

UNDER DEVELOPMENT

## MPC7447A Processor Functional Description

This hardware component is a Freescale MPC7447A, a 32-bit implementation of the PowerPC architecture used for both general purpose (PowerMacintosh and CHRP machines) and embedded applications (industrial and network). This model is still in development and currently uses [IssWrapper](#) to connect the ISS to the VCI xcache. The model should run applications not requiring the standard PowerPC MMU, and the PowerPC specific TLB and cache instructions.

## Compiling the ISS

Here is a sample for soclib.conf to make it compile:

```
# -*- python -*-
# Maintainers: nipo

def _platform():
    """
    Retrieves platform information and make it look-like systemc's
    lib-xxx thing.

    Working so far with:
    * linux
    * darwin
    """
    import sys
    pf = sys.platform
    # Strip numeric suffix from platform name
    while pf[-1] in "0123456789":
        pf = pf[:-1]

    remap_pf = {'darwin':'macosx'}
    if pf in remap_pf:
        pf = remap_pf[pf]
    return pf

config.systemc = Config(
    base = config.systemc,
    dir = "${SYSTEMC}",
    os = _platform(),
)

config.mytoolchain = Config(
    base= config.toolchain,
    cflags=['-DSOCLIB', '-I/usr/include/libxml2'],
    libs=['-lxml2', '-lbfd']
)

config.default = Config(
    base = config.build_env,
    systemc = config.systemc,
    toolchain = config.mytoolchain,
    repos = "/tmp/build/sc",
)
```