BLUE CANYON TECHNOLOGIES

Spacecraft Buses, Systems & Solutions

CUBESAT EDU SUMMARY

Blue Canyon Technologies can provide generic Engineering Development Units (EDUs) to aid in the development of customer payloads. These EDUs offer the ability for new customers to prove out the interfaces between their payload and the XB1 spacecraft well before the flight units are brought together, lowering technical and schedules risks for the program.

The generic EDUs contain all of the interfaces, both data and power, that will be available on a flight program.

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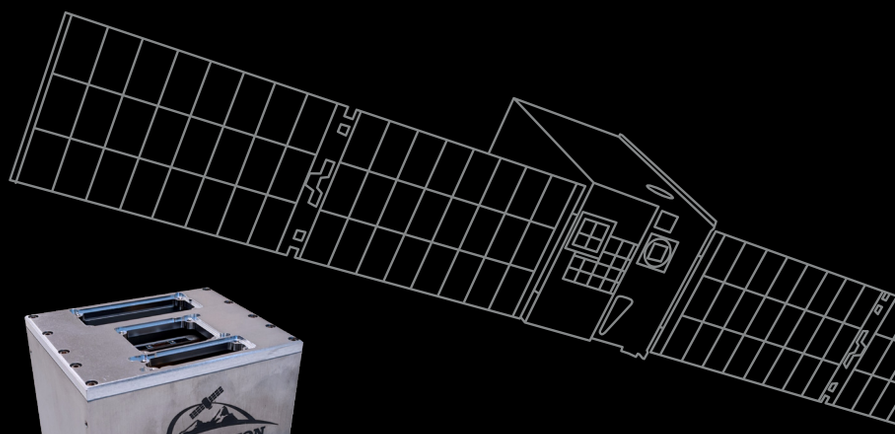

XB1 EDU

MECHANICAL CONFIGURATION	EDUs are housed in durable aluminum chassis. Mechanical configuration is not flight-like
DATA INTERFACES	14 x 2.5V LVDS Pairs, 8 x 3.3V Single Ended IO. Preferred protocols: UART, SpaceWire, RS422, RS485
ONBOARD DATA STORAGE	4 GigaBytes of payload data
POWER INTERFACES	1 Switched 3.3V @ 3.2A 1 Switched 5.0V @ 3.2A 6 Switched unregulated 12 @ 4.8A *Combined current not to exceed 10A
MISSION SIMULATIONS	BCT's Real Time Dynamics Processor is included with all EDUs to provide software simulations of mission operations
RF INTERFACE	BCT Software Defined Radio available as an option
GPS INTERFACE	GPS Receiver and Antenna available as an option
ENERGY STORAGE	No batteries are included in EDU. Battery inputs can be simulated with GSE input
SOLAR ARRAY POWER	No solar arrays are included in EDU. Solar Array inputs can be simulated with GSE input
SENSORS AND ACTUATORS	EDUs do not contain reaction wheels, torque rods, star trackers, IMUs, or sun sensors

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