

DATA SHEET

hitag

HTEV400

HITAG proximity evaluation kit

Product specification
Supersedes data of 1999 Jan 01
File under Integrated Circuits, IC11

2001 Sep 24

HITAG proximity evaluation kit**HTEV400****FEATURES**

The evaluation kit comprises the following components:

- Proximity read and write device with integrated antenna
- DC power supply cable
- RS232 interface cable
- HITAG transponders
- CD-ROM with:
 - Demonstration software
 - User manual.

APPLICATIONS

- Easy integration and application of HITAG proximity readers.

GENERAL DESCRIPTION

HITAG⁽¹⁾ is the name of one of the universal and powerful product lines of our 125 kHz family. The HITAG product family is used both in the proximity area (operating range up to approximately 200 mm) and in the long range area (operating range up to approximately 1000 mm).

(1) HITAG - is a trademark of Philips Semiconductors
Gratkorn GmbH.

ORDERING INFORMATION

PART NUMBER	NAME	ORDER CODE (12NC)
HTEV400	HITAG proximity evaluation kit	9352 341 40122



Developing our HITAG products, utmost consideration was given to security and reliability. The use of cryptography guarantees highest data security.

The central part of every HITAG read and write device is the HITAG core module, which ensures full compatibility for every HITAG read and write device.

To give you the possibility for an easy and quick start with our HITAG products we offer a HITAG proximity evaluation kit. Easy application certainly is an important factor in making the proximity evaluation kit suitable for evaluation purposes. You will be able to present your ideas and demonstrate the performance of your system with the help of the HITAG evaluation kit.

The HTEV400 supports both HITAG 1 and HITAG 2 products. However, the HTEV400 does NOT support the anticollision feature of HITAG 1.

HITAG proximity evaluation kit

HTEV400

BLOCK DIAGRAM

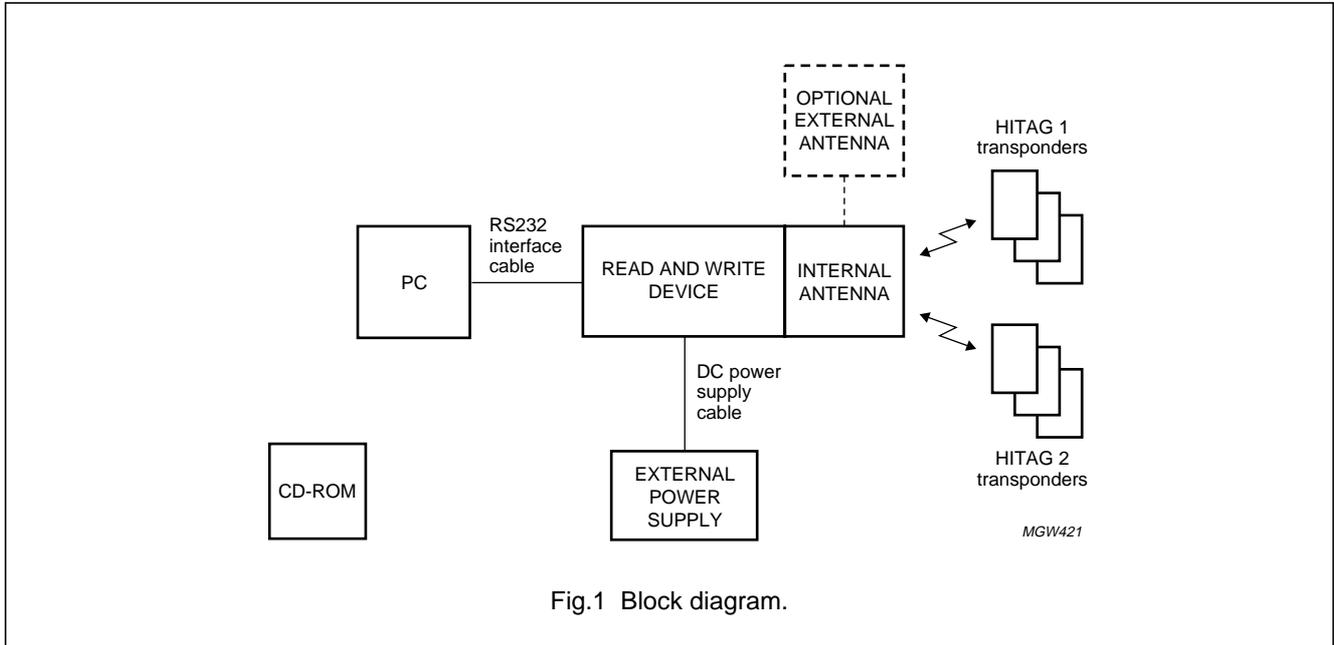


Fig.1 Block diagram.

FUNCTIONAL DESCRIPTION

Hardware start-up

Metallic environment and electromagnetic interferences (e.g. monitors and keyboards) have a negative effect on the range.

CONNECTING READ AND WRITE DEVICE TO PC AND POWER SUPPLY UNIT

The following connections have to be made on the read and write device:

- Connect the supplied interface cable to the serial interface (port COM 1 or port COM 2) on your PC
- Connect the external power supply unit.

CONNECTING EXTERNAL ANTENNA

An own built antenna may be connected to the external antenna connector. For the design of a proximity antenna, please refer to the documents:

- "HTCM400 HITAG core module"
- "HTRM440 HITAG proximity reader module".

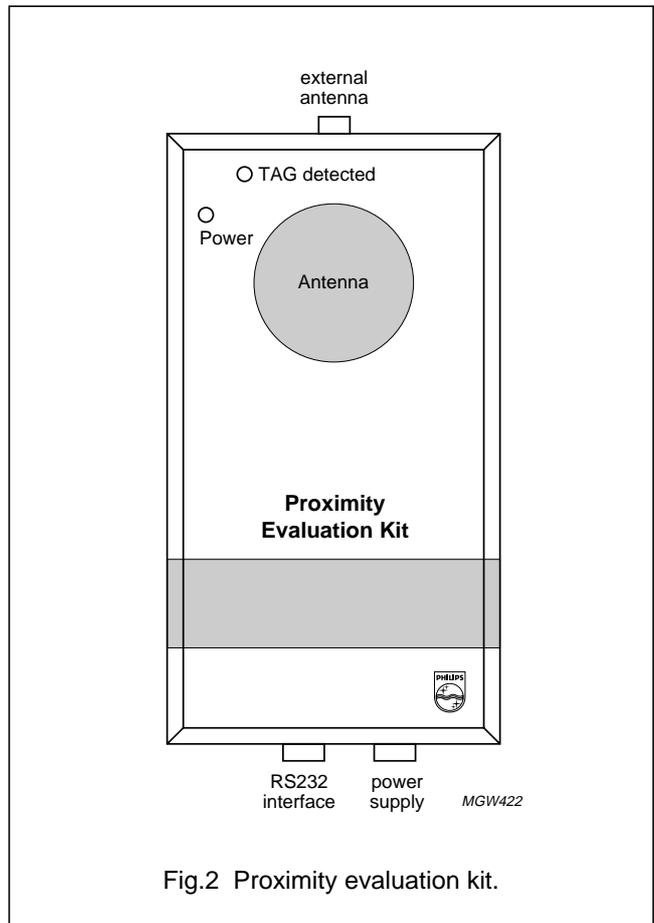


Fig.2 Proximity evaluation kit.

HITAG proximity evaluation kit

HTEV400

Software start-up

SYSTEM REQUIREMENTS

In order to use the RFIDDEMO software the following system requirements must be satisfied:

- IBM-PC or compatible (minimum 286 processor)
- 640 kbyte RAM
- Serial interface.

INSTALLATION

1. Create a new directory on your PC for the demo-files e.g. C:\RFIDDEMO
2. Copy all the files from the CD-ROM into the new directory.

STARTING THE DEMO-PROGRAM

We strongly recommend to carefully read the user manual "*RFIDDEMO HITAG evaluation software*" before starting the demo system. Inconsiderate use of individual menu options may result in unwanted irreversible changes in access rights.

Start your demo-program by typing the command RFIDDEMO.EXE.

CHARACTERISTICS

DEVICE	PARAMETER
External power supply unit	DC voltage: 9 to 16 V
	DC current: 150 mA (maximum)
Read and write device	interface: RS232
	operating frequency: 125 kHz
Operating temperature	0 to 70 °C

REFERENCE DOCUMENTS

CATEGORY	TITLE
User manual	<i>"RFIDDEMO HITAG evaluation software"</i>
Data sheet	<i>"HTCM400 HITAG core module"</i>
Data sheet	<i>"HTRM440 HITAG proximity reader module"</i>

HITAG proximity evaluation kit

HTEV400

DATA SHEET STATUS

DATA SHEET STATUS ⁽¹⁾	PRODUCT STATUS ⁽²⁾	DEFINITIONS
Objective data	development	This data sheet contains data from the objective specification for product development. Philips Semiconductors reserves the right to change the specification in any manner without notice.
Preliminary data	qualification	This data sheet contains data from the preliminary specification. Supplementary data will be published at a later date. Philips Semiconductors reserves the right to change the specification without notice, in order to improve the design and supply the best possible product.
Product data	production	This data sheet contains data from the product specification. Philips Semiconductors reserves the right to make changes at any time in order to improve the design, manufacturing and supply. Changes will be communicated according to the customer product/process change notification (CPCN) procedure SNW-SQ-650A.

Notes

1. Please consult the most recently issued data sheet before initiating or completing a design.
2. The product status of the device(s) described in this data sheet may have changed since this data sheet was published. The latest information is available on the Internet at URL <http://www.semiconductors.philips.com>.

DEFINITIONS

Short-form specification — The data in a short-form specification is extracted from a full data sheet with the same type number and title. For detailed information see the relevant data sheet or data handbook.

Limiting values definition — Limiting values given are in accordance with the Absolute Maximum Rating System (IEC 60134). Stress above one or more of the limiting values may cause permanent damage to the device. These are stress ratings only and operation of the device at these or at any other conditions above those given in the Characteristics sections of the specification is not implied. Exposure to limiting values for extended periods may affect device reliability.

Application information — Applications that are described herein for any of these products are for illustrative purposes only. Philips Semiconductors make no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

DISCLAIMERS

Life support applications — These products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury. Philips Semiconductors customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Philips Semiconductors for any damages resulting from such application.

Right to make changes — Philips Semiconductors reserves the right to make changes, without notice, in the products, including circuits, standard cells, and/or software, described or contained herein in order to improve design and/or performance. Philips Semiconductors assumes no responsibility or liability for the use of any of these products, conveys no licence or title under any patent, copyright, or mask work right to these products, and makes no representations or warranties that these products are free from patent, copyright, or mask work right infringement, unless otherwise specified.

HITAG proximity evaluation kit

HTEV400

NOTES

HITAG proximity evaluation kit

HTEV400

NOTES

Philips Semiconductors – a worldwide company

Contact information

For additional information please visit <http://www.semiconductors.philips.com>. Fax: +31 40 27 24825

For sales offices addresses send e-mail to: sales.addresses@www.semiconductors.philips.com.

© Koninklijke Philips Electronics N.V. 2001

SCA73

All rights are reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner.

The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent- or other industrial or intellectual property rights.

Printed in The Netherlands

613502/02/pp8

Date of release: 2001 Sep 24

Document order number: 9397 750 08334

Let's make things better.

**Philips
Semiconductors**



PHILIPS