



Wavelet Compression Board

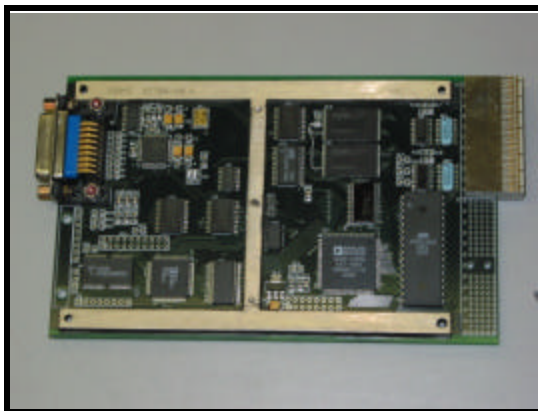
General Description _____

The ED36313 provides video data capture, compression, and output formatting for NTSC or PAL cameras. An internal 8-channel video switch selects one of eight composite video data streams to route to a video A/D converter and then a wavelet compression chip. A DSP chip manages the compressor and formats its output for storage to on-board flash memory and downlink.

Both video data and image snapshots can be saved for later retrieval. The imagery data product can be packaged in a native format or according to CCSDS standards, and output on either a synchronous or asynchronous serial data port.

Applications _____

- Video Capture
- Snapshot Image Capture
- Spacecraft Systems
- Launch Systems
- Other Remote Platforms
- Test and Lab Facilities



Features _____

- 8 Camera Inputs
- NTSC or PAL Composite Video Inputs
- Wavelet Compression to Avoid Temporal (frame-to-frame) Compression Artifacts
- 1 to 2 Mb/s Output Data Rate (typical)
- 2 Gb of Non-Volatile Image Data Storage
- Conduction Cooled Design
- Low Power: Less than 3 W (typical)
- Compact 3U Form Factor (cPCI compliant)

Options _____

- Serial Data Protocols:
 - Asynchronous Serial (UART)
 - Synch Serial (CLK/DATA)
 - Native Wavelet Format
 - CCSDS
- Data Timestamping
 - Metadata Time Tags
- Front-Panel Inputs

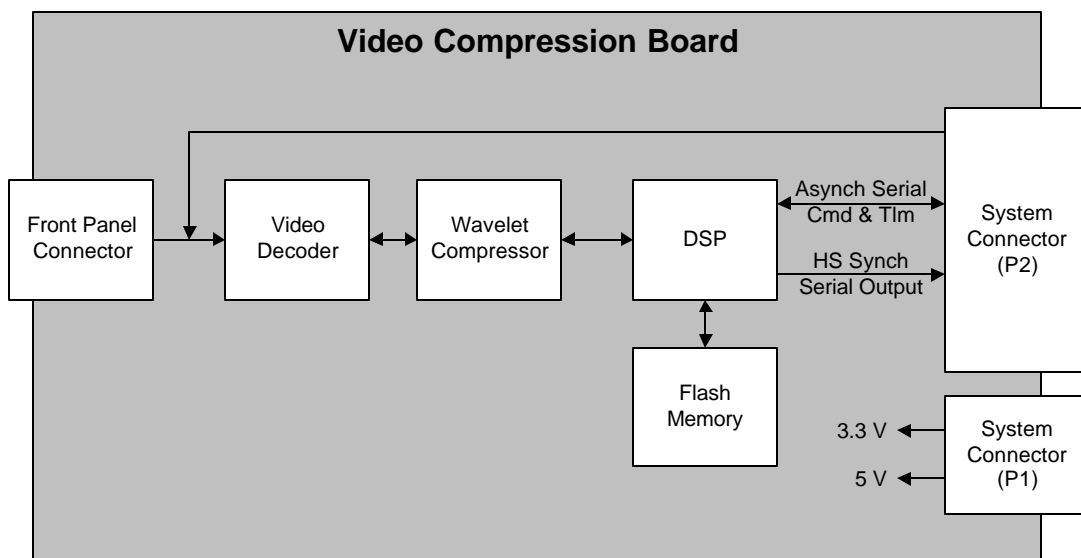
Ordering Information _____

ED363131-1	Video Snapshots over Synchronous Serial (native wavelet format)
ED363131-2	Video Snapshots over Asynchronous Serial (native wavelet format)
ED363131-3	Real-Time Video Compression and Data Return (native wavelet format)
ED363132-1	Video Snapshots over Synchronous Serial (native wavelet format) - with Flash
ED363132-2	Video Snapshots over Asynchronous Serial (native wavelet format) - with Flash
ED363132-3	Real-Time Video Compression and Data Return (native wavelet format) - with Flash

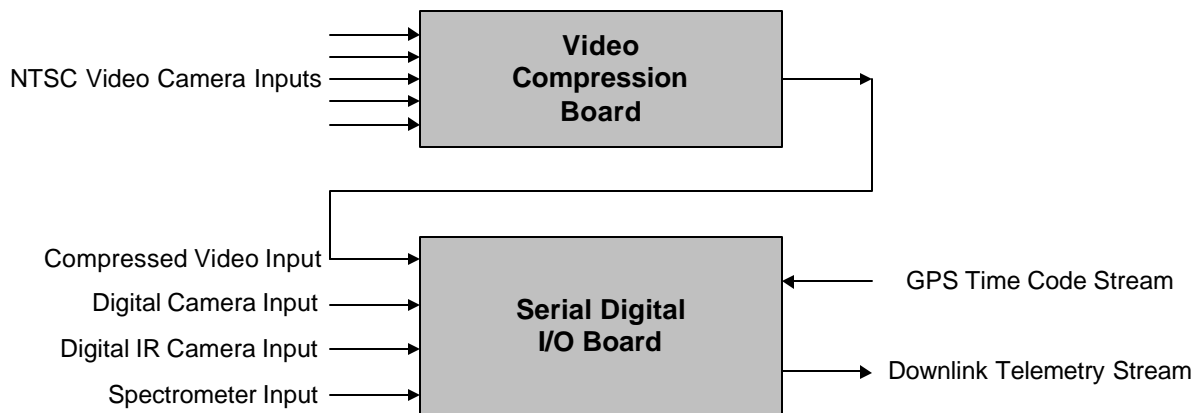
Specifications

Form Factor	3U cPCI
Power	< 3 W
Mass	< 170 g
Operating Temperature	-40 °C to +75 °C
Supply Voltage	3.3 V and 5.0 V
Cameras Supported	8
Maximum Serial Data Rate	4 Mbps
Camera Formats	NTSC or PAL
Video Format	Composite Video (1 Vpp)

Block Diagram



Application Example



For additional information please contact:
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