

STEVAL-IPT007V1

Smartcard interface evaluation board based on the ST8034HC

Data brief



Features

- Smartcard connector
- Labeled test-points provide accessibility to all signals on the board
- Design allows standalone operation for basic tests
- Interface to MCU block and easy board configurability allows full-featured functionality for applications such as set-top box
- On-board 10 MHz crystal clock oscillator can be used to provide card clock in standalone operation
- Card clock source selection switch allows a choice between the on-board crystal oscillator as card clock source, or an external clock source provided by microcontroller block through the MCU interface together with data signals
- Card supply voltage selection provides simple but flexible card supply through either on-board configuration switches or remotely by microcontroller
- RoHS compliant

Description

The ST8034xx interface devices are placed between the smartcard and the microcontroller to provide all necessary supply, protection, detection and control functions, while requiring a minimum of external components.

The STEVAL-IPT007V1 product evaluation board allows easy demonstration and testing of the ST8034HC 24-pin smartcard interface features.

The board can also be used as a functional block for a complete application, as it is designed both for standalone operation or to be controlled by the microcontroller. The board is fully configurable to maintain flexibility for various use scenarios. It includes standard interfaces on both sides (smartcard connector, MCU interface connector) and easily accessed, labeled test-points on all signals.

The STEVAL-IPT007V1 product evaluation board addresses market segments including POS, settop boxes, pay TV, identification, banking and tachograph.

May 2014

DocID026405 Rev 1

1/4

For further information contact your local STMicroelectronics sales office.

1 Schematic diagram

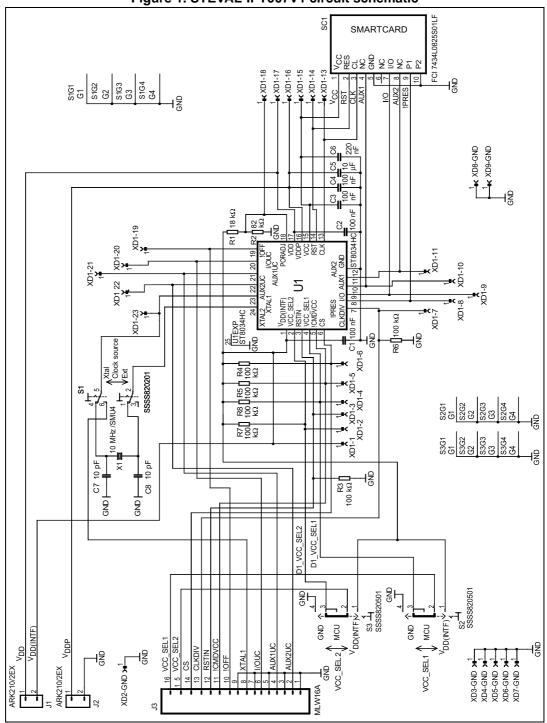


Figure 1. STEVAL-IPT007V1 circuit schematic



2 Revision history

Table 1. Docum	nt revision history
----------------	---------------------

Date	Revision	Changes
23-May-2014	1	Initial release.



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

DocID026405 Rev 1



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Interface Development Tools category:

Click to view products by STMicroelectronics manufacturer:

Other Similar products are found below :

DP130SSEVM ISO3086TEVM-436 ADP5585CP-EVALZ CHA2066-99F AS8650-DB MLX80104 TESTINTERFACE I2C-CPEV/NOPB ISO35TEVM-434 416100120-3 XR18910ILEVB XR21B1421IL28-0A-EVB EVAL-ADM2491EEBZ MAXREFDES23DB# MAX9286COAXEVKIT# MAX3100EVKIT MAX13235EEVKIT XR21B1424IV64-0A-EVB CMOD232+ MAX13042EEVKIT+ MAX14838EVKIT# MAXCAM705OV635AAA# MAX9205EVKIT DS100BR111AEVK/NOPB DC241C MAX9286RCARH3DB# DC1794A SN65HVS885EVM EVB81112-A1 DFR0257 XR22404CG28EVB ZLR964122L ZLR88822L EVK-U23-01S EVK-W262U-00 DC196A-B DC196A-A DC327A OM13585UL MAX16972AGEEVKIT# MARS1-DEMO3-ADAPTER-GEVB MAX7315EVKIT+ PIM511 PIM536 PIM517 DEV-17512 STR-FUSB3307MPX-PPS-GEVK MAXREFDES177# EVAL-ADM2567EEBZ EVAL-ADN4654EBZ MAX2202XEVKIT#