

# DATA SHEET

## **hitag**

### **HTEV800**

### **HITAG long range evaluation kit**

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

2001 Sep 24

**HITAG long range evaluation kit****HTEV800****FEATURES**

The evaluation kit comprises the following components:

- HITAG long range read and write device
- Power supply unit +15 V and –15 V
- AC mains supply cable
- DC power supply cable
- External antenna including flat cable
- RS232 interface cable
- HITAG transponders
- CD-ROM with:
  - Demonstration software
  - Evaluation software
  - 'C' source code
  - User manual.

**APPLICATIONS**

- Easy integration and application of HITAG reader modules.

**GENERAL DESCRIPTION**

HITAG<sup>(1)</sup> 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) |
|-------------|---------------------------------|-------------------|
| HTEV800     | HITAG long range evaluation kit | 9352 341 50122    |



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.

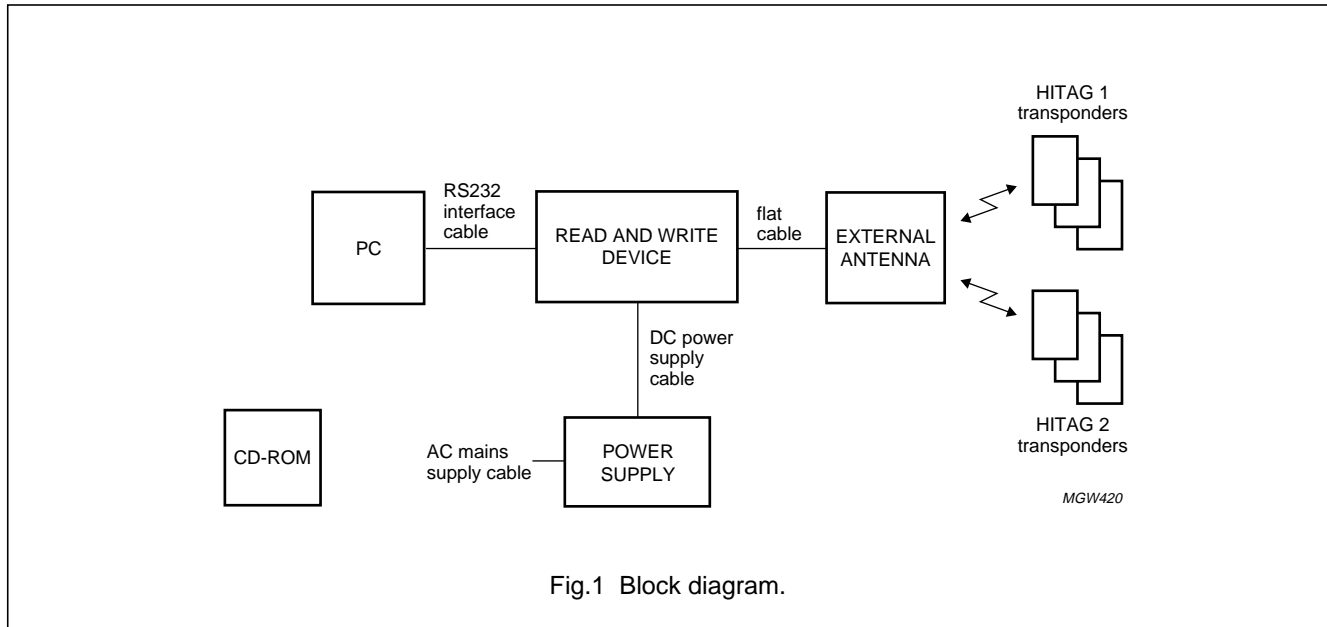
To give you the possibility for an easy and quick start with our HITAG products we offer a HITAG long range evaluation kit. Easy application certainly is an important factor in making the long range evaluation kit suitable for evaluation purposes. You will be able to present your ideas and demonstrate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

The HTEV800 supports both HITAG 1 and HITAG 2 products. Moreover, the HTEV800 supports the anticollision feature of HITAG 1.

## HITAG long range evaluation kit

## HTEV800

## BLOCK DIAGRAM



## FUNCTIONAL DESCRIPTION

## Hardware start-up

Metallic environment and electromagnetic interferences (e.g. monitors and keyboards) have a negative effect on the range. At the HITAG long range read and write device, the signal processing unit is able to suppress up to two harmonic disturbers.

## CONNECTING THE ANTENNA

If an own built antenna instead of the standard flat cable antenna is used, please refer to application note *"Antenna design for the HITAG long range system"*.

## CONNECTING THE READ AND WRITE DEVICE TO THE PC AND POWER SUPPLY

**After** connecting the antenna, connect the supplied interface cable to the serial interface (port COM 1 or port COM 2) on your PC.

Plug the DC power supply cable into the power supply unit and please take attention to the marking at the back of the supply unit (110 or 240 VAC).

## 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.

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**HITAG long range evaluation kit****HTEV800**

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**CHARACTERISTICS**

| <b>DEVICE</b>         | <b>PARAMETER</b>   |
|-----------------------|--|
| Power supply voltage  | AC mains: 240 V, 50 Hz; optional 110 V, 60 Hz (as per agreement) |
| Read and write device | interface: RS232   |
|                       | operating frequency: 125 kHz                                     |
| Antenna               | dimensions: 340 × 360 mm   |
|                       | connection: flat cable   |
| Operating temperature | 0 to 70 °C   |

**REFERENCE DOCUMENTS**

| <b>CATEGORY</b>  | <b>TITLE</b>  |
|------------------|---|
| Application note | <i>"Antenna design for the HITAG long range system"</i> |
| User manual      | <i>"RFIDDEMO HITAG evaluation software"</i>             |

## HITAG long range evaluation kit

HTEV800

## DATA SHEET STATUS

| DATA SHEET STATUS <sup>(1)</sup> | PRODUCT STATUS <sup>(2)</sup> | 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>.

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**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.

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HITAG long range evaluation kit

HTEV800

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**NOTES**

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HITAG long range evaluation kit

HTEV800

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**NOTES**

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## **Contact information**

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