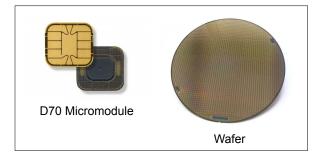


# STPay-J-D18-D

Data brief

## VSDC DDA and M/Chip 4 Select applications Java Card™ platform with 18 Kbytes of EEPROM - Dual interface



### Features

- Java Card™/Visa® GlobalPlatform™ (VGP)
- Embedded Visa® Smart Debit Credit (VSDC) and MasterCard® M/Chip® 4 EMV applications
- payWave and PayPass contactless payment supported
- Visa and MasterCard certified

### Platform

- Java Card<sup>™</sup> 3.0.1 Classic operating system
- Visa® GlobalPlatform™ 2.1.1 API support
- Common personalization specification (CPS) compliant
- ISO/IEC 7816 T=0 contact protocol
- ISO/IEC 14443 Type B contactless interface

#### Hardware

- Highly secure ST23 MCU with enhanced 8/16-bit CPU core
- 18 Kbytes of User EEPROM

#### Applications

- Payment applications embedded in ROM
- MasterCard M/Chip 4 1.1b Select for EMV payment applications
- Visa VSDC 2.7.1 for EMV DDA payment applications
- PayPass 1.3.1 and payWave 2.0.2 for contactless payments
- CAP (Chip Authentication Protocol) and DPA (Dynamic Passcode Authentication)
- PSE 2.2 (Payment System Environment) for application selection

### Cryptography

- NESCRYPT cryptographic co-processor for RSA and Elliptic Curve cryptography
- Enhanced DES accelerator (EDES) for DES and 3DES support

#### Personalization

- VGP 2.1.1 CPS compliant
- VSDC Personalization Specification v 1.0
- M/Chip 4 v1.1 Common Personalization Specification

### Certifications

- Visa® VSDC and payWave
- MasterCard® M/Chip 4 and PayPass

### **Delivery forms**

- D70 6-contact dual interface modules
- Sawn/unsawn wafers

November 2013

1/3

For further information contact your local STMicroelectronics sales office.

### 1 Description

The STPay-J-D18-D is a Java Card<sup>™</sup>/VGP platform for payment applications. It comes with 18 Kbytes of user EEPROM and supports both contact and contactless interfaces.

The STPay-J-D18-D has Visa® Smart Debit Credit (VSDC) Dynamic Data Authentication (DDA) and MasterCard® M/Chip® 4 Select payment applications pre-loaded in ROM. These applications also support payWave and PayPass contactless payments.

The STPay System-on-Chip (SoC) family is a packaged offering by ST, comprising a highly secure microcontroller, embedded application SW, tools and support, aimed at serving the needs of card embedders and personalization bureaus worldwide.

### 2 Development tools

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

- Develop, test and install Java applets
- Personalize, test and validate STPay-Java sample cards

The tool comes with sample personalization scripts to facilitate script development and rapid card deployment.

### 3 Revision history

Date	Document revision	ROM code reference	Changes
16-Apr-2013	1	MRD	Initial release.
08-Nov-2013	2	MRD	Updated logo information on page 2.

#### Table 1. Document revision history





#### Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

ST PRODUCTS ARE NOT DESIGNED OR AUTHORIZED FOR USE IN: (A) SAFETY CRITICAL APPLICATIONS SUCH AS LIFE SUPPORTING, ACTIVE IMPLANTED DEVICES OR SYSTEMS WITH PRODUCT FUNCTIONAL SAFETY REQUIREMENTS; (B) AERONAUTIC APPLICATIONS; (C) AUTOMOTIVE APPLICATIONS OR ENVIRONMENTS, AND/OR (D) AEROSPACE APPLICATIONS OR ENVIRONMENTS. WHERE ST PRODUCTS ARE NOT DESIGNED FOR SUCH USE, THE PURCHASER SHALL USE PRODUCTS AT PURCHASER'S SOLE RISK, EVEN IF ST HAS BEEN INFORMED IN WRITING OF SUCH USAGE, UNLESS A PRODUCT IS EXPRESSLY DESIGNATED BY ST AS BEING INTENDED FOR "AUTOMOTIVE, AUTOMOTIVE SAFETY OR MEDICAL" INDUSTRY DOMAINS ACCORDING TO ST PRODUCT DESIGN SPECIFICATIONS. PRODUCTS FORMALLY ESCC, QML OR JAN QUALIFIED ARE DEEMED SUITABLE FOR USE IN AEROSPACE BY THE CORRESPONDING GOVERNMENTAL AGENCY.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries. Information in this document supersedes and replaces all information previously supplied. The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.

© 2013 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan -Malaysia - Malta - Morocco - Philippines - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com



DocID022975 Rev 2