Solid State Recorder (SSR)

SAC has designed and developed a Solid State Recorder (SSR) based on non-volatile flash memory for applications requiring high speed large volume data recording. Industry standard NAND Flash has been used to take advantage of their ever increasing density and cost reduction as technology advances. These SSRs make ideal data capture media for airborne imaging sensors as well as other applications requiring high data ingest rate real-time capacity including ground testing and archival of data. The architecture has been specially optimized for imaging sensor applications and mass, volume and power parameters. Various input connectivity options allow these recorders to be readily applied with most data heavy sources.

Technical Specifications

Parameter	Specifications
Sustained Input Data Rate	1.0 Giga Baud
Storage Capacity	4 Tb
Temperature Range	-20°C to +75°C
Storage Medium	NAND Flash
Mass	< 0.75 Kg
Power	< 8 Watts
Data Retrieval	USB 2.0
Input Interface	SERDES / LVDS Serial / LVDS Parallel / RS422 serial and RS232 serial
Operational Voltage	5-12 Volts (non-isolated) 9-36/18-72 Volts (Isolated)
Package Size	220 mm x 50 mm x 25 mm
Operator Interface	Custom Utility (Windows)

Features

- Real-time recording
- ONFI Flash device based storage
- Scalable and Flexible Design
- Optimized for mass and power
- Host-based file management

Applications

- Imaging Data Recording
- High Speed Sensor Data Acquisition
- Airborne Applications
- Ground Testing and Data Archival