

# Flight Software Overview

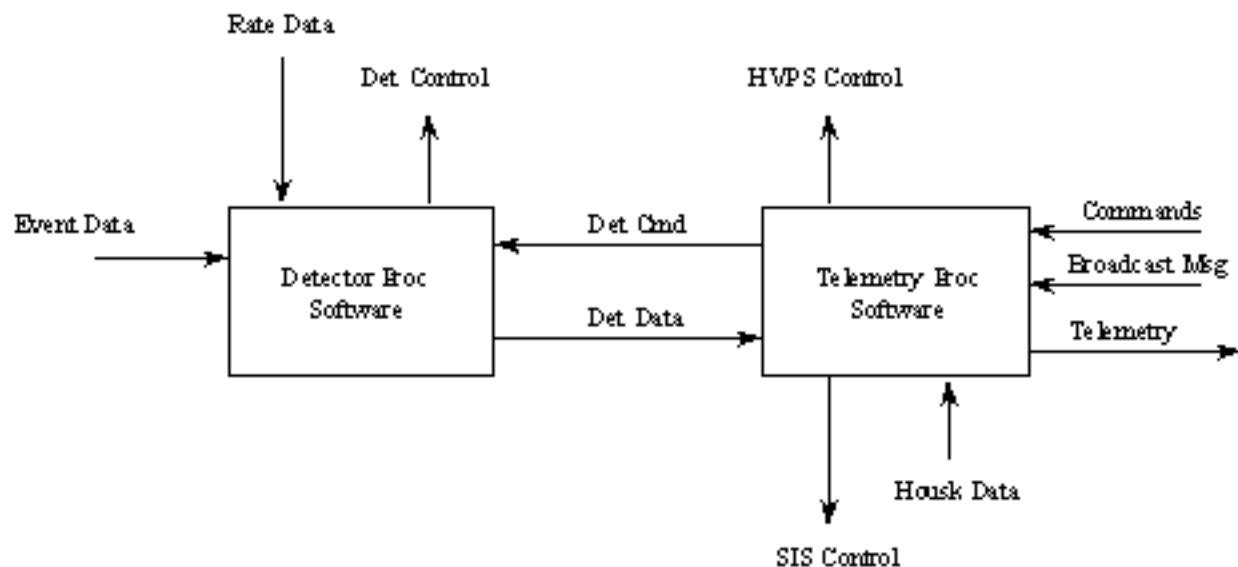
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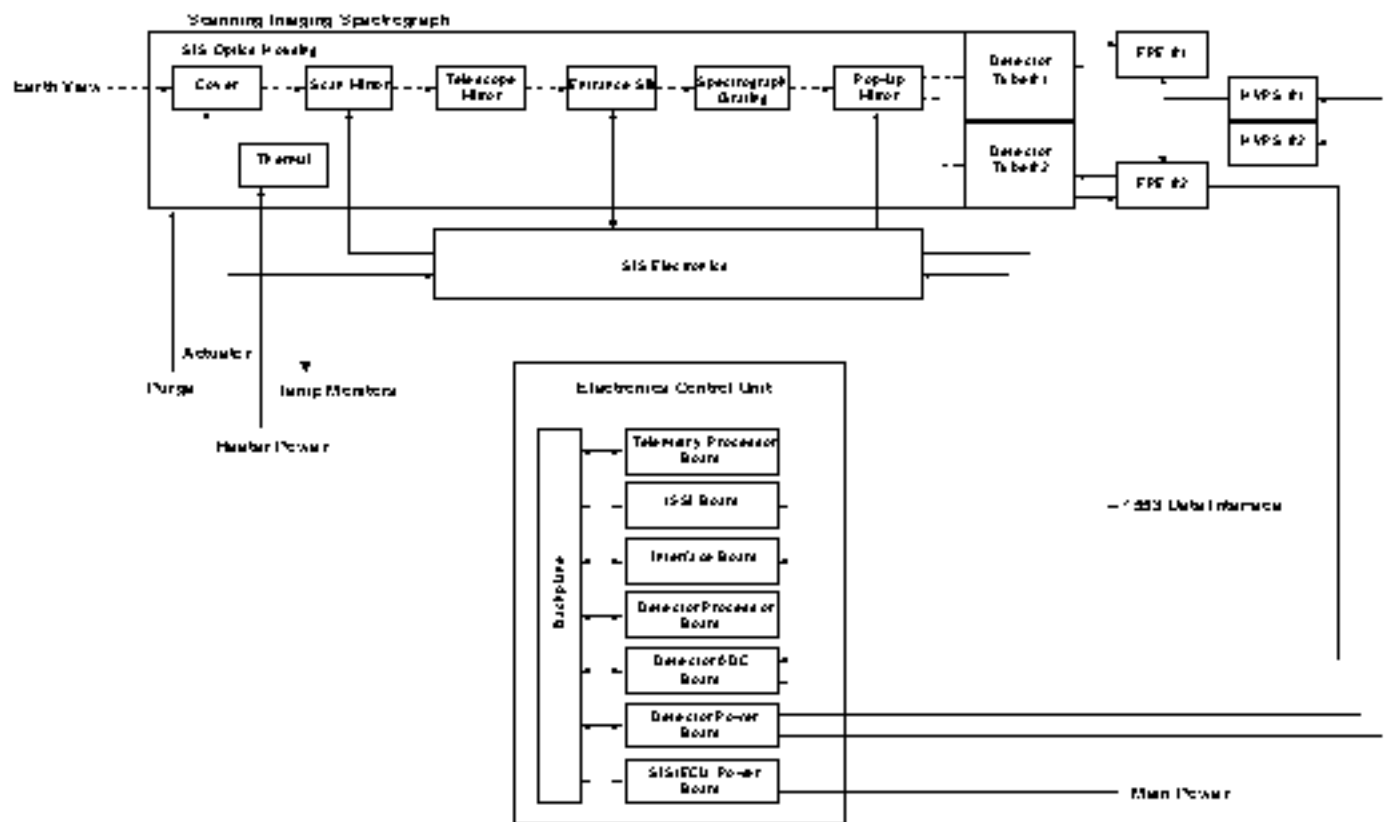
# Flight Software Components

- Telemetry Processor Software
  - Provides instrument control and telemetry functions
  - Controls spectrograph and detector subsystems
  - Collects and formats instrument data
  - Executes commands
- Detector Processor Software
  - Processes detector photon events
  - Computes event position
  - Bins events into focal plane image

# GUVI Flight Software



## GUVI Functional Block Diagram



# Flight Software Development

- PDR May 1997
- Detailed Design/Prototype Test May-Oct 1997
- CDR Nov 1997
- Final Implementation/Test Dec 1997-April 1998
- Code Walkthrough May 1998
- Configuration Control May 1998
- Burn PROMs June 1998
- SW Acceptance Test August 1998

# Test Plan

- Component Testing
  - Informal, by software lead engineers
  - Testing performed on prototype hardware
- ECU Integration Test
  - Test flight software after ECU flight hardware integration complete
  - Use GSE simulators to vary inputs
- Acceptance Test
  - Test flight software after flight instrument integration complete