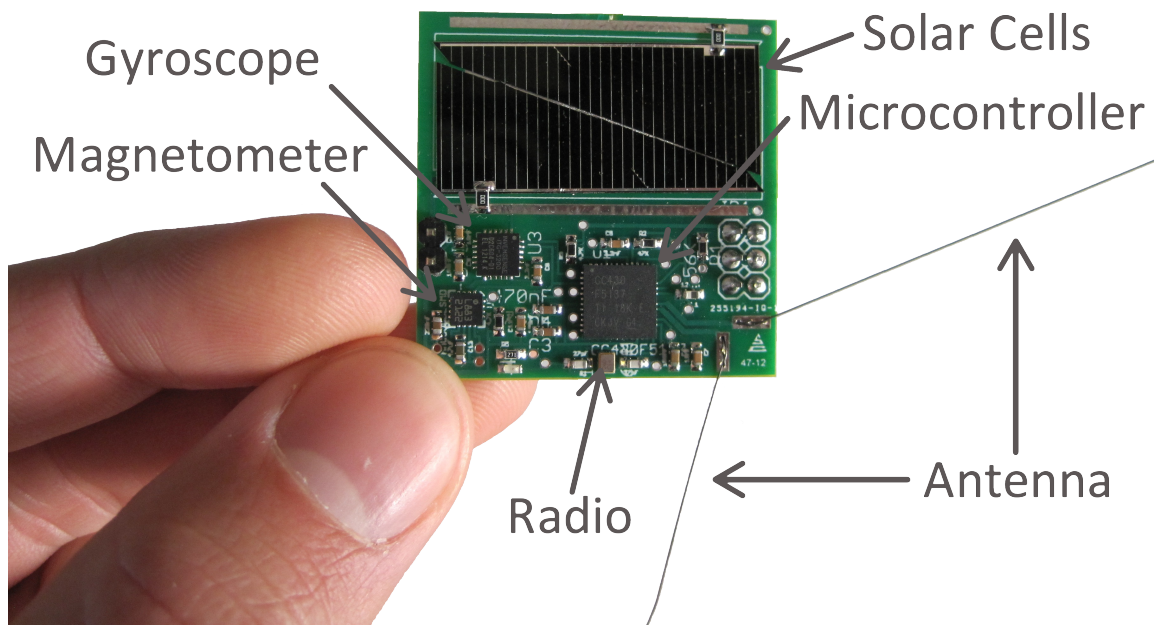




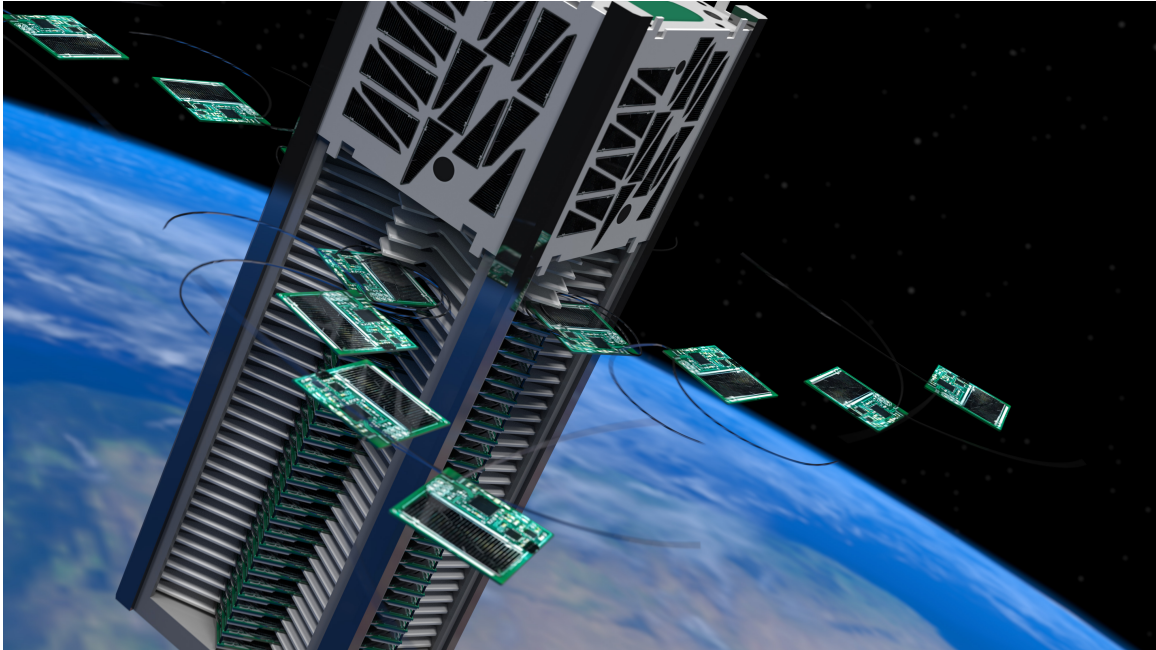
A Crowd-Funded Technology Demonstration Mission for the Sprite ChipSat

KickSat is a CubeSat technology demonstration mission designed to demonstrate the deployment and operation of prototype Sprite “ChipSats” (femtosatellites) developed at Cornell University. ChipSats like the Sprite represent a disruptive new space technology that has the potential to both open space access to hobbyists and students and enable a new class of science missions. KickSat has been financed through the crowd-source funding website Kickstarter, with the goal of reducing the total cost of putting a single satellite into low Earth orbit to a few hundred dollars.



The Sprite is a tiny spacecraft that includes power, sensor, and communication systems on a printed circuit board measuring 3.5 by 3.5 cm with a thickness of a few millimeters and a mass of a few grams. It is intended as a general-purpose sensor platform for micro-electro-mechanical (MEMS) and other chip-scale sensors with the ability to downlink data to ground stations from LEO.

KickSat is a 3U CubeSat built to carry and deploy Sprites into space. A 1U avionics bus provides power, communications, command and data handling, and attitude control functions, while a 2U deployer houses 100 Sprites in individual spring-loaded slots. KickSat has been awarded a launch through NASA’s ELaNa program. It is currently manifested on the CRS-3 mission, which is scheduled for launch on a SpaceX Falcon 9 in February 2014 into a 325 km. altitude circular orbit with 51.5° inclination.



After they are deployed, the Sprites will transmit telemetry and sensor data to Cornell's ground station in Ithaca, New York, as well as to amateur radio operators around the world. They will remain in orbit for a few days before reentering the atmosphere and burning up.