB identification, MYGDC, Global Warehouse, Site Security Target NXP Global Distribution Center Malaysia
Abstract	Site Security Target for the site certification of the site NXP Global Distribution Center Malaysia (MYGDC)



## 1 Document Information

### 1.1 Reference

Title:	NXP Global Distribution Center Malaysia (MYGDC)
Version:	1.9
Date:	23 February 2023
Company:	NXP Semiconductors NV
Name of the site:	MYGDC, Malaysia
Site Type:	Internal shipment Warehouse including external delivery
EAL:	EAL: SARs taken from EAL6

### 1.2 Revision History

Rev.	Date	Description	Author	Owner
1.6 (DRAFT)	2022-30-03	Initial release in DITA Oxygen XML Author v 21. All revisions prior to 1.5 were archived. SST and SST Lite merged using the PUBLIC OMS reference	Christophe Bouly	Christophe Bouly
1.7 (DRAFT)	2022-19-05	Updated to include lab comments before DITA delivery	Christophe Bouly	Christophe Bouly
1.8	2023-01-13	Using DITA NXP template and including review updates	Christophe Bouly	Christophe Bouly
1.9	2023-02-23	Change related to - Physical scope - P-Scrap-Items, A.Client-Agreements[Warehouse], O.Zero-Balance rephrased to delete local scrapping - Dependencies included into chapter 7.2	Christophe Bouly	Christophe Bouly

## 2 SST Introduction

This document is based on the Eurosmart Site Security Target Template [1] with adaptations such that it fits the site.

This Site Security Target is intended to be used by only one specific client, namely NXP Semiconductors B.V.. Therefore, the term 'client' in this document refers directly to NXP Semiconductors B.V..

Definitions of the color coded areas and handling instructions for classified material can be found here [2]

In the following chapters you will find several times statements like 'this and/or that'. The applicability is given by the 'type of site' and the definition of assets.

### 2.1 Identification of the Site

The site MYGDC, Malaysia is located at:

```
Malaysia Global Distribution Center - MYGDC
NXP Semiconductors Netherlands.
C/o CEVA Logistics (M)
Lot 9a Jalan Tiang U8/92
Bukit Jelulong Industrial Park
40150 Shah Alam, Selangor
Malaysia
Physical scope includes also the ATKL datacenter which hosts
MYGDC logistics servers.
The ATKL datacenter is located "No. 2 Jalan SS 8/2 Free
Industrial Zone Sungei Way,
47300 Petaling-Jaya, Selangor, Malaysia" room E-DC.
```

### 2.2 Site Description

#### 2.2.1 Physical Scope

The entire building specified in [Section 2.1](#) is in the scope of the SST. The surroundings of this building are not in the scope of the SST. Therefore the walls of this building form the physical boundary of the site.

The NXP area is located building CDC2 where a dedicated and secured area is for NXP only.

In particular NXP activities are performed at

- CDC2/Ground floor\_Yellow for all shipment operations related to reception, packing, storage and delivery (Yellow area)
- CDC2/Ground floor2\_Yellow for sample desk operations (Yellow area)
- CDC2/Ground floor\_Red for secure storage (Red area)
- CDC2/First floor\_Yellow for the DC communication center (Yellow area)

More details could be found into the C-CL\_FSL-S014 MYGDC Security Standard Operation Procedure

Moreover, because MYGDC site is connected to NXP LAN through ATKL datacenter, ATKL datacenter is included into the physical scope

- Building E - EDC room (Red area)

### 2.2.2 Logical Scope

The site is only related to storage, shipment or deliveries (so after Phase 3 operations of ([3])

In order to achieve these operations, IT supports using CDC2/First floor\_Yellow area for the communication room but also from E-DC room which store communications devices to connect NXP network and applications

### 2.2.3 List of services in Scope

The following services and/or processes provided by the site are in the scope of the site evaluation process. Some processes are directly part of the phases presented before and others are supporting processes which can be involved at any phase of the development. The services are detailed in section [Section 8.2](#).

S.Secure\_Area

S.Internal\_Shipment

S.External\_Delivery

S.Sample\_Desk

### 3 Conformance Claim

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The SST is conformant to Common Criteria Version 3.1 ([4], [5]).

For the evaluation the following methodology will be used:

- Common Methodology for Information Security Evaluation (CEM), Evaluation Methodology; Version 3.1 ([6])

The evaluation of the site comprises the following assurance components:

- **ALC\_CMC.5**
- **ALC\_CMS.5**
- **ALC\_DVS.2**
- **ALC\_DEL.1**

The activities of the site are not directly related to designing, testing, producing, etc. of secure products. Therefore, this site does not claim conformance to ALC\_TAT and ALC\_LCD.

The assurance level chosen for the SST is compliant to the Security IC Platform Protection Profile [3] and is therefore suitable for the evaluation of (software for) Security ICs.

The chosen assurance components are derived from the assurance level EAL6 of the assurance class "Life-Cycle Support". For the assessment of the security measures attackers with a high attack potential are assumed. Therefore, this site supports product evaluations up to EAL6.

## 4 Security Problem Definition

The Security Problem Definition comprises security problems derived from threats against the assets handled by the site and security problems derived from the configuration management requirements. The configuration management covers the integrity of the TOE and the security management of the site.

### 4.1 Assets

Depending on the setup of the Site, the protection of the following assets is needed:

**Physical Security Objects:** The site has physical security objects in relation to the "intended TOEs". Both the integrity and the confidentiality of these must be protected.

- Wafers, dies, inlays, smart cards (finalized, good and fail parts)
- Scrap material
- Security Seal Tape

**Site Certification Data:** The site has access to documentation needed to successfully pass a site certification. Both the integrity and the confidentiality of this data must be protected.

- Site Security Manual
- Document list

### 4.2 Threats

**T.Smart-Theft:** An attacker tries to access sensitive areas of the site for manipulation or theft of sensitive assets. The attacker has sufficient time to investigate the site outside the controlled boundary. For the attack the use of standard equipment for burglary is considered. In addition, the attacker may be able to use specific working clothes of the site to camouflage the intention.

**T.Rugged-Theft:** An experienced thief with specialised equipment for burglary, who may be paid to perform the attack tries to access sensitive areas and manipulate or steal sensitive assets.

**T.Computer-Net:** A hacker with substantial expertise, standard equipment, who may be paid to attempt to remotely access sensitive network segments to get access to development and/or production systems with the intention to modify the development and/or production process thus violating integrity and possibly confidentiality.

**T.Accident-Change:** An employee, contractor or student trainee may exchange products of different production lots / different clients during production or changes tool configuration that have an impact on the "intended TOE" by accident.

**T.Unauthorised-Staff:** Unauthorised employees or subcontractors get access to assets or systems used for development, configuration management and/or production, so that the confidentiality and/or the integrity of the "intended TOE" is violated. This can apply to any development and/or production step and any asset related to the "intended TOE" or its configuration.

**T.Staff-Collusion:** An attacker tries to get access to assets handled at the site. The attacker tries to get support from one employee through an attempted extortion or an attempt at bribery.

**T.Attack-Transport:** An attacker might try to get hold of any assets during the internal shipment and/or the external delivery. The target is to compromise confidential information or violate the integrity of the assets during the shipment/delivery process to allow a modification, cloning or the direct/indirect retrieval of confidential information.

### 4.3 Organisational Security Policies

**P.LifeCycle-Doc :** The site uses life cycle documentation that describe:

1. Description of configuration management systems and their usage;
2. A configuration items list;

**P.Config-Items:** The configuration management system shall be able to uniquely identify all configuration items. This includes the unique identification of items that are created, generated, developed or used at a site as well as the received and transferred and/or provided items.

**P.Config-Process:** The services and/or processes provided by the site are controlled in the configuration management plan. This comprises incoming items, tools used for the development and/or production of the product, the management of flaws and optimizations of the process flow as well as the documentation that describes the services and/or processes provided by the site. A released production/development process is defined and under version control.

**P.Reception-Control:** The inspection of incoming items done at the site ensures that the received assets comply with the properties stated by the client. Furthermore, it is verified that the "intended TOE" can be identified and a released process is defined for the "intended TOE". If applicable this aspect includes the check that all required information and data is available to handle the incoming items.

**P.Zero-Balance:** The site ensures that all sensitive items (security relevant parts of the "intended TOEs" of different clients) are separated and traced on a device basis. For each handover, either an automated or an organizational "two-employees-acknowledgement" (four-eyes principle) is applied for functional and defect assets. As per the released production process the defect assets are either destroyed at the site or sent back to the client.

**P.Product-Transport:** Technical and organisational measures ensure the correct labelling of the "intended TOE". A controlled internal shipment and/or the external delivery is applied. The transport supports traceability up to the recipient. If applicable or required, this policy includes measures for packing to protect the product during transport.

**P.Scrap-Items:** Any item that is defect, end-of-life or that does not comply with the quality requirements is shipped back to the client for destruction in a way that the item does not support any attacker.

### 4.4 Assumptions

Each site operating in a production flow must rely on preconditions provided by the previous site. Each site must rely on the information received by the previous site/client. This is reflected by the assumptions that must be defined for the interface.

**A.Client-Agreements [Warehouse]:** The site participates in the forwarding of products. The site and the client agree on the following items:

- the activities to be performed by the site including work instructions (e.g. handling instructions, packing instructions)
- the pre-alert message (including delivery note, air waybill, security seal information) for each shipment via the agreed tools,
- the item identification and classification,
- the delivery and shipment details of any security relevant item,
- the handling of scrap configuration items: scrap configuration items are transferred back to the client,
- in case of necessary updates to the life cycle documentation, the site and the client align.

The agreed methods and tools ensure the correct handling of the configuration items in terms of Common Criteria regarding the classes ALC\_CMC, ALC\_CMS and ALC\_DEL.

**NXP rationale for usage of this site:** *The delivery and shipment is covered by NXPOMS-1719007347-2354 "CCC&S Packing and Delivery Requirements for Security Products" with all relevant information and handling instructions, while the return shipment (also scrap) from this site to NXP is covered in their ALC-DVS documentation.*

**A.Item-Identification:** Each configuration item received by the site is appropriately labelled to ensure the identification of the configuration item.

**NXP rationale for usage of this site:** *Standard tools like Enovia, Collabnet, DesignSync and NXPOMS were checked during the Hamburg Common Criteria audit. The site sticks to these tools commonly used in NXP. They all were found suitable for proper configuration item handling and providing unique identifiers.*

**A.External-Delivery:** The recipient (consumer) of the product is identified by the address provided by the client. The address of the consumer is part of the product setup.

**NXP rationale for usage of this site:** *All shipments follow the same procedures. A shipment request is generated per paper, database, website or per mail. After approval (e.g. by security management, export control, group leader, cost center manager,...) such request is entered/transferred in to SAP where a shipment address must exist for the recipient. Every new external development or production site has to be added once to the SAP system, before it can be used. The address is determined during project setup or site certification request. The secure shipment process from that moment on is according to the process documentation in NXPOMS-1719007347-2354 "CCC&S Packing and Delivery Requirements for Security Products".*

**A.Internal-Shipment:** The recipient (client) of the product is identified by the address of the client site. The address of the client is part of the product setup.

**NXP rationale for usage of this site:** *All shipments follow the same procedures. A shipment request is generated per paper, database, website or per mail. After approval (e.g. by security management, export control, group leader, cost center manager,...) such request is entered/transferred in to SAP where a shipment address must exist for the recipient. Every new external development or production site has to be added once to the SAP system, before it can be used. The address is determined during project setup or site certification request. The secure shipment process from that moment on is according to the process documentation in NXPOMS-1719007347-2354 "CCC&S Packing and Delivery Requirements for Security Products".*

**A.Product-Integrity:** The self-protecting features of the devices are fully operational, and it is not possible to influence the configuration and behaviour of the devices based on insufficient operational conditions or any command sequence generated by an attacker or by accident.



***NXP rationale for usage of this site:*** *Two different approaches ensure that all devices are integrity protected:*

*\* On arrival of the secure product at the site, all wafer testing is already complete. The devices on the wafer are in application mode. This means self-protecting features are activated and access to secure data is blocked for the site and NXP - at that stage the product is a "black box" only.*

*\* The self-protecting features of the device are verified by the test program. If the test program detects an unexpected configuration or behaviour the device is marked as fail device and scrapped under zero balancing control.*

## 5 Security Objectives

The Security Objectives are related to physical, technical, and organizational security measures, the configuration management as well as the internal shipment and/or the external delivery.

**O.LifeCycle-Doc** : The site uses life cycle documentation that describes:

1. Description of configuration management systems and their usage;
2. A configuration items list;

**O.Physical-Access**: The combination of physical partitioning between the different access control levels together with technical and organisational security measures allows a sufficient separation of employees to enforce the "need to know" principle. The access control shall support the limitation for the access to these areas including the identification and rejection of unauthorised people. The site enforces two or three levels of access control to sensitive areas of the site. The access control measures ensure that only registered and authorized people can access restricted areas. Sensitive products and data are handled in restricted areas only. Network cabling is protected according to classification of the transferred data by avoiding routes through public areas or by usage of appropriate cryptographic measures.

**O.Security-Control**: Assigned personnel of the site or guards operate the systems for access control and surveillance and respond to alarms. Technical security measures like video control, motion sensors and similar kind of sensors support the enforcement of the access control. These personnel are also responsible for registering and ensuring escort of visitors, contractors and suppliers.

**O.Alarm-Response**: The technical and organisational security measures ensure that an alarm is generated before an unauthorised person gets access to any sensitive configuration item (assets). After the alarm is triggered the unauthorised person still has to overcome further security measures. The reaction time of the employees and/or guards is short enough to prevent a successful attack.

**O.Internal-Monitor**: The site performs security management meetings at least every six months. The security management meetings are used to review security incidences, to verify that maintenance measures are applied and to reconsider the assessment of risks and security measures. Furthermore, an internal audit is performed every year to control the application of the security measures. Sensitive processes may be controlled within a shorter time frame to ensure a sufficient protection.

**O.Maintain-Security**: Technical security measures are maintained regularly to ensure correct operation. The logging of sensitive systems is checked regularly. This comprises the access control system to ensure that only authorised employees have access to sensitive areas as well as computer/network systems to ensure that they are configured as required to ensure the protection of the networks and computer systems.

**O.Logical-Access**: The site implements a firewall system to enforce a logical separation between the internal network and the internet. The firewall system ensures that only defined services and defined connections are accepted. Furthermore, the internal network is separated into production networks, office and administration network. Specific networks for production and configuration/administration are further logically separated from other internal network to enforce access control. Access to the production network and related systems is restricted to authorised employees involved in the configuration tasks of the production systems. Every user of an IT system has its own user account and password. An authentication using a unique user account and password is enforced by all computer systems.

**O.Logical-Operation:** All network segments and the computer systems are kept up to date (software updates, security patches, virus protection, spyware protection). The backup of sensitive data and security relevant logs is applied according to the classification of the stored data.

**O.Config-Items:** The site has a configuration management system that assigns a unique internal identification to each product to uniquely identify configuration items and allow an assignment to the client. Also, the internal procedures and guidance are covered by the configuration management.

**O.Config-Control:** The site applies a release procedure for the setup of the production and/or development process for each new product. In addition, the site has a process to classify and introduce changes for services and/or processes of released products. Minor changes are handled by the site, major changes must be acknowledged by the client. A designated team is responsible for the release of new products and for the classification and release of changes. This team comprises specialists for all aspects of the services and/or processes. The services and/or processes can be changed by authorised personnel only. Automated systems support configuration management and production control.

**O.Config-Process:** The site controls its services and/or processes using a configuration management plan. The configuration management is controlled by tools and procedures for the development and production of the product, for the management of flaws and optimisations of the process flow as well as for the documentation that describes the services and/or processes provided by a site.

**O.Staff-Engagement:** All employees who have access to sensitive configuration items and who can move parts of the product out of the defined production/development flow are checked regarding security concerns and have to sign a nondisclosure agreement. Furthermore, all employees are trained and qualified for their job.

**O.Zero-Balance:** The site ensures that all sensitive products ("intended TOE" of different clients) are separated and traced on a device basis. Automated control and/or two employees acknowledgement during hand over is applied for functional and defective devices. According to the agreed production flow the defect devices are either destroyed at the site or sent to the client or the consumer.

**O.Reception-Control:** Upon reception of any product/mask/"intended TOE" an immediate incoming inspection is performed. The inspection comprises the received amount, their identification and the assignment of the items to a related internal process.

**O.Internal-Shipment:** The recipient of a physical configuration item is identified by the assigned client address. The internal shipment procedure is applied to the configuration item. The address for shipment can only be changed by a controlled process. The packaging is part of the defined process and applied as agreed with the client. The forwarder supports the tracing of configuration items during internal shipment. For every sensitive configuration item, the protection measures against manipulation are defined.

**O.External-Delivery:** The recipient of a physical configuration item is identified by the assigned consumer address. The external delivery procedure is applied to the sensitive configuration item. A delivery address is assigned to each product and subject of a controlled process. The packaging is also part of the defined process and applied as specified by the client. The forwarder supports the tracing of sensitive configuration items during external delivery. For every configuration item, the protection measures against manipulation are defined.

**O.Control-Scrap:** The site has either measures in place to destruct sensitive documentation, erase electronic media or the site returns the assets to be scrapped to

the client, according to the secure shipment procedure of the client, so that they do not support an attacker,

### 5.1 Security Objectives Rationale

The SST includes a Security Objectives Rationale with two parts. The first part includes the tracing which shows how the threats and OSPs are covered by the Security Objectives. The second part includes a justification that shows that all threats and OSPs are effectively addressed by the Security Objectives.

Note that the assumptions of the SST cannot be used to cover any threat or OSP of the site. They are pre-conditions fulfilled either by the site providing the sensitive configuration items or by the site receiving the sensitive configuration items. Therefore, they do not contribute to the security of the site under evaluation.

#### 5.1.1 Mapping of Security Objectives

All the given security objective(s) in the table below counter(s) the threat / OSP.

Table 1. Security Problem Definition mapping to Security Objective

Security Problem Definition / Threats	Security Objective
T.Smart-Theft	O.Physical-Access O.Security-Control O.Alarm-Response O.Internal-Monitor O.Maintain-Security
T.Rugged-Theft	O.Physical-Access O.Security-Control O.Alarm-Response O.Internal-Monitor O.Maintain-Security
T.Computer-Net	O.Maintain-Security O.Logical-Access
T.Accident-Change	O.Logical-Access O.Logical-Operation O.Config-Items O.Config-Control O.Config-Process O.Staff-Engagement O.Zero-Balance O.Control-Scrap
T.Unauthorised-Staff	O.Physical-Access O.Security-Control O.Alarm-Response O.Internal-Monitor O.Maintain-Security O.Logical-Operation O.Staff-Engagement O.Zero-Balance O.Control-Scrap

Table 1. Security Problem Definition mapping to Security Objective...continued

Security Problem Definition / Threats	Security Objective
T.Staff-Collusion	O.Internal-Monitor O.Maintain-Security O.Staff-Engagement O.Zero-Balance O.Control-Scrap
T.Attack-Transport	O.LifeCycle-Doc O.Internal-Shipment O.Reception-Control O.External-Delivery
Security Problem Definition / Policies	Security Objective
P.LifeCycle-Doc	O.LifeCycle-Doc
P.Config-Items	O.Config-Items O.Reception-Control
P.Config-Control	O.Logical-Access O.Config-Items O.Config-Control
P.Config-Process	O.Config-Process
P.Reception-Control	O.Reception-Control
P.Zero-Balance	O.Staff-Engagement O.Zero-Balance O.Control-Scrap
P.Product-Transport	O.Config-Process O.Internal-Shipment O.External-Delivery
P.Scrap-Items	O.Control-Scrap

5.1.2 Objectives Rationale

The following rationale provides a justification that shows that all threats and OSP are effectively addressed by the Security Objectives.

**O.LifeCycle-Doc:** Dedicated documents exist which define the use and the management of the configuration management systems, the configuration item list, the site security, the production/development process and the production/development tools. The site follows the procedures and instructions of these documents.

*This directly addresses the OSP P.LifeCycle-Doc. The threat T.Attack-Transport can be prevented.*

**O.Physical-Access:** The site implements a "need to know" principle by separation measures using a combination of physical partitioning together with technical and organisational security measures. The access control measures support the enforcement of the separation and the "need to know" principle. The handling of assets is restricted to separate security areas.

*By the combination of these measures the threats T.Smart-Theft, T.Rugged-Theft and T.Unauthorised-Staff can be prevented.*

**O.Security-Control:** The site is using dedicated, trained security personnel for guard services. These personnel are responsible for operation of the access control and alarm systems, performing patrol rounds, visitor registration, physical key management, the surveillance of the technical alarm sensors and the responses to incidents.

*By the combination of these measures the threats T.Smart-Theft, T.Rugged-Theft and T.Unauthorised-Staff can be prevented.*

**O.Alarm-Response:** In case of an access attempt to an asset by an unauthorized person, the site has an alarm system in place. After the alarm is triggered the unauthorised person still must overcome further security measures. The reaction time of the employees and/or guards is short enough to prevent a successful attack.

*By the combination of these measures the threats T.Smart-Theft, T.Rugged-Theft and T.Unauthorised-Staff can be prevented.*

**O.Internal-Monitor:** Regular meetings are implemented to monitor security incidences as well as changes or updates of security relevant systems and processes. This includes the assessment of security alarms and associated logs of the physical and logical protection. In addition, results of internal audits and assessments are reviewed.

*This helps to prevent the threat(s) T.Smart-Theft, T.Rugged-Theft, T.Unauthorised-Staff and T.Staff-Collusion.*

**O.Maintain-Security:** The security related surveillance and alarm systems are maintained on a regular basis. The physical and logical access permission are reviewed and updated if needed. Logs of the associated systems are reviewed to support the work.

*This helps to prevent the threat(s) T.Smart-Theft, T.Rugged-Theft, T.Computer-Net, T.Unauthorised-Staff and T.Staff-Collusion.*

**O.Logical-Access:** The secure IT network is split in several segments according to different security level and purpose (development, administration, lab, manufacturing). The protection of network segments is implemented according to the classification of the processed data. The separation is enforced by firewalls and additional network components. Network services are limited to prevent the misuse and the access to network segments. User accounts are limited to the access rights required by the job task following a strict "need to know principle".

*This helps to address the OSP(s) P.Config-Control. T.Computer-Net and T.Accident-Change.*

**O.Logical-Operation:** Virus protection and patch management for operating systems and applications ensure the secure operation of the computer systems and the defense against malfunctions provoked by malicious software. Furthermore, backup of the production control system and data processing tools is implemented and the classified data from the client is excluded from the backup.

*This helps to prevent the threat(s) T.Unauthorised-Staff and T.Accident-Change.*

**O.Config-Items:** The different items part of an "intended TOE" and the "intended TOE" itself is under configuration management. This configuration management system assigns unique identification numbers.

*This helps to address the OSP(s) P.Config-Items and P.Config-Control This helps to prevent the threat T.Accident-Change..*

**O.Config-Control:** "Intended TOE" development is performed by authorized people using configuration management plan and change management. Automated tools are used for configuration management and for production control.

*This helps to address the OSP(s) and P.Config-Control . This helps to prevent the threat T.Accident-Change.*

**O.Config-Process:** The control of the released production/development processes and the controlled introduction of changes ensure a reproducible and consistent production/development. Procedures for setting up the production/development process as well as changes to the released processes and documents are in place. Changes can only be done by authorised personnel. A team of specialists ensures that all aspects are covered for the introduction of new processes and for the assessment of changes. All documentation is under configuration management.

*This helps to address the OSP(s) P.Product-Transport, P.Config-Process. This helps to prevent the threat T.Accident-Change.*

**O.Staff-Engagement:** The site has established personnel security measures. All employees who have access to assets are checked regarding security concerns and have to sign a non-disclosure agreement. This provides legal liability to protect the assets against disclosure. Furthermore, all employees are qualified for their job, are trained and had to pass a questionnaire to check the security awareness.

*This directly addresses the OSP P.Zero-Balance. This helps to prevent the threat(s) T.Accident-Change, T.Unauthorised-Staff and T.Staff-Collusion.*

**O.Zero-Balance:** The security of scrap handling is ensured by returning them to the client. Furthermore, in case of production, all assets are uniquely identified throughout the whole process. Before an order is closed a zero-balance calculation is documenting the good and bad parts of this order.

*This directly addresses the OSP P.Zero-Balance. This helps to prevent the threat(s) T.Accident-Change, T.Unauthorised-Staff and T.Staff-Collusion.*

**O.Reception-Control:** When design/test/production data is received, the integrity and completeness of the data is verified and assigned to the related client order. The link between data and client order ensures the unique identification. When receiving physical assets, an inspection of the items is performed in order to acknowledge the correct amount, their identification and the assignment. Received assets are registered within the tracking system.

*This helps to address the OSP(s) P.Reception-Control and P.Config-Items The threat T.Attack-Transport can be prevented.*

**O.Internal-Shipment:** Packing procedures including seal tape and the tracking of the transport support the identification of manipulations during the transport. The address of the client is part of the product setup and included in the requirements specification of the client.

*This directly addresses the OSP P.Product-Transport. The threat T.Attack-Transport can be prevented.*

**O.External-Delivery:** Packing procedures including seal tape and the tracking of the transport support the identification of manipulations during the transport. The address of the customer/consumer is part of the product setup.

*This directly addresses the OSP P.Product-Transport. The threat T.Attack-Transport can be prevented.*

**O.Control-Scrap:** The security of scrap handling is ensured by either securely destruct assets at the site (e.g. paper shredder) or return them to the client. Scrap material

is stored, until destruction or shipment back to the client, in security environments. Procedures document the destruction process.

*This helps to address the OSP(s) P.Zero-Balance and P.Scrap-Items. This helps to prevent the threat(s) T.Accident-Change, T.Unauthorised-Staff and T.Staff-Collusion.*



## 6 Extended Assurance Components Definition

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No extended components are defined in this Site Security Target.

## 7 Security Assurance Requirements

Clients using this Site Security Target require a TOE evaluation up to evaluation assurance level EAL6, potentially claiming conformance with the Eurosmart Protection Profile [3].

The Security Assurance Requirements (SAR) are:

- CM capabilities (ALC\_CMC.5)
- CM scope (ALC\_CMS.5)
- Delivery (ALC\_DEL.1)
- Development Security (ALC\_DVS.2)

The Security Assurance Requirements listed above fulfil the requirements of [7] because hierarchically higher components than the defined minimum site requirements (ALC\_CMC.3, ALC\_CMS.3, ALC\_DVS.1) are used in this Site Security Target.

The dependencies for the assurance requirements are as follows

- ALC\_CMC.5: ALC\_CMS.1, ALC\_DVS.2, ALC\_LCD.1
- ALC\_CMS.5: None
- ALC\_DVS.2: None

All included except ALC\_LCD.1. ALC\_LCD.1 is not included as it is related to development where this site is not involved in development.

In addition, the minimum set of SARs is extended by SAR of the assurance components for "Delivery" (ALC\_DEL.1),

### 7.1 Application Notes and Refinements

The description of the site certification process [7] includes specific application notes. The main item is that a product that is considered as "intended TOE" is not available during the evaluation. Since the term "TOE" is not applicable in the Site Security Target, the associated processes for the handling of products, or "intended TOEs" are in the scope of this Site Security Target and are described in this document. These processes are subject of the evaluation of the site.

The SST in hand has been refined to consider "intended TOEs" rather than specific TOEs. All other refinements as stipulated by the corresponding subsections in "Application Notes for Site Certification" [7], chapter 5 of the chosen [Assurance Classes](#) have been applied as well. In addition, the relevant refinements of the Eurosmart PP [3] have been considered.

### 7.2 Security Assurance Rationale

The Security Assurance Rationale maps the content elements of the selected assurance components of [5] to the Security Objectives defined in this SST. The refinements described above are considered.

The site has a process in place to ensure an appropriate and consistent identification of the products. If the site already receives configuration items, this process is based on the assumption that the received configuration items are appropriately labelled and identified.

**Note:** The content elements that are changed from the original CEM [6] according to the application notes in the process description [7] are written in italic. The term TOE can

be replaced by "configuration items" in most cases. In specific cases it is replaced by "intended TOE". "Configuration items" is used here in the sense that these are items contributing to build or to produce the TOE.

The SAR Rationale does not explicitly address the developer action elements defined in [5] because they are implicitly included in the content elements. This comprises the provision of the documentation to support the evaluation and the preparation for the site visit. This includes the requirement that the procedures are applied as written and explained in the documentation.

**7.2.1 Rationales, Aspects and References for ALC\_CMC.5**

**ALC\_CMC.5.1C** - *The CM documentation shall show that a process is in place to ensure an appropriate and consistent labelling.*

Security Objective	Rational
O.Reception-Control	Ensures the correct identification of the incoming items.

Aspects	Reference
Documents are labelled with a DOC-number, -title, -owner and date. Configuration Items are identified via the identifiers that are automatically provided by the system as well as the baseline labels that are given by the configuration manager.	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014 - Release and Control of Confidential Documents NXPOMS-999116894-2471 - Document control procedure C-QMS-S001

**ALC\_CMC.5.2C** - *The CM documentation shall describe the method used to uniquely identify the configuration items.*

Security Objective	Rational
O.LifeCycle-Doc	The method used to uniquely identify the configuration items is described in the CM-Plan.

Aspects	Reference
Documents can be uniquely identified using the labelling described above. Configuration Items are identified via the identifiers that are automatically provided by the system as well as the baseline labels that are given by the configuration manager.	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014 - Release and Control of Confidential Documents NXPOMS-999116894-2471 - Document control procedure C-QMS-S001

**ALC\_CMC.5.3C** - *The CM documentation shall justify that the acceptance procedures provide for an adequate and appropriate review of changes to all configuration items.*

Security Objective	Rational
O.LifeCycle-Doc	Several checks made by the reviewer provide an adequate review of changes in documents and handling procedures.
O.Config-Control	Change acceptance is managed by authorized people only.

Aspects	Reference
Several checks made by the reviewer provide an adequate review of changes in documents and handling procedures.	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014 - Release and Control of Confidential Documents NXPOMS-999116894-2471 - Document control procedure C-QMS-S001

**ALC\_CMC.5.4C** - The CM system shall uniquely identify all configuration items.

Security Objective	Rational
O.Config-Items	The configuration management system is ensuring uniqueness of the identification.
O.Config-Process	Unique identification of all configuration items is realized by performing the configuration management activities.

Aspects	Reference
All items are uniquely identified by the version control system, which is owned by the client (e.g. 12NC). This system is not under MYGDC control. Documents are also uniquely identified using the version control system of the used documentation systems	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014 - Release and Control of Confidential Documents NXPOMS-999116894-2471 - Document control procedure C-QMS-S001

**ALC\_CMC.5.5C** - The CM system shall provide automated measures such that only authorised changes are made to the configuration items.

Security Objective	Rational
O.Config-Items	The CM system ensure unique identification.
O.Config-Process	Mandates a CM-Plan for each project, and ensures that only authorized changes are made to the configuration items.
O.Config-Control	Ensures that only authorized changes are made to the configuration items.

Aspects	Reference
Different CM tools provide automated measures to only allow authorized changes to configuration items.	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014 - Release and Control of Confidential Documents NXPOMS-999116894-2471 - Document control procedure C-QMS-S001

**ALC\_CMC.5.6C** - The CM system shall support the production of the *intended* TOE by automated means.

Security Objective	Rational
O.Config-Items	The CM system ensure unique identification.
O.Config-Process	Mandates a CM-Plan for each project.
O.Zero-Balance	Zero-Balancing is performed at each step.

Aspects	Reference
The above mentioned tools support the production of the intended product by automated means. All documents related to CC certification are stored in RS collabnet.	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014 - Release and Control of Confidential Documents NXPOMS-999116894-2471 - Document control procedure C-QMS-S001

**ALC\_CMC.5.7C** - The CM system shall ensure that the person responsible for accepting a configuration item into CM is not the person who developed it.

Security Objective	Rational
O.Config-Process	Mandates a CM-Plan for each project.

Aspects	Reference
Specific roles in tools are defined in a way that the person responsible for accepting a configuration item into CM is not the person who developed it.	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014 - Release and Control of Confidential Documents NXPOMS-999116894-2471 - Document control procedure C-QMS-S001

**ALC\_CMC.5.8C** - The CM system shall identify the configuration items that comprise the TSF.

Security Objective	Rational
O.Config-Items	The CM system ensure unique identification.
O.Config-Process	Mandates a CM-Plan for each project.

Aspects	Reference
Per [7] there is no specific TOE in the focus, therefore, this is only applicable to the CM documentation.	- Product/project specific CM plans and the CI list that is used for CC evaluation

**ALC\_CMC.5.9C** - The CM system shall support the audit of all changes to the *intended* TOE by automated means, including the originator, date, and time in the audit trail.

Security Objective	Rational
O.Config-Items	The CM system ensure unique identification.
O.Config-Process	Mandates a CM-Plan for each project.

Aspects	Reference
Different CM tools like DesignSync or CollabNet provide automated means to support the audit of all changes. Documents stored in OHSAS or NXPOMS are under version control.	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014 - Release and Control of Confidential Documents NXPOMS-999116894-2471 - Document control procedure C-QMS-S001

**ALC\_CMC.5.10C** - The CM system shall provide an automated means to identify all other configuration items that are affected by the change of a given configuration item.

Security Objective	Rational
O.Config-Items	The CM system ensure unique identification.
O.Config-Process	Mandates a CM-Plan for each project.

Aspects	Reference
In case a source file has been changed, the code is compiled again, and all affected items are identified as they are marked as 'changed' compared with the version in the CM system.	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014 - Release and Control of Confidential Documents NXPOMS-999116894-2471

Aspects	Reference
	- Document control procedure C-QMS-S001
	- Collabnet Teamforge 8.1 User & Administration Guide

**ALC\_CMC.5.11C** - The CM system shall be able to identify the version of the implementation representation from which the *intended* TOE is generated.

Security Objective	Rational
O.Config-Items	The CM system ensure unique identification.
O.Config-Process	Mandates a CM-Plan for each project.

Aspects	Reference
There is no intended TOE generated at the site, only handled. The version information of documents is stored in Collabnet.	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014 - Collabnet Teamforge 8.1 User & Administration Guide

**ALC\_CMC.5.12C** - The CM documentation shall include a CM plan.

Security Objective	Rational
O.Config-Process	Mandates a CM-Plan for each project.

Aspects	Reference
Each project must have a project specific CM plan.	- MYGDC Security Product Handling, NXPOMS-1719007347-4208. - MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014

**ALC\_CMC.5.13C** - The CM plan shall describe how the CM system is used for the development of the *intended* TOE.

Security Objective	Rational
O.LifeCycle-Doc	The life-cycle documentation describes how the CM system is used for the development of the product.

Aspects	Reference
The site does not develop the intended TOE. Operations performed are storage and	- MYGDC Security Product Handling, NXPOMS-1719007347-4208.

Aspects	Reference
shipment which are not related to change on the products.	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014

**ALC\_CMC.5.14C** - The CM plan shall describe the procedures used to accept modified or newly created configuration items as part of the *intended* TOE.

Security Objective	Rational
O.LifeCycle-Doc	The acceptance procedures for modified or newly created configuration items are described in the CM-Plan.
O.Config-Control	Mandates a CM-Plan for each project.

Aspects	Reference
The site does not develop the intended TOE. Operations performed are storage and shipment which are not related to change on the products.	- MYGDC Security Product Handling, NXPOMS-1719007347-4208. - MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014

**ALC\_CMC.5.15C** - The evidence shall demonstrate that all configuration items are being maintained under the CM system.

Security Objective	Rational
O.Config-Process	Ensures, that all configuration items are under version control.

Aspects	Reference
The site does not develop the intended TOE. The documentation used for site certification are under configuration management	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014 - Release and Control of Confidential Documents NXPOMS-999116894-2471 - Document control procedure C-QMS-S001

**ALC\_CMC.5.16C** - The evidence shall demonstrate that the CM system is being operated in accordance with the CM plan.

Security Objective	Rational
O.Config-Process	Ensures, that all configuration items are under version control.



Aspects	Reference
The site does not develop the intended TOE. Evidences regarding documentation used can be provided during a site visit.	- MYGDC SECURITY STANDARD OPERATING Procedure C-CL-FSL-S014

The security assurance requirements of the assurance class "CM capabilities" listed above are suitable to support the production of complex products due to the formalized acceptance process and the automated support. The identification of all configuration items supports an automated and industrialized production process. The requirement for authorized changes supports the integrity and confidentiality required for the products. Therefore, this assurance level meets the requirements for the configuration management.

**7.2.2 Rationales, Aspects and References for ALC\_CMS.5**

The scope of the evaluation according to the assurance class ALC\_CMS comprises the security products, the complete documentation of the site provided for the evaluation and the configuration and initialization data as well as associated tools. The specifications and descriptions provided by the client are not part of the configuration management at the certified site.

**ALC\_CMS.5.1C** - The configuration list includes the following: the *intended* TOE itself; the evaluation evidence required by the SARs in the ST; the parts that comprise the *intended* TOE; the implementation representation; security flaws; and development tools and related information. The CM documentation shall include a CM plan.

Security Objective	Rational
O.LifeCycle-Doc	The life-cycle documentation includes a CI-List which contains all the items of this content element.

Aspects	Reference
In terms of site certification, the configuration list is represented by the list of all applicable documents including this SST.	- SST - Document list/Bibliography

**ALC\_CMS.5.2C** - The configuration list shall uniquely identify the configuration items.

Security Objective	Rational
O.LifeCycle-Doc	The CI-List uniquely identifies the configurations items per version, date, NXPOMS number, Collabnet ID (whatever is applicable per CI).

Aspects	Reference
Since no TOE is subject of the site evaluation the principles are defined. All configuration items are maintained in the CM systems. Every document can be uniquely identified as stated above for ALC_CMC.5.1C.	- CollabNet TeamForge - User & Administration Guide
<b>ALC_CMS.5.3C</b> - For each TSF relevant configuration item, the configuration list shall indicate the developer/ <i>subcontractor</i> of the item.	
Security Objective	Rational
O.LifeCycle-Doc	The CI-List indicates the developer/subcontractor/author for each configuration item.

Aspects	Reference
In terms of site certification, the CI-list is the list of all applicable documents. In the CI-List the author of each item is listed.	- Document list/Bibliography

The security assurance requirements of the assurance class "CM scope" listed above support the control of the production and test environment. This includes product related documentation and data as well as the documentation for the configuration management and the site security measures. Since the site certification process focuses on the processes based on the absence of a concrete TOE these assurance requirements are suitable.

### 7.2.3 Rationales, Aspects and References for ALC\_DEL.1

**ALC\_DEL.1.1C** - The delivery documentation shall describe all procedures that are necessary to maintain security when distributing versions of the *intended* TOE to the consumer.

Security Objective	Rational
O.Reception-Control	This ensures correct identification and labelling of received products or parts of a product.
O.External-Delivery	O.External-Delivery: This supports integrity and confidentiality by use of trustworthy transport, transport protection and recipient pre-notification and confirmation procedures.

Aspects	Reference
Ensuring integrity of physical items of an "intended TOE" sent to the consumer.	- C-CL_FSL-S014 MYGDC Security Standard Operation Procedure Rev 8

Aspects	Reference
	- NXPOMS-1719007347-2354 – CCC&S Packing and Delivery Requirements for Security Products

The security assurance requirement of the assurance class "Delivery" listed above is suitable to define a controlled process for delivery products to the consumer. The confidentiality and integrity of the product during transport is addressed by this assurance class. Since the Protection Profile [3] requires the same assurance level it is enough.

**7.2.4 Rationales, Aspects and References for ALC\_DVS.2**

**ALC\_DVS.2.1C** - The development security documentation shall describe all the physical, procedural, personnel, and other security measures that are necessary to protect the confidentiality and integrity of the *intended* TOE design and implementation in its development environment.

Security Objective	Rational
O.LifeCycle-Doc	This covers the overall development security documentation.
O.Physical-Access	This covers the physical measures.
O.Security-Control	This covers the organizational measures of the guard team.
O.Alarm-Response	This covers the physical measures and their alarm follow up by the guard team.
O.Internal-Monitor	This covers organizational measures by reviews and management attention.
O.Maintain-Security	This covers organizational measures by maintenance.
O.Logical-Operation	This covers logical measures and the user interaction with the security systems.
O.Logical-Access	This covers logical measures in the area of firewall and virus protection as well at patch management.
O.Internal-Shipment	This covers procedural measures of internal transport of security material.
O.Control-Scrap	This covers procedural measures of secure destruction of security material.
O.Staff-Engagement	This covers personnel measures.
O.Zero-Balance	This covers the procedural measure to ensure all security material is under control.

Aspects	Reference
- Access control to development areas inside the building, surveillance, alarm system and	- C-CL_FSL-S014 MYGDC Security Standard Operation Procedure Rev 8

Aspects	Reference
guard services to prevent access to the security area for unauthorized persons	- ATKL Security Manual for ATKL DC usage, NXPOMS-999116897-15133
- Operation of the physical security system, emergency procedures, incident handling and reporting	
- Tracing and control of Visitors, external suppliers and cleaning personnel	
- Internal storage of products in a strong room, handling of physical objects, zero balancing, disposal of security products	
- Trustworthiness and training of staff	
- Organizational measures to enforce security and alarm tracing	
- Personal accountability for products	
- Policies and procedures for the internal handling of confidential information	
- Network security measures to ensure logical protection and authentication to computer systems using username and password	
- Maintenance of security measures	
- Protection of the internal shipment	
- Destruction of sensitive documents, data, products and other items	

**ALC\_DVS.2.2C** - The development security documentation shall justify that the security measures provide the necessary level of protection to maintain the confidentiality and integrity of the *intended* TOE.

Security Objective	Rational
O.LifeCycle-Doc	The development security documentation justifies, that the security measures provide the necessary level of protection to maintain the confidentiality and integrity of the "intended TOE".

Aspects	Reference
The justification is provided in this site security target because it shows that all threats are addressed by the measures. In addition, the measures are monitored to control the effectiveness. Besides this the lifecycle	- C-CL_FSL-S014 MYGDC Security Standard Operation Procedure Rev 8 - ATKL Security Manual for ATKL DC usage, NXPOMS-999116897-15133 - This SST, see <a href="#">chapter 7.2 Security Assurance Rationale</a>

**Aspects**

**Reference**

documentation also provides a justification from a different angle.

The security assurance requirements of the assurance class "Development security" listed above are required since a high attack potential is assumed for potential attackers. The configuration items and information handled at the site during development, production, testing, assembly and pre-personalization or personalization of the "intended TOE" can be used by potential attackers for the development of attacks. Any keys loaded into the "intended TOE" also support the security during the internal shipment or the external delivery. Therefore, the handling and storage of electronic keys must also be protected. Further on the Protection Profile [3] requires this protection for sites involved in the lifecycle of Security ICs development and production.

## 8 Site Summary Specification

Please refer for the rationales, aspects and references to the subchapters in [Section 7.2](#) for the different ALC classes.

### 8.1 Preconditions Required by the Site

This section includes justifications for the assumptions defined in the SST. These assumptions are relevant for the splicing process since they must be examined during the product evaluation. Especially aspects like the classification of items and the appropriate provision of specifications for the site must be verified by checking appropriate evidence (e.g. the set of specifications provided to the site with a site certificate) during the product evaluation.

The following table explains the preconditions of the client that are required to ensure the security measures of the site in order to protect its assets.

**Table 2. Preconditions of Assumptions**

Assumption	Precondition
<b>A.Client-Agreements [Warehouse]</b>	To allow the site to provide the warehouse and shipping service, it is necessary that the relevant work and shipping instructions and procedures are trained, shared and kept up to date. Furthermore, changes to the relevant procedures require a notification of the relevant people. Information about the handling of scrap material is required, as well as proper details and classification of the material to be shipped.
<b>A.Item-Identification</b>	Before sending items to this site, the previous site must label it uniquely. Those unique identifiers can come from EnoviaNXP, Collabnet or other tools.
<b>A.External-Delivery</b>	External delivery can only take place based on an order in SAP and to addresses defined in SAP. The delivery method is described in the shipment and delivery documentation. The site had to be informed about correct delivery information.
<b>A.Internal-Shipment</b>	Internal shipment can only take place based on an order in SAP and to addresses defined in SAP. The shipment method is described in the shipment and delivery documentation. The site had to be informed about correct shipment information.
<b>A.Product-Integrity</b>	To ensure integrity of the devices they shall be in a mode that the self-protection is fully operational. The client has to ensure the proper configuration of those devices.

## 8.2 Services of the Site

Table 3. Services of the Site

Service of the Site	Explanation of the Service
<b>S.Internal_Shipment</b>	<p>The site uses a shipment method such that assurance of integrity is assured throughout transport of physical security objects. Internal shipment is covered under ALC_DVS.2.</p> <p><i>Dependencies:</i>  <b>S.Secure_Area</b> must be fulfilled to ensure physical security</p> <p><i>Assumptions:</i>  <b>A.Item-Identification</b> must be fulfilled  <b>A.Internal-Shipment</b> must be fulfilled</p>
<b>S.External_Delivery</b>	<p>This site provides the service of secure receipt, packing, storage and delivery to customers of following goods: wafers with ICs, semi-finished products containing these ICs and finished products (i.e. Smart Cards), and any related goods. The processes to be followed are provided by the client.</p> <p><i>Dependencies:</i>  <b>S.Secure_Area</b> must be fulfilled to ensure physical security</p> <p><i>Assumptions:</i>  <b>A.Client-Agreements [Warehouse]</b> must be fulfilled  <b>A.Item-Identification</b> must be fulfilled  <b>A.External-Delivery</b> must be fulfilled  <b>A.Product-Integrity</b> must be fulfilled</p>
<b>S.Secure_Area</b>	<p>The site provides a secure physical environment (RED and/or YELLOW area) for classified IT infrastructure and equipment installed by the client at the site according to Common Criteria requirements.</p> <p><i>Dependencies:</i>                      none</p> <p><i>Assumptions:</i>                      none</p>
<b>S.Sample_Desk</b>	<p>Service for secure sample delivery including</p> <ul style="list-style-type: none"> <li>Storage of customer samples in dedicated high security area for NXP end customers</li> <li>Order execution according to customer needs</li> </ul> <p><i>Dependencies:</i>  <b>S.Secure_Area</b> must be fulfilled to ensure physical security</p> <p><i>Assumptions:</i>  <b>A.Item-Identification</b> must be fulfilled  <b>A.External-Delivery</b> must be fulfilled  <b>A.Product-Integrity</b> must be fulfilled</p>

## 9 Bibliography

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- [1] Eurosmart. Site Security Target Template, Version 2.0, 15 April 2021.
- [2] a.) NXP Semiconductors. "CCC&S Security Objects", NXPOMS-1719007347-2404, 13. Dezember 2021.  
b.) NXP Semiconductors. "CCC&S Security Objects Master", NXPOMS-1719007347-2402, 24. November 2021.
- [3] Eurosmart. Security IC Platform Protection Profile with Augmented Packages (BSI-CC-PP-0084-2014), Version 1.0, 2014.
- [4] Common Criteria. Common Criteria for Information Technology Security Evaluation, Part 1: Introduction and General Model, Version 3.1, Revision 5, April 2017.
- [5] Common Criteria. Common Criteria for Information Technology Security Evaluation, Part 3: Security Assurance Requirements, Version 3.1, Revision 5, April 2017.
- [6] Common Criteria. Common Methodology for Information Technology Security Evaluation (CEM), Evaluation Methodology, Version 3.1, Revision 5, April 2017.
- [7] Common Criteria. Supporting Document Guidance, Site Certification, Version 1.0, Revision 1, CCDB-2007-11-001, October 2007.



## 10 Glossary

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<b>CA</b>	– Certificate Authority
<b>CC</b>	– Common Criteria
<b>CCC&amp;S</b>	– Competence Center Crypto & Security
<b>CI</b>	– Configuration Item
<b>CKC</b>	– Customer Key Creation (system for key creation and post-shipment services)
<b>CL</b>	– Configuration List
<b>CM</b>	– Configuration Management
<b>CSH</b>	– China Secure High Confidential
<b>CSM</b>	– China Secure Main Confidential
<b>CSR</b>	– Certificate Signing Requests
<b>CTO</b>	– Chief Technology Organization
<b>CSx</b>	– China Secure - Main or High Confidential
<b>DIT</b>	– Data Intake and Translation
<b>DMZ</b>	– Demilitarized Zone
<b>DNV</b>	– Dynamic Non-volatile
<b>EAL</b>	– Evaluation Assurance Level
<b>FH</b>	– Fabkey Helpdesk (old name of DNV desk)
<b>FS</b>	– Facility Secure
<b>FAE</b>	– Field Application Engineer
<b>HS</b>	– High Secure
<b>HSM</b>	– Hardware Security Module
<b>IC</b>	– Integrated Circuit
<b>IP</b>	– Intellectual Property
<b>KDS</b>	– Key Delivery Services
<b>KIS</b>	– Key Insertion Server
<b>MBK</b>	– Master Backup Key
<b>NPIT</b>	– New Product Introduction Team
<b>OEF</b>	– Order Entry Form
<b>OSP</b>	– Organizational Security Policy
<b>PP</b>	– Protection Profile
<b>PS</b>	– Production Secure
<b>PS-HS</b>	– Production Secure-High Secure
<b>PS-RS</b>	– Production Secure-Restricted Secure
<b>PMP</b>	– Project Management Plan

**PQE** – Product Quality Engineer  
**RCS** – ROM Code System  
**ROM** – Read-Only Memory  
**RS** – Restricted Secure  
**SAR** – Security Assurance Requirement  
**SNV** – Static Non-Volatile  
**SNR** – Serial Number Server  
**SSM** – Site Security Manual  
**SST** – Site Security Target  
**ST** – Security Target  
**TOE** – Target of Evaluation  
**TP** – Trust Provisioning  
**TSM** – Trusted Service Manager

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Tables

Tab. 1.	Security Problem Definition mapping to Security Objective .....	12	Tab. 2.	Preconditions of Assumptions .....	30
			Tab. 3.	Services of the Site .....	31

## Contents

<b>1</b>	<b>Document Information .....</b>	<b>2</b>
1.1	Reference .....	2
1.2	Revision History .....	2
<b>2</b>	<b>SST Introduction .....</b>	<b>3</b>
2.1	Identification of the Site .....	3
2.2	Site Description .....	3
2.2.1	Physical Scope .....	3
2.2.2	Logical Scope .....	4
2.2.3	List of services in Scope .....	4
<b>3</b>	<b>Conformance Claim .....</b>	<b>5</b>
<b>4</b>	<b>Security Problem Definition .....</b>	<b>6</b>
4.1	Assets .....	6
4.2	Threats .....	6
4.3	Organisational Security Policies .....	7
4.4	Assumptions .....	7
<b>5</b>	<b>Security Objectives .....</b>	<b>10</b>
5.1	Security Objectives Rationale .....	12
5.1.1	Mapping of Security Objectives .....	12
5.1.2	Objectives Rationale .....	13
<b>6</b>	<b>Extended Assurance Components</b>	
	<b>Definition .....</b>	<b>17</b>
<b>7</b>	<b>Security Assurance Requirements .....</b>	<b>18</b>
7.1	Application Notes and Refinements .....	18
7.2	Security Assurance Rationale .....	18
7.2.1	Rationales, Aspects and References for ALC_CMC.5 .....	19
7.2.2	Rationales, Aspects and References for ALC_CMS.5 .....	25
7.2.3	Rationales, Aspects and References for ALC_DEL.1 .....	26
7.2.4	Rationales, Aspects and References for ALC_DVS.2 .....	27
<b>8</b>	<b>Site Summary Specification .....</b>	<b>30</b>
8.1	Preconditions Required by the Site .....	30
8.2	Services of the Site .....	31
<b>9</b>	<b>Bibliography .....</b>	<b>32</b>
<b>10</b>	<b>Glossary .....</b>	<b>33</b>
<b>11</b>	<b>Legal information .....</b>	<b>35</b>

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