

High Speed Data Recorder

16 GBytes Storage

Applications

- LEO Missions
- Earth Observation Missions
- Space Science Missions



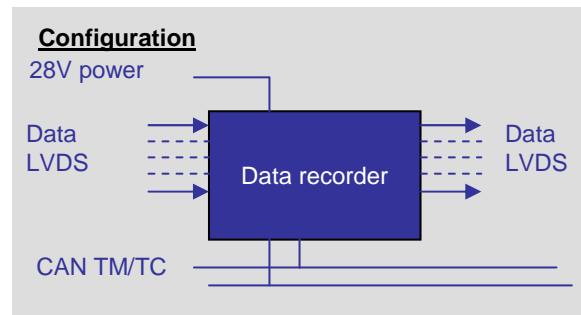
High Speed Solid State Data Recorder and payload data processor

Features

- Flight heritage
- Manufactured to ECSS standards
- Modular 16 GBytes storage capacity
- Data I/O Processing Capability >5Gbps
- 7.5 year design life

Interfaces

- LVDS data interfaces up to 150 Mbps
- SerDes data interfaces up to 1Gbps
- Pulse-per-second synchronisation inputs
- Dual redundant CAN TM/TC interface



Key Specifications

- 1kg
- 5 W standby – 15 W peak
- 320 x 170 x 55mm (Half Micro-Tray)

Options

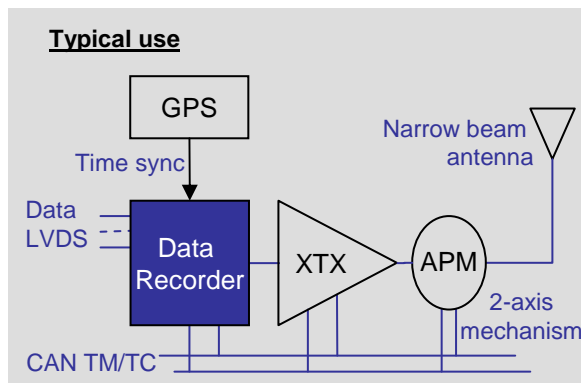
- Complete Payload Downlink Solution
- X-band downlink & tracking antenna
- GPS receiver supporting timing and synchronisation

Heritage (launch date)

- Deimos-1 (2008)
- UK-DMC2 (2008)
- NigeriaSat-2 (2009)
- Baselined for Future Missions

SSTL Associated Products

- X-Band Transmitter 10 – 300 Mbps
- Antenna Pointing Mechanism with X-band Horn

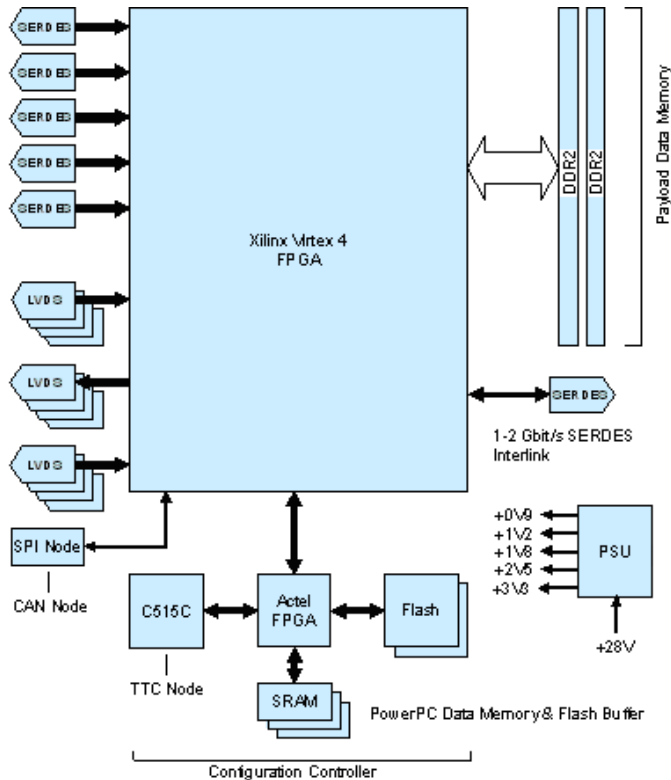


Space Downlink Solution

High Speed Data Recorder

16 GBytes Storage

The High Speed Solid State Data Recorder supports high speed data return for Earth Observation and Space Science missions.



SSTL is ISO9000:2000 certified

- Manufacture and rework to
 - ECSS Q-70-80A
 - ESA PSS-01-738
 - ECSS Q-70-28A
 - Test to SSTL ISO9000:2000

Standard Delivery Service Includes

- Compliance Testing
- Vibration Test
- Thermal Cycling
- User Manual
- Test Results
- Export License and Shipping
- Thermal Vacuum Testing available
- Unit can be supplied prior to environmental testing

Storage Capacity	16 GBytes
Data Input/Outputs	- 20 LVDS 150Mbps inputs - 5 SerDes 1Gbps inputs - 10 LVDS 150Mbps outputs
Mass	1kg
Dimensions	320 x 170 x 55mm (Half Micro-Tray)
Power	15 to 50V, 5 W Standby, 15 W Peak
Operating Temperature	-20 to +50°C operating -30 to +60°C non-operating
Random Vibration	15 G _{rms} in all axes
Radiation Tolerance	10kRad (Si)

Surrey Satellite Technology Limited

SSTL has launched over 30 satellites gaining almost 200 years in-orbit experience. SSTL draws on its world-class expertise in both small satellite platform technology and high and medium resolution optical instruments. SSTL provides complete turn-key system solutions; spacecraft, ground station, launch, operations and image processing.

SSTL is unique in the space industry; able to design, manufacture and integrate multiple satellites in-house.

Changing the economics of space
www.sstl.co.uk