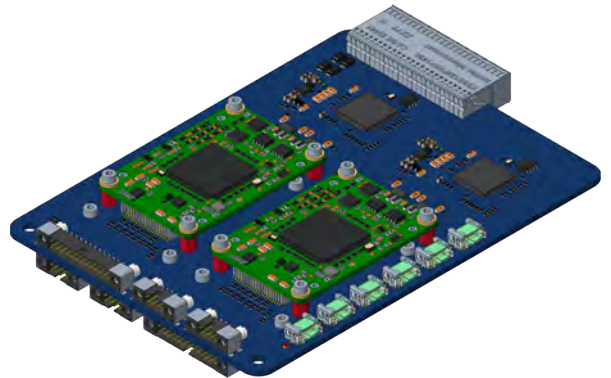


OBC Core is an affordable onboard computer for general application on mini and micro satellites. Build with rugged automotive-grade components, OBC core features a double or even quadruple redundant architecture, making it a reliable alternative to more expensive radiation hardened hardware.

The board comes with a software bundle that includes a real time operating system and tools to manage the board configuration, transfer data and software applications, and collect and transmit telemetry. A Python onboard control procedure engine enables satellite operators to upload scripts that increase the operational autonomy of the satellite.

FEATURES

- Up to 4 cores that can be configured to work as independent onboard computers for load balancing or combined into redundant units for reliability.*
- Each Core features:
 - AVR32 Microcontroller
 - 1Gbit SPI flash memory
 - 4Mbit FRAM
 - 256Mbit SDRAM
 - 2x CAN (1Mbps) interfaces, CSP enabled
 - 2x RS-422 interfaces
 - Several 12-bit ADC and GPIOs lines
- 4 x 4 GB configurable eMMC non-volatile memory



SOFTWARE BUNDLE

- FreeRTOS operating system
- Software development kit (SDK)
- Parameters manager (optional)
- File transfer manager (optional)
- Telecommands (including time-tagged) manager (optional)
- Telemetry manager (optional)
- On-Board control procedure engine (optional)



* Configuration selectable during purchase order

D-SENSE

TECHNICAL SHEET

TECHNICAL SPECIFICATIONS

Physical Dimensions and Temperature

Dimensions	150x110x25 mm
Mass	150 g

Qualification

Operating temperature	-30 + 70 C°
Random vibrations	13.45 gRMS
Shocks	2000 g @ 2000 Hz SRS levels

Interfaces and Ratings

Data interface	2 x CAN Bus (CSP enabled)	
	2 x RS-422	
Power interface	Average	Maximum
Voltage	8 V	12 V
Current	50 mA	150 mA