

TM Vendor Name

TM Module Name

FIPS 140-3 Non-Proprietary Security Policy

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| | | | | |
| | | | | |

1 – General

1.1 Overview

<Text>

1.2 Security Levels

| Section | Security Level |
|---------|----------------|
| 1 | 2 |
| 2 | 2 |
| 3 | 2 |
| 4 | 2 |
| 5 | 0 |
| 6 | 2 |
| 7 | 0 |
| 8 | 2 |
| 9 | 2 |
| 10 | 2 |
| 11 | 2 |
| 12 | 2 |

Table 1: Security Levels

1.3 Additional Information [O]

<Text>

2 – Cryptographic Module Specification

2.1 Description

Purpose and Use:

<Text>

Module Type: Hardware

Module Embodiment: SingleChip

Module Characteristics: SubChip

Cryptographic Boundary:

<Text>

Tested Operational Environment's Physical Perimeter (TOEPP) [O]:

<Text>

<Other Diagrams, Photographs and Descriptive Text>

<Picture or Block Diagram>

Figure 1: Block Diagram

2.2 Tested and Vendor Affirmed Module Version and Identification

Tested Module Identification – Hardware:

| Model and/or Part Number | Hardware Version | Firmware Version | Processors | Features |
|--------------------------|------------------|------------------|--------------|-----------------|
| T1 Model | T1 Hardware ver | T1 Firmware V | T1 Processor | T1 NSR Features |

Table 2: Tested Module Identification – Hardware

Tested Module Identification – Software, Firmware, Hybrid (Executable Code Sets):

N/A for this module.

Tested Module Identification – Hybrid Disjoint Hardware:

N/A for this module.

Tested Operational Environments - Software, Firmware, Hybrid:

N/A for this module.

Vendor-Affirmed Operational Environments - Software, Firmware, Hybrid:

N/A for this module.

CMVP makes no statement as to the correct operation of the module or the security strengths of the generated keys when so ported if the specific operational environment is not listed on the validation certificate.

2.3 Excluded Components

<Excluded components statements or table>

2.4 Modes of Operation

Modes List and Description:

| Table Name | Description | Type | Status Indicator |
|------------|-------------|----------|------------------|
| T5 Name | T5 Descrip | Approved | T5 Status |

Table 3: Modes List and Description

<Text>

Mode Change Instructions and Status [O]:

<Text>

Degraded Mode Description [O]:

<Text>

2.5 Algorithms

Approved Algorithms:

« ApprovedAlgorithmTable From Web Cryptik ApprovedAlgorithmTable »

<Text>

Vendor-Affirmed Algorithms:

| Name | Properties | Implementation | Reference |
|--------------|--|--------------------------------------|-----------|
| T6 Algo Name | T6 Algo Prop Name: T6 Algo Prop Value | UltraLock Cryptographic Module | T6 Ref |

Table 4: Vendor-Affirmed Algorithms

<Text>

Non-Approved, Allowed Algorithms:

| Name | Properties | Implementation | Reference |
|--------------|--|--------------------------------------|-----------|
| T7 Algo Name | T7 Algo Prop Name: T7 Algo Prop Value | UltraLock Cryptographic Module | T7 Ref |

Table 5: Non-Approved, Allowed Algorithms

<Text>

Non-Approved, Allowed Algorithms with No Security Claimed:

| Name | Caveat | Use and Function |
|--------------|-----------|------------------|
| T8 Algo Name | T8 Caveat | T8 Use |

Table 6: Non-Approved, Allowed Algorithms with No Security Claimed

<Text>

Non-Approved, Not Allowed Algorithms:

| Name | Use and Function |
|---------|------------------|
| T9 Algo | T9 Use |

Table 7: Non-Approved, Not Allowed Algorithms

<Text>

2.6 Security Function Implementations

| Name | Type | Description | Properties | Algorithms |
|----------|--------------------|-------------|--------------------------|-----------------|
| T10 Name | AsymKeyPair-KeyGen | T10 Descrip | T10 SF Cap: T10 SF Value | DES CBC AES-CBC |

Table 8: Security Function Implementations

<Text>

2.7 Algorithm Specific Information

<Text>

2.8 RBG and Entropy

| Cert Number | Vendor Name |
|-------------|-------------|
| E2 | microsoft |

Table 9: Entropy Certificates

| Name | Type | Operational Environment | Sample Size | Entropy per Sample | Conditioning Component |
|----------|--------------|-------------------------|-----------------|--------------------|------------------------|
| T12 Name | Non-Physical | T12 OE | T12 Sample Size | T12 Ent Per Sample | T12 Cond Comp |

Table 10: Entropy Sources

<Text>

2.9 Key Generation

N/A for this module.

<Text>

2.10 Key Establishment

N/A for this module.

<Text>

N/A for this module.

<Text>

2.11 Industry Protocols

<Text>

2.12 Additional Information [O]

<Text>

3 Cryptographic Module Interfaces

3.1 Ports and Interfaces

| Physical Port | Logical Interface(s) | Data That Passes |
|---------------|---|------------------|
| T13 Phy Port | Data Input Data Output Control Input Control Output Status Output | T13 Data Passes |

Table 11: Ports and Interfaces

<Text>

3.2 Trusted Channel Specification [O]

<Text>

3.3 Control Interface Not Inhibited [O]

<Text>

3.4 Additional Information [O]

<Text>

4 Roles, Services, and Authentication

4.1 Authentication Methods

| Method Name | Description | Security Mechanism | Strength Each Attempt | Strength per Minute |
|-------------|-------------|--------------------|-----------------------|---------------------|
| T14 Name | T14 Descrip | T14 Mech Other | T14 Strength Each | T14 Strength Min |

Table 12: Authentication Methods

<Text>

4.2 Roles

| Name | Type | Operator Type | Authentication Methods |
|----------|----------|---------------|------------------------|
| T15 Name | Identity | T15 Op Type | T14 Name |

Table 13: Roles

<Text>

4.3 Approved Services

| Name | Description | Indicator | Inputs | Outputs | Security Functions | SSP Access |
|----------|-------------|---------------|------------|-------------|--------------------|----------------------------|
| T16 Name | T16 Descrip | T16 Indicator | T16 Inputs | T16 Outputs | T10 Name | T15 Name - T24 Name: G,W,Z |

Table 14: Approved Services

<Text>

4.4 Non-Approved Services

| Name | Description | Algorithms | Role |
|----------|-------------|------------|----------|
| T17 Name | T17 Descrip | T9 Algo | T17 Role |

Table 15: Non-Approved Services

<Text>

4.5 External Software/Firmware Loaded

<Text>

4.6 Bypass Actions and Status [O]

<Text>

4.7 Cryptographic Output Actions and Status [O]

<Text>

4.8 Additional Information [O]

<Text>

5 Software/Firmware Security

5.1 Integrity Techniques

<Text>

5.2 Initiate on Demand

<Text>

5.3 Open-Source Parameters [O]

<Text>

5.4 Additional Information [O]

<Text>

6 Operational Environment

6.1 Operational Environment Type and Requirements

Type of Operational Environment: Non-Modifiable

How Requirements are Satisfied [O]:

<Text>

6.2 Configuration Settings and Restrictions [O]

<Text>

6.3 Additional Information [O]

<Text>

7 Physical Security

7.1 Mechanisms and Actions Required

| Mechanism | Inspection Frequency | Inspection Guidance |
|-----------|----------------------|---------------------|
| T18 Mech | T18 Frequency | T18 Guidance |

Table 16: Mechanisms and Actions Required

<Text and Photos>

7.2 User Placed Tamper Seals [O]

Number:

Placement:

Surface Preparation:

Operator Responsible for Securing Unused Seals:

Part Numbers:

<Text and Pictures>

7.3 Filler Panels [O]

<Text and Pictures>

7.4 Fault Induction Mitigation [O]

<Text>

7.5 EFP/EFT Information [O]

| Temp/Voltage Type | Temperature or Voltage | EFP or EFT | Result |
|-------------------|------------------------|------------|--------|
| LowTemperature | | | |
| HighTemperature | | | |
| LowVoltage | | | |
| HighVoltage | | | |

Table 17: EFP/EFT Information

<Text>

7.6 Hardness Testing Temperature Ranges [O]

| Temperature Type | Temperature |
|------------------|-------------|
| LowTemperature | |
| HighTemperature | |

Table 18: Hardness Testing Temperatures

<Text>

7.7 Additional Information [O]

<Text>

8 Non-Invasive Security

8.1 Mitigation Techniques [O]

<Text>

8.2 Effectiveness [O]

<Text>

8.3 Additional Information [O]

<Text>

9 Sensitive Security Parameters Management

9.1 Storage Areas

| Storage Area Name | Description | Persistence Type |
|-------------------|-------------|------------------|
| T21 Name | T21 Descrip | Dynamic |

Table 19: Storage Areas

<Text>

9.2 SSP Input-Output Methods

| Name | From | To | Format Type | Distribution Type | Entry Type | SFI or Algorithm |
|----------|----------|----------|-------------|-------------------|------------|------------------|
| T22 Name | T21 Name | External | Encrypted | Automated | Direct | AES-CBC |

Table 20: SSP Input-Output Methods

<Text>

9.3 SSP Zeroization Methods

| Zeroization Method | Description | Rationale | Operator Initiation |
|--------------------|-------------|---------------|---------------------|
| T23 Name | T23 Descrip | T23 Rationale | T23 Op Initiation |

Table 21: SSP Zeroization Methods

<Text>

9.4 SSPs

| Name | Description | Size - Strength | Type - Category | Generated By | Established By | Used By |
|----------|-------------|-------------------------|-----------------|--------------|----------------|----------|
| T24 Name | T24 Descrip | T24 Size - T24 Strength | T24 Types - PSP | DES CBC | T10 Name | TDES-CBC |

Table 22: SSP Table 1

| Name | Input - Output | Storage | Storage Duration | Zeroization | Related SSPs |
|----------|----------------|---------------------|------------------|-------------|--------------|
| T24 Name | T22 Name | T21 Name: Encrypted | T24 Duration | T23 Name | |

Table 23: SSP Table 2

<Text>

9.5 Transitions [O]

<Text>

9.6 Additional Information [O]

<Text>

10 Self-Tests

10.1 Pre-Operational Self-Tests

| Algorithm or Test | Test Properties | Test Method | Test Type | Indicator | Details |
|-------------------|-----------------|-------------|-----------|---------------|-------------|
| DES CBC | T25 Prop | T25 Methd | Bypass | T25 Indicator | T25 Details |

Table 24: Pre-Operational Self-Tests

<Text>

10.2 Conditional Self-Tests

| Algorithm or Test | Test Properties | Test Method | Test Type | Indicator | Details | Conditions |
|------------------------|-----------------|-------------|-----------|---------------|-------------|---------------|
| DSA KeyGen (FIPS186-2) | T26 Prop | T26 Method | CAST | T26 Indicator | T26 Details | T26 Condition |

Table 25: Conditional Self-Tests

<Text>

10.3 Periodic Self-Test Information

| Algorithm or Test | Test Method | Test Type | Period | Periodic Method |
|-------------------|-------------|-----------|------------|-------------------|
| DES CBC | T25 Methd | Bypass | T25 Period | T25 Period Method |

Table 26: Pre-Operational Periodic Information

| Algorithm or Test | Test Method | Test Type | Period | Periodic Method |
|------------------------|-------------|-----------|------------|-------------------|
| DSA KeyGen (FIPS186-2) | T26 Method | CAST | T26 Period | T26 Period Method |

Table 27: Conditional Periodic Information

<Text>

10.4 Error States

| Name | Description | Conditions | Recovery Method | Indicator |
|----------------|-------------|-----------------|-----------------|---------------|
| T28 State Name | T28 Descrip | T27 Condition 1 | T27 Recovery | T27 Indicator |

Table 28: Error States

<Text>

10.5 Operator Initiation of Self-Tests [O]

<Text>

10.6 Additional Information [O]

<Text>

11 Life-Cycle Assurance

11.1 Installation, Initialization, and Startup Procedures

<Text>

11.2 Administrator Guidance

<Text>

11.3 Non-Administrator Guidance

<Text>

11.4 Design and Rules [O]

<Text>

11.5 Maintenance Requirements [O]

<Text>

11.6 End of Life [O]

<Text>

11.7 Additional Information [O]

<Text>

12 Mitigation of Other Attacks

12.1 Attack List [O]

<Text>

12.2 Mitigation Effectiveness [O]

<Text>

12.3 Guidance and Constraints [O]

<Text>

12.4 Additional Information [O]

<Text>