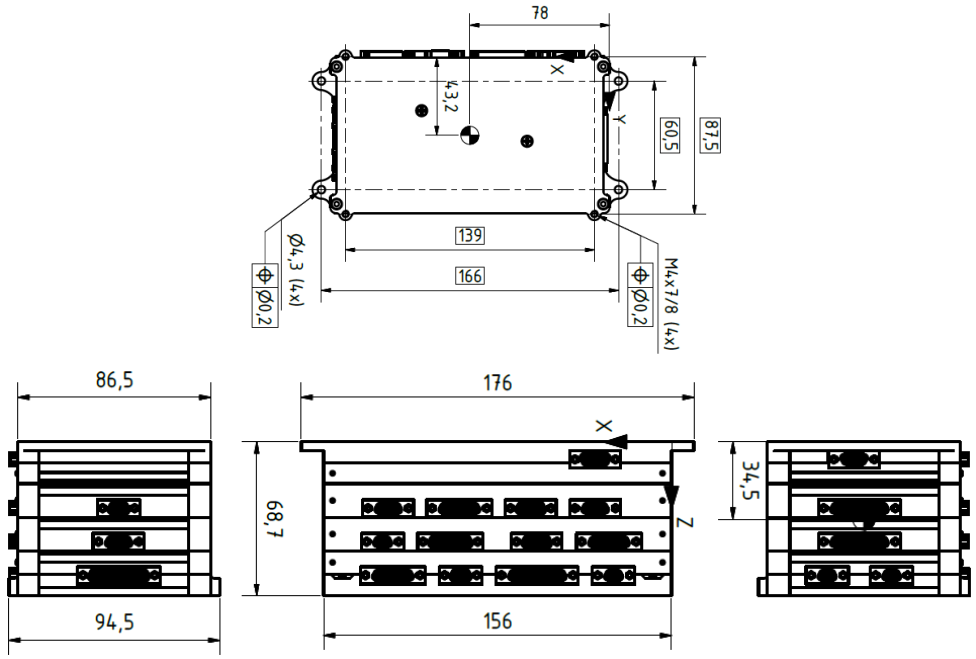
COMMAND AND DATA HANDLING SYSTEM

The BST CDH system consist of two main parts: the OBC-110 and the ACC-110. The OBC-110 is responsible for scheduling all tasks and coordinating TMTC functions of the bus whereas the ACC-110 which is integrated in the same housing runs the attitude algorithm and connects to all ADCS components. Optionally an auxiliary processor can be attached to the OBC-110 that allows centralized operation via a Linux operation system.

Command and Data Handling System (CDH)

CHARACTERISTICS	
Size	176x94x69mm³
Weight	815g
Power (digital electronics)	5V DC
(magnetic coils)	bus voltage or 5V DC
Storage Temperature	-30°C to +50°C
Operating Temperature	-20°C to +40°C
Design Life	5 years LEO
Space Heritage	Yes
Radiation Test (Co60)	20 krad



INTERFACES & CAPABILITIES	
OBC-110	
Data Interfaces	8x RS422 + 2x SPI/RS422
	4x TMTC, 1x PCU, 1x payload, 1x GPS, 1x ACC, 1x OBC-HP, 1x EGSE interface
Time Synchronisation	dedicated pins for subsystems
Process Power	90 MIPS
OBC-HP	Optionally attached to OBC-110
Interfaces	1x RS422 (OBC-110) 1x USB (S/C EGSE), 16 Temp, 16 Analogue, 32 GPIO
Time Synchronisation	dedicated pins for subsystems
Process Power	400 MIPS
Operating System	Linux
Authentication	Yes
TMTC Data Encryption	Optional
CCSDS Engine for TMTC	Yes
ACC-110	
Data Interfaces	10x RS422, 3x PWM (coil)
	3x RW & FOG, 1x mems gyro, 1x magneto meter, 2x star tracker, 2x sun sensors (3), 1x OBC, 3x Coil
Time Synchronisation	dedicated pins for subsystems
Process Power	90 MIPS