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STPay-Tiger-12

Data brief

ST Payment Secure Solution – Java Card™ platform with 35 Kbytes of user NVM for Visa®, MasterCard® and ePAL applications

Product status link
STPay-Tiger-12

Features

- Java Card™ platform
- Up to 35 Kbytes of user NVM
- Certified payment applications: Visa®, MasterCard® and ePAL (eftpos Payments Australia Ltd)
- Common Personalization Specification (CPS) personalization

Platform

- Java Card 3.0.4 classic operating system
- GlobalPlatform® 2.2.1 MG 1.0.1 API support
- CPS-compliant
- ISO/IEC 7816 T=0 contact protocol
- ISO/IEC 14443 Type A contactless interface

Hardware

- ST31 product based on a 32-bit Arm® SecurCore® SC000™ RISC core
- Up to 35 Kbytes of user non-volatile memory

Cryptography

- NESCRYPT cryptographic RSA coprocessor
- Enhanced DES accelerator (EDES)

Personalization

- Enhanced personalization performance for very fast personalization times
- EMV® CPS v1.1 compliant
- VSDC Personalization Specification v 2.0
- M/Chip® Advance v1.2.1 Common Personalization Specification

Applications

- MasterCard M/Chip Advance 1.2.1
  - Dual-interface supporting PayPass® contactless payments
  - Data sharing single account configuration 2
  - PIN sharing
- Visa VSDC 2.9
  - Dual interface supporting payWave® contactless payments
- eftpos ePAL 3.04

1 Description

The STPay-Tiger-12 is a GlobalPlatform 2.2.1 Java Card platform with up to 35 Kbytes of user non-volatile memory for payment applications.

It can be configured to support Visa VSDC, MasterCard M/Chip Advance and EFTPOS EPAL EMV payment applications.

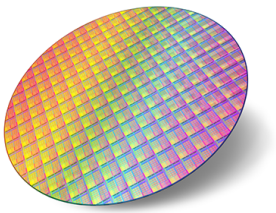
The STPay system-on-chip (SoC) family is a packaged offering by ST, comprising a highly secure microcontroller, embedded application software, tools and support aimed at serving the needs of card embedders and personalization bureaus worldwide. The secure microcontroller is based on an Arm® SecurCore® RISC core.

For detailed configuration data, contact your local ST sales office.

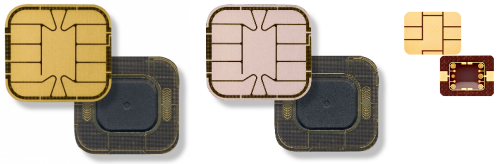
Note: Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere.

2 Certification

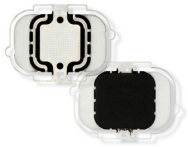
3 Delivery forms



Sawn/unsawn wafer



Dual-interface gold and silver modules



Contactless module

4 Development tools

The STPay tool is an easy-to-use toolkit that allows issuers and service providers to:

- Install and test Java applets
- Personalize, test and validate STPay-Java sample cards

The tool comes with sample personalization scripts for VSDC, M/Chip Advance and ePAL to facilitate script development/validation and fast card deployment.

Revision history

Table 1. **Document revision history**

Date	Version	Changes
05-Apr-2018	1	Initial release.
20-Jun-2018	2	Both 4K and 8K MIFARE DESFire EVI applications are supported. The device supports ISO/IEC 14443 Type A only. L-Applet is no longer supported.
26-Mar-2019	3	Removed MIFARE® DESFire® support and transport applications.