



nMigen is a reboot of Migen, a Python toolbox for building complex digital hardware.

nMigen is a reboot of [Migen](#), our metaprogramming-based hardware description language. See the [Migen page](#) for the basic ideas.

Although Migen works very well in production (it is used, for instance, in the [ARTIQ](#) experiment control system, and the [Amarisoft](#) base stations), its design could be improved in many fundamental ways. nMigen reimplements Migen concepts from scratch to do so. nMigen also provides an extensive compatibility layer that makes it possible to build and simulate most Migen designs unmodified, as well as integrate modules written for Migen and nMigen.

Environment

nMigen itself provides the core language, and is complemented by a number of external components. The `nmigen-boards` package contains definition files for various FPGA boards, providing information such as pin locations and clocks. The `nmigen-stdio` package provides libraries to interface to common I/O protocols such as I2C and SPI. The `nmigen-soc`

