CubeADCS bundles offer custom solutions for a variety of satellite requirements. Each bundle consists of an integrated stack of CubeSpace components with UART, I2C, and CAN interfaces to other satellite subsystems. The ADCS OBC can also serve as a main satellite OBC. High-level ADCS software libraries are also available on any CubeADCS bundle. The bundles are compact and have low power consumption.

**Feature List**

**Standard Configurations:**
- CubeADCS Magnetic: Pure magnetic control
- CubeADCS Y-Momentum: 3-axis stabilisation
- CubeADCS 3-Axis: 3-axis control

**Available Hardware Components:**
- CubeComputer
- CubeSense
- CubeControl
- CubeWheel (momentum/reaction)
- CubeTorquer
- CubeCoil
- Coarse sun sensors
- Magnetometer (deployable)

**CubeADCS Y-Momentum:**
- CubeComputer
- CubeSense
- CubeControl
- 3 orthogonal rate sensors onboard
- 2 CubeTorquers onboard, 1 CubeCoil in stack
- CubeWheel (can be mounted on CubeControl)
- Coarse sun sensors
- CubeMagnetometer (deployable)

**Application**
- For nano-satellites that require attitude control
- Volume-limited satellites designs
- PC/104 form factor, compatible with CubeSat standard

**Testing & Heritage**
- Successful vibration & heated vacuum tests
- Radiation test (TID)
- Used on QB50 precursor satellites (Y-Momentum)

**ADCS Library**

**Controllers:**
- Magnetic: B-dot, Y-spin, and Cross Product
- Wheel: Y-momentum and Quaternion Feedback

**Estimators:**
- Rate Kalman Filter (RKF)
- TRIAD Algorithm
- Extended Kalman Filter (EKF)