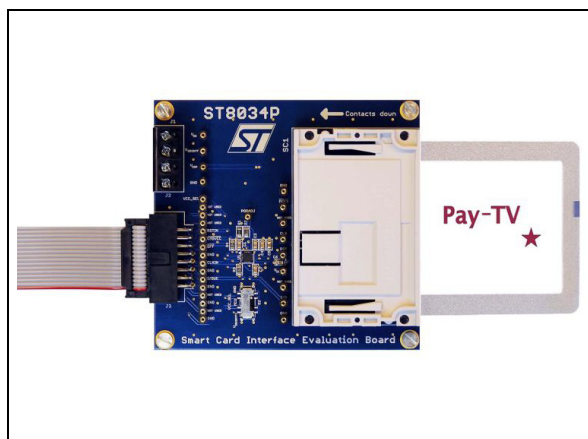


Smart card interface evaluation board based on the ST8034P

Data brief



Features

- Smartcard connector for testing with a smartcard
- Labeled testpoints provide accessibility to all the signals
- Board design allows standalone operation for basic tests
- Interface to an MCU block and simple board configurability allow even full functioning in applications (i.e. set-top box)
- Onboard 10 MHz crystal clock oscillator can be used to provide card clock in standalone operation
- Card clock source selection switch allows selection between the onboard crystal oscillator as card clock source, or an external clock source provided by the microcontroller block through the MCU interface together with the data signals
- Provides easy, flexible card supply voltage selection either by onboard configuration switches or remotely by the microcontroller
- RoHS compliant

Description

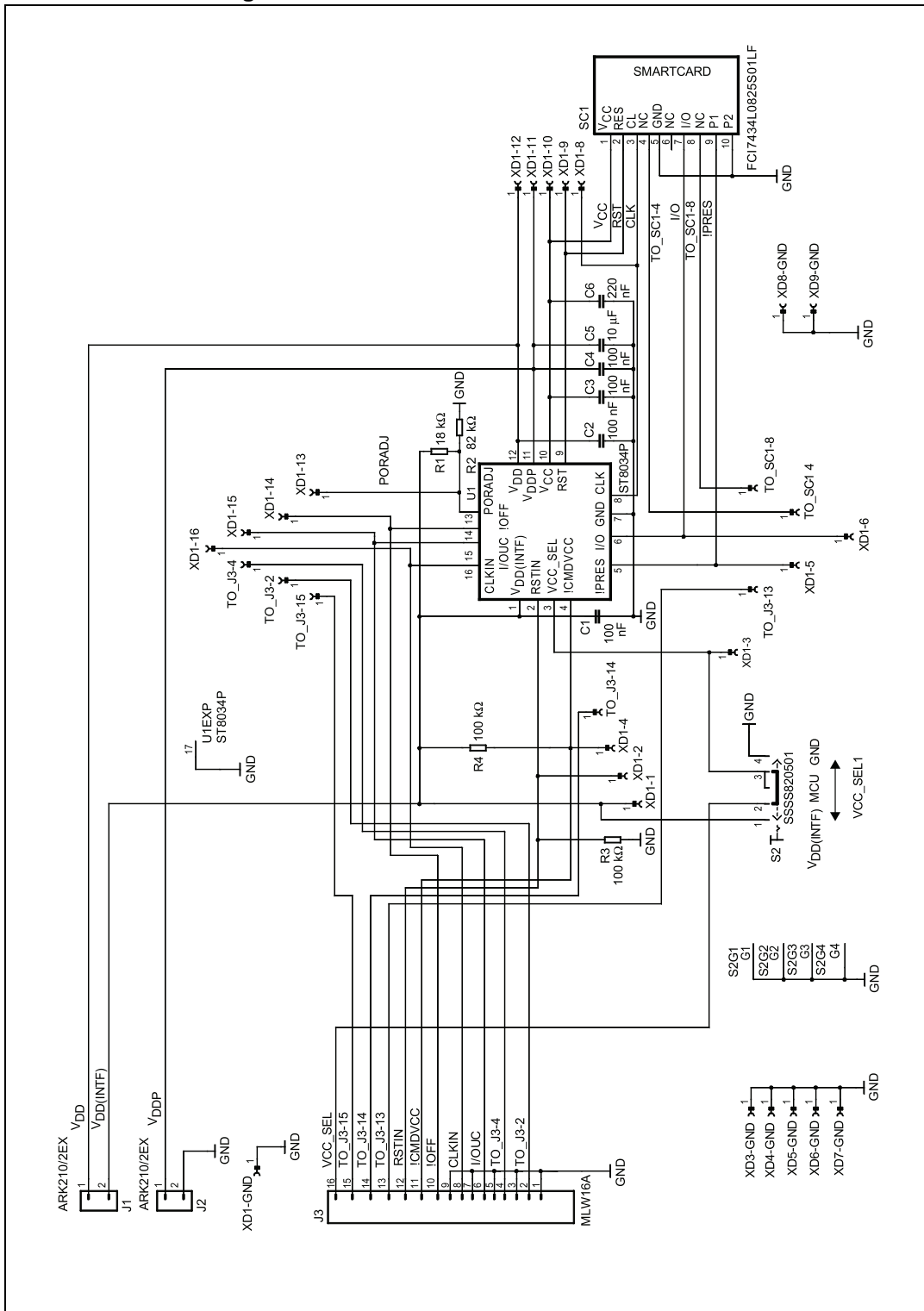
The STEVAL-IPT005V1 product evaluation board is designed both for standalone operation or to be controlled by the microcontroller. The board is fully configurable, provides access to all signals including supply voltage through labeled test points, and uses a standard connector for simple communication interfacing with the microcontroller block. The labeled test points on the board are in the same order as the signals in the flat interface cable.

The board provides easy and flexible card supply voltage (V_{CC}) selection, either through the onboard configuration switch (driving the tri-state V_{CC} selection input pin V_{CC_SEL}) or through the microcontroller.

The STEVAL-IPT005V1 product evaluation board addresses market segments including: POS, set-top boxes, pay TV, identification, banking and tachographs.

1 Schematic diagram

Figure 1. STEVAL-IPT005V1 circuit schematic



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
03-Dec-2013	1	Initial release.
10-Apr-2014	2	Title has been corrected.

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.

© 2014 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