

When you've got a challenging mission ahead that requires flexibility with payloads and cost, there's one space-proven spacecraft that's the perfect choice.

The Ball Aerospace Ball Configurable Platform (BCP) is built on a customizable, proven spacecraft design. It's ideally suited for environmental monitoring, deep space, Intelligence Surveillance and Reconnaissance, and space control missions. The highly successful, flight-proven BCP is the solution when performance and reliability are essential.





BCP 100

The BCP 100 is the perfect small satellite solution, offering a rapid response for meeting mission requirements. The spacecraft measures about 24" wide x 28" deep x 28" high and has the capacity to accommodate up to four separate instruments.

STPSat-2

Built for the United States Air Force, launched November 2010 aboard a Minotaur IV from Kodiak, Alaska, STPSat-2 demonstrates the utility of standard payload interfaces.



STPSat-2

STPSat-3

Built in only 47 days for the United States Air Force, this BCP 100 has repeatedly demonstrated its ability to add or remove payloads even after the spacecraft was completed.



STPSat-3

GPIM

The Green Propellant Infusion Mission (GPIM) is a Technology Demonstration Mission managed by NASA and is expected to launch aboard a SpaceX Falcon Heavy launch vehicle in 2015. The mission utilizes a BCP 100 spacecraft bus with an Aerojet modular propulsion system to validate the benefits of the non-toxic fuel for future satellite missions.

GPIM



BCP 300

Ideal for both operational and technology demonstration missions, the BCP 300 offers a step-up in capabilities.

WISE

A NASA Explorer class mission, the Wide-field Infrared Survey Explorer (WISE) launched December 2009. WISE is studying the entire sky in the infrared with far greater sensitivity than any previous mission and has already produced millions of images of stars, asteroids, comets and galaxies.



WISE

Orbital Express NEXTSAT

This "little satellite that could" assisted in the successful demonstration of on-orbit servicing, including autonomous rendezvous, docking, and component replacement, as well as refueling for the Defense Advanced Research Projects Agency.



Orbital Express NEXTSAT

BCP 2000

The BCP 2000 is a stable, highly agile, high-throughput space-craft bus designed for high-performance missions. The BCP 2000

accommodates Earth remotesensing payloads requiring precision pointing control, yet maintains the flexibility for rapid target selection.

Suomi NPP

Launched October 2011, this weather and environmental monitoring satellite for NASA and NOAA was built on a BCP 2000. Suomi NPP demonstrates the Ball Aerospace unique ability to accommodate five government-furnished instruments under a firm, fixed-price contract. This BCP 2000 bus module is also being used for the first Joint Polar Satellite System (JPSS-1).

Kepler

NASA's Kepler telescope, launched in March 2009, is yielding unprecedented exoplanet discoveries. The very stable BCP 2000 Deep Space bus platform deployed one of the largest, most complex focal planes ever to fly in space.



Suomi NPP



Kepler

SBSS

The Space Based Space Surveillance (SBSS) spacecraft, launched September 2010, is revolutionizing the United States Air Force's ability to detect and track space objects. Using an adaptation of the BCP 2000 for space situational awareness, SBSS demonstrated Ball's ability to integrate a complex two-axis gimbal payload.

QuickBird

This firm, fixed-price BCP 2000 spacecraft set an industry milestone for commercial remote sensing with its world-class imagery. Built for DigitalGlobe, QuickBird provided the highest resolution Earth imagery that was commercially available at the time of its launch.

QuikSCAT

Commissioned to measure wind speed and direction over the oceans, QuikSCAT was the first spacecraft procured by NASA through the Rapid Spacecraft Development Office. Time was of the essence in providing this BCP 2000: contract start to spacecraft completion took only 11 months.



SBSS



QuickBird

BCP 5000

The BCP 5000 offers the highest performance. This powerful spacecraft is able to handle next-generation optical and synthetic aperture radar remote-sensing payloads. The BCP 5000 provides increased power in standard increments. For higher spacecraft agility, control moment gyros (CMGs) provide rapid retargeting capability while supplying stability for even the finest-spatial-resolution payloads. The BCP 5000 is the quintessential choice for firm, fixed-priced spacecraft programs, such as the WorldView series built for DigitalGlobe.

WorldView-1

Launched September 2007, WorldView-1 represented a new commercial standard in rapid targeting, image resolution, and data handling. Its images demonstrate the precise geolocation capabilities and its extreme stability due to the spacecraft's CMGs.



WorldView-2

WorldView-2

Launched in October 2009, this spacecraft's ability to provide 8-band multispectral pictures at resolutions as sharp as 1.8 meters and panchromatic at half-meter enables Ball Aerospace to further enhance its contributions to the geospatial information market.

WorldView-3

Expected to launch in 2014, this spacecraft has the ability to collect 8-band, short-wave infrared imagery and has all of the features of its predecessors.



Unrivaled Reliability

The combined BCP series has flown for more than 85 years, consistently exceeding each spacecraft's design life, demonstrating the Ball Aerospace commitment to quality and reliability.

Consistent, Incremental Enhancement

Ball Aerospace is continuously evolving the BCP spacecraft family. The solid BCP heritage has allowed the company to make incremental improvements of the spacecraft's performance without increasing its risk profile. Upgrades include high-power systems, low-mass energy storage/generation subsystems, higher agility, advanced propulsion, and higher capacity telecom. This approach to spacecraft manufacturing enables Ball Aerospace to confidently support operational missions as well as state-of-the-art technology demonstration missions under both fixed-price and cost-plus contracts.

A Wide Range of Missions

The highly agile Ball Aerospace BCP spacecraft line is able to suit customer needs from initial technology development to prototype demonstration through full, operational systems. The BCP line is flown in a variety of orbits with a wide assortment of payloads, including optical payloads (imagers and limb scanners) with extremely tight pointing requirements. As a space instrument developer, Ball Aerospace has a unique understanding of instrument accommodation and experience delivering end-to-end systems. This knowledge gives Ball Aerospace a mission systems expertise that translates into a proven ability to fulfill the most challenging mission requirements.

Space-Proven Dependability



