

# Kontron EAPI for Linux

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## Purpose

This document describes Kontron Embedded API (KEAPI) installation and usage on Kontron hardware platforms running Linux. For common KEAPI description and specifications see “Software specification for Kontron EAPI” document, version 3.0.

## Introduction

Kontron Embedded API (KEAPI) is a software library and tools delivered along with each Board Support Package (BSP) for Kontron hardware. KEAPI enables software developers to easily create their applications for control and monitoring hardware resources of Kontron boards, modules, systems and platforms.

KEAPI delivery consists of:

- KEAPI SDK – library and C/C++ interface headers for dynamically and static linking with applications
- KEAPI configuration files – BSP specific configuration files
- KEAPI documentation
- KEAPI tool – command-line tool to run and inspect result of KEAPI calls

As KEAPI v3 is fully compliant with PICMG EAPI and JIDA32 API KEAPI package also installs library-wrappers for EAPI and JIDA32 applications

## KEAPI SDK

Kontron BSP's for Linux based platforms preinstall KEAPI library to `/usr/lib` or `/usr/lib64` (for x86-64 hardware platforms). The C/C++ interfaces are preinstalled to `/usr/include/keapi`, `/usr/include/eapi` and `/usr/include/jida`.

C/C++ applications have to be linked with KEAPI using `-lkeapi` linker switch.

C/C++ applications have to be linked with JIDA32 API using `-ljida` linker switch.

C/C++ applications have to be linked with PICMG EAPI using `-leapi` linker switch.

## KEAPI configuration files

BSP specific configuration files provide information which is necessary for correct work of Kontron EAPI on a specific board. Also it enables to make fine tuning for some specific requirements.

Most configuration files are pre installed to `/etc/keapi/` directory. More information about configuration files you may found in BSP specific documentation.

## KEAPI documentation

Documentation is provided for each BSP and consist from 2 parts:

- Kontron EAPI documentation – is pre installed to `/usr/share/doc/keapi/` directory. Contains the revision history, general information, end user license agreement, Kontron EAPI release notes, etc.
- BSP specific documentation – is pre installed to `/usr/share/doc/keapi_config/` directory. Contains description of configuration files, end user license agreement, BSP release notes, etc.