

## ST Payment Secure Solution – Java Card™ platform with up to 130 Kbytes of user NVM for Visa®, MasterCard® and Calypso® applications



### Features

- Java Card™ platform
- Up to 130 Kbytes of user NVM
- Certified payment applications: Visa® and MasterCard®
- Common Personalization Specification (CPS) personalization
- Calypso® transport application

### 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 B contactless interface

### Hardware

- ST31 product based on a 32-bit Arm® SecurCore® SC000™ RISC core
- Up to 130 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 v1.2.2 Common Personalization Specification

### Applications

- MasterCard M/Chip Advance v1.2.2
  - Dual-interface supporting PayPass® contactless payments
  - Data sharing single account configuration 2
  - PIN sharing
- Visa VSDC 2.8.1g1
  - Dual interface supporting payWave® contactless payments
- Calypso rev 3.1

Product status link

[STPay-Tiger-14](#)

## 1 Description

The [STPay-Tiger-14](#) is a GlobalPlatform 2.2.1 Java Card platform for payment and transport applications with up to 130 Kbytes of user non-volatile memory.

It can be configured to support Visa VSDC and MasterCard M/Chip Advance EMV payment applications as well as Calypso transport 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.*

arm

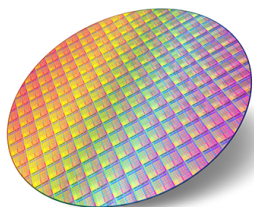


## 2 Certifications

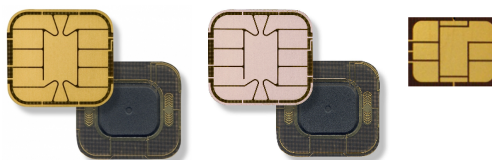
---



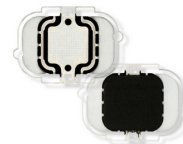
### 3 Delivery forms



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 and M/Chip Advance to facilitate script development/validation and fast card deployment.

## Revision history

**Table 1. Document revision history**

Date	Version	Changes
03-Apr-2018	1	Initial release.
22-Jun-2018	2	Updated M/Chip Advance version and Visa VSDC version.

**IMPORTANT NOTICE – PLEASE READ CAREFULLY**

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics – All rights reserved