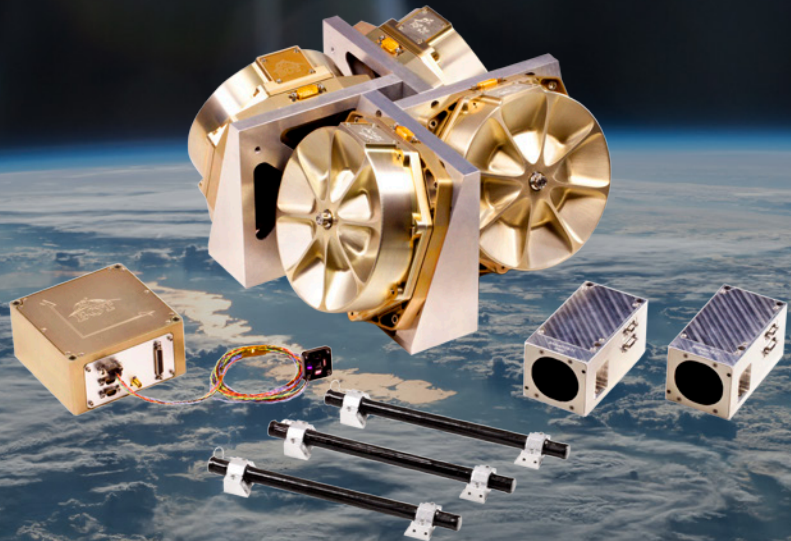




Spacecraft Buses, Systems & Solutions

FLEXCORE



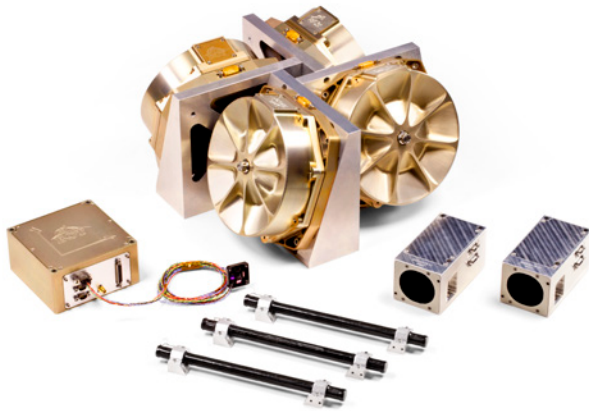
XACT Attitude Control Scalable to Microsatellites

The BCT FleXcore is a highly capable and low-cost attitude control system for microsatellite-sized spacecraft. The FleXcore is a reliable and modular attitude control system compatible with a variety of configurations and missions. The integrated XACT-based architecture leverages a powerful processing core with BCT's Nano Star Trackers and Reaction Wheel assemblies to enable a new generation of highly proficient, miniaturized spacecraft.

FEATURES INCLUDE

- Advantages of CubeSats now available for Microsats, ESPA-class, and beyond.
- XACT-based electronics and control software with external sensors and actuators
- Low-cost and high-performance attitude control solution
- Modular system fits multiple missions
- Supports multiple Star Trackers
- Scalable to a wide range of bus sizes
- Compatible with BCT family of reaction wheels and torque rods

FleXcore



Specification	Performance
Spacecraft Pointing Accuracy	± 0.002 deg (1-sigma), 3 axes, 2 Trackers
Spacecraft Lifetime	3 Years (LEO)
FleXcore Controller Mass	0.85 kg
FleXcore Controller Volume	10 x 10 x 5 cm (0.5U)
FleXcore Controller Electronics Voltage	5V
FleXcore Reaction Wheel Voltage	28V (dependent upon RW size)
Data Interface	RS-422 (SPI by request)

FleXcore features 3-axis Stellar Attitude Determination in a micro-package. Built-in, flexible commanding allows for multiple pointing reference frames: Inertial, LVLH, Earth-Fixed, and Solar. Precise 3-axis control is provided by low jitter reaction wheels, torque rods and integrated control algorithms. Software is available to support simulation, system integration, and customization of the ADCS functionality.



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