

## KAlstack

### The KNX Communication Stack for end devices

„ KAlstack - the basis for your applications .“

Embedded system designs that employ KAlstack gain access to the powerful, yet easy-to-use technology platform KAI (KNX Advanced Interface) for KNX enabled bus devices.

KAlstack is the main software component of KAI and provides the complete functionality needed for KNX devices.

KAlstack contains all elements required by the KNX standard and is certified in several different configurations. KAlstack is implemented in close dependence on the ISO/OSI reference model. The clear structure separates between application relevant parts, modular communication stack internal parts, media dependent parts and target CPU related issues. Advanced implementation methods allow highly efficient coding that leads to optimized resource usage. This is shown in a small footprint and moderate resources needed. An application development with KAlstack relieves the burden of early decisions in the design process by simple configurability of the stack.

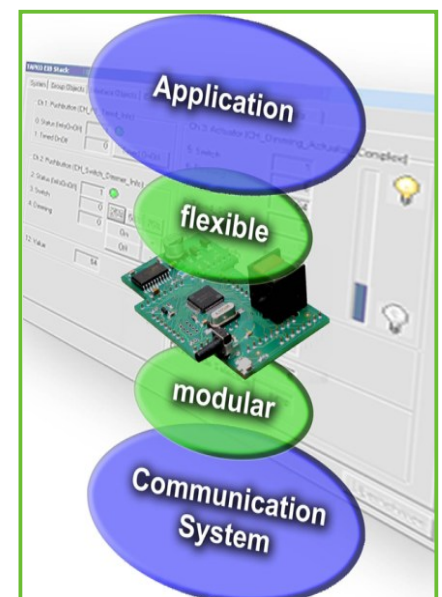
It helps increase system reliability and improves device stability. Hardware and software components of KAI can be adapted according to given conditions. KAlstack is KNX certified.



### Modularity in design & function

## Advantages

- According to KNX standard
- Adaptable to your requirements
- High flexibility by modularity
- Applications unchanged by varying configurations of KAlstack
- Separate WINDOWS target as developing aid
- KNX certified



## Features

### General

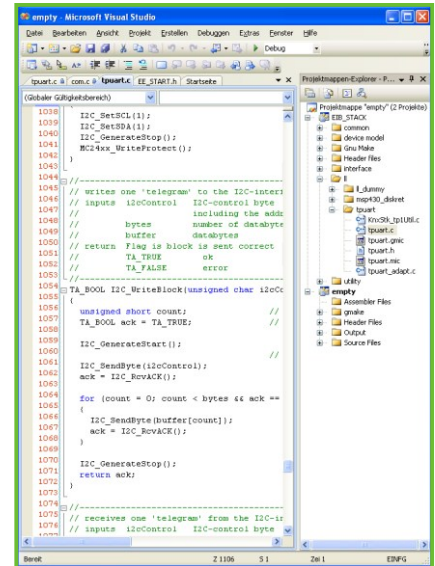
- Structure according to ISO/OSI-mode
- Standard ANSI-C
- High flexibility through modularity
- Configuration with compiler switches
- Adaptable to various requirements
- Various 8/16/32 bit microcontroller with/without operating system

### KNX

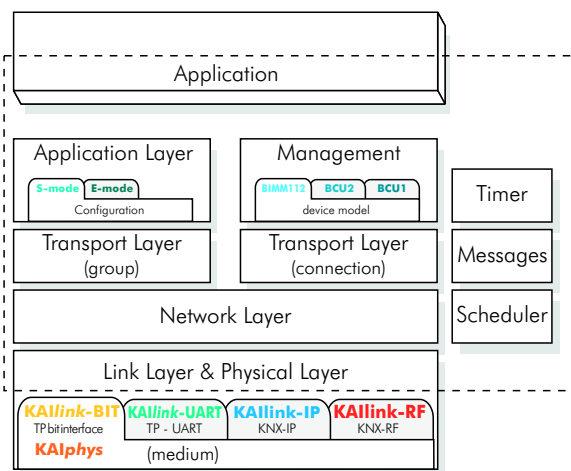
- Different KNX configuration modes (System-, Easy-mode)
- Several device models (BCU1, BIMM112, ...)
- Device configuration is isolated from the application.
- Different media/coupling to the KNX bus (KAllink-BIT, KAllink-IP, ...)
- KNX certified

### Development environment

- Development board available
- Separate WINDOWS target as developing aid



## Architecture



KAlstack is the main software component of the technology platform KAI (KNX Advanced Interface) for KNX enabled bus devices.