

## Porting of Micropython to LEON platforms

Micropython is “is a lean and fast implementation of the Python3 programming language that is optimized to run on a microcontroller (ARM)”. It was developed from scratch by Damien George (using crow-funding) and it is available under the MIT Open Source license.

MicroPython has been ported to LEON on top of RTEMS 4.8. The following aspects have been taking into account for the porting: optimization of resources, deterministic and bounded use of resources, interface with the Operating System, interface with C code, concurrency and multitasking. Supported Python version is 3.4 and the number of language features is very high (most of the language, classes, exceptions, etc.).

The standard MicroPython test bench plus specific test cases for LEON have been executed successfully. The port has been tested first into a LEON-2 simulator (the ESOC EMU simulator) and after in a real LEON target (AT-697E).

Intended uses and License policy will be commented.