MutekH

Project pages

- <u>?development page</u>
- <u>?MutekH API reference manual</u>

Tutorial for SoCLib users

• <u>?The Tutorial for SoCLib users</u> is available on MutekH's site.

General presentation

MutekH is a portable operating system developed at <u>?Lip6-soc</u>.

MutekH is a set of libraries build on top of the Hexo exo-kernel. This exo-kernel defines the Hardware Abstraction Layer, providing both portability and support for heterogeneity.

Hexo has been ported on several platforms:

- MIPS, PowerPC and ARM processor based MPSoCs architectures modeled with SoCLib.
- ARM7-TDMI (Atmel AT91SAM7) based hardware platforms.
- x86 multiprocessor PC platforms.
- Runs wrapped in a linux process on x86 and x86-64 platforms.

Currently available libraries are:

- Several devices drivers for PC and SoCLib platforms.
- Native Posix Threads implementation (libpthread).
- Standard C library implementation (libc).
- File systems support (libvfs) along with file system drivers like vfat.
- TCP/IP protocol stack (libnetwork).
- The famous <u>?lua</u> lightweight script language interpreter (liblua).
- A <u>?terminal user interface library</u> with history and completion (libtermui).
- ELF loader (libelf) with support for dynamic relocations, code sharing and TLS (thread local storage).
- Scriptable loading and mapping of multi-threaded applications (libdsrl).

Other libraries are under development:

• Unix kernel API (libunix).