

RODOS — Realtime Onboard Operating System

Reference: TD-DF-1038



TECHNOLOGY DESCRIPTION

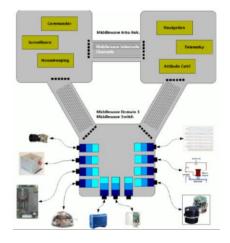
The RODOS operating system requires very few resources and offers preemptive multitasking, as well as its own middleware for communication between threads on the same processor or on different processors.

The system runs on several small satellites (TET-I, BIROS, BeeSat 1 & 2). RODOS was set up as a multi-layer framework; one layer provides the connection to the hardware, while the second layer represents the middleware. This middleware enables communication between different applications and components.



TNNOVATIVE ASPECTS

- · Very high efficiency
- It can be operated on comparatively small processors.
- It enables to write real-time applications on variable platforms.
- Simple implementation of components of the operating system





TECHNOLOGY READINESS (in space application)

TRL 9 (2024)

#distributed

Germany

LATEST UPDATE

COUNTRY OF ORIGIN

06/2024

TAGS

#operating system

processing

#real-time operations #small processors

#cubesats

#smallsats

APPLICATION AREAS

Aviation

Energy

Data Processing. Software & AI

Electrical & Electronic Engineering Construction & Civil Engineering

Infrastructure & **Smart Cities**

Space technologies

SPACE FOR BUSTNESS **BUSINESS** FOR SPACE



