

## KIMaip

### Fast Interface for KNX

„ The energizing way to connect to the KNX.“

KIMaip is an easy-to-use Interface Module for connecting to the KNX. Access to the KIMaip module from your application controller is achieved via I2C bus.

I<sup>2</sup>C -bus or Inter-Integrated Circuit bus, developed by NXP Semiconductors in the early 1980's, is a simple bi-directional 2-wire bus for efficient inter-IC control for microcontrollers, general-purpose circuits and application-oriented circuits like our KIMaip interface.

KIMaip consists of a microcontroller running the certified KNX communication stack KAlstack and the high performance KNX interface to the KNX bus - KAlphys. This design enables direct usage of the high power supply from the bus.

This module is intended to connect directly to an application controller and is thus optimized as basis for end devices. It is ideally suited for applications not needing galvanic isolation. Due to its design and cost it is optimal for small to high quantities.

The KIMaip reduces time-to-market by making it easy to implement KNX functionality and removing overhead in your application development.

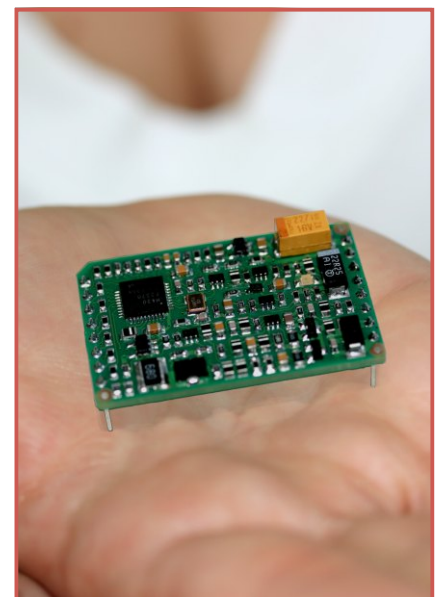
KIMaip: KNX Interface Module, application layer, I2C protocol



**I<sup>2</sup>C: de facto world standard connection**

## Advantages

- I<sup>2</sup>C interface
- High power supply from bus 3V and 12V
- Cost effective KNX solutions
- Small dimensions: 39x25 mm
- High flexibility
- Faster time to market
- Adaptable
- KNX certified



## Technical Information

### Application Interface

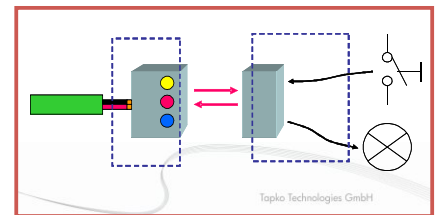
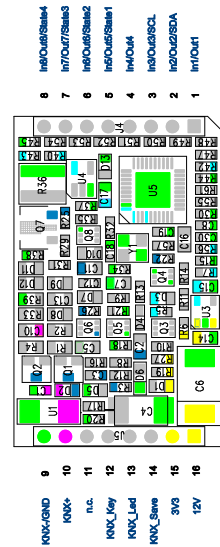
- KIMaip bus module is slave, your controller is master
- Binary data representation in messages on I<sup>2</sup>C
- Access to group communication and interface objects
- Access to ETS configurable parameter area
- Object data are stored in external user application controller
- Optional "attention KNX data received" pin available

### Features

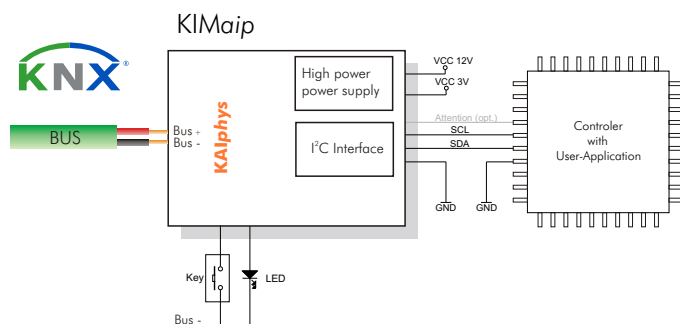
- high efficiency KNX physical layer KAlphys provides max. 35 mA @12V or 30 mA @ 3V output power for application.  
Total maximum power available for application is 0,4 Watt!
- direct connection of application controller and application hardware to module power supply.
- device model 0701
- configuration via freely downloadable generic ETS database entry.
- 253 group objects (maximum for model 0701) available.
- support for long KNX messages < 100 bytes
- low cost

### One operation mode

- support of all KNX data types
- immediate indication when data received with object data
- transparent transmission of the group communication object data
- no data conversion. Pay load of messages are not changed or filtered
- telegram generation immediate after reception over I<sup>2</sup>C



## Application



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The data contained herein are subject to change without notice.

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