

# KubOS

## Space Grade Flight System

KubOS flight system is a space graded, out of the box flight system designed for nanosatellites and microsatellites. KubOS has two different distributions, KubOS RT built upon FreeRTOS and KubOS Linux designed for more user functionality, allowing users to integrate with any OnBoard Computer (OBC) or payload computer to best complete your mission. Running KubOS on both the bus computer and the payload computer creates compatibility during integration and operations taking the risk out of the mission. More than an operating system, KubOS is a complete full featured flight systems combining the KubOS Core (flight middleware), KubOS HAL, and a base operating system. KubOS addresses the risk, development and integration uncertainties that come with building spacecrafts through providing Service Level Agreements for on demand support and mission critical solutions.



Command Shell



Logging API



Telemetry Beacon



Remote Updating

### Technical

- IPC
- AX.25 / APRS
- UDP/IP
- NMEA parser and GPS support
- Healthkeeping framework
- Debugging tools
- CubeSat Space Protocol
- HAL w/ support for GPIO, UART, SPI, I2C, SDIO

### Development Tools

- SDK
- Includes pre-configured Toolchains
- CMake build system
- ARM's yotta module dependency system

	KubOS RT	KubOS Linux
Operating System	FreeRTOS	Linux
MCU	MSP430, ARM Cortex-M	ARM9, Cortex-A*
CubeSat Boards	NanoAvionics SatBus 3C1 PocketQube OBC ClydeSpace OBC*	ISIS iOBC* Pumpkin OBC*
Documentation	<a href="http://docs.kubos.co">http://docs.kubos.co</a>	
Source Code	<a href="http://github.com/kubostech">http://github.com/kubostech</a>	

\*coming soon