APOGEE LABS

2180 HVAI1

H.264 Video Encoder / Decoder

FEATURES

- H.264 Video Format
- Minimal latency
- Selectable encode or decode option
- Channel bit rate from 200 Kb/s To 8 Mb/s
- AAC Audio encoding / decoding
- Configurable video frame rate and bit rate

OVERVIEW

The 2180 HVA1 was designed using state of the art DSP technology to encode and decode NTSC/PAL video using the latest H.264 codec. The 2180 also encodes and decodes Audio using an AAC codec.

When setup as an encoder the 2180 module compresses video and audio data into packets that are transported at a user selectable bit rate. Integrated into an AL4300 series Multiplexer, the compressed data is multiplexed with packetized data from other input modules and transported to an AL4300 series Demultiplexer. The Demultiplexer can contain multiple 2180 modules setup as decoders to output decompressed video and audio streams. Also available as a decoding option is the 2319 ETHIO5 module which can decommutate the packetized data stream into a multicast RTSP Ethernet stream for display on remote PCs.

SPECIFICATIONS

DATA INPUT / OUTPUT
- Composite video—75Ω BNC connector
- BNC audio jack— 600Ω

ENCODER / DECODER
- H.264 video standard
- Less than 100ms end to end latency
- NTSC / PAL Composite
- AAC audio standard

VERTICAL RESOLUTION
- 480 / 240 lines per NTSC frame
- 576 / 288 lines per PAL frame

HORIZONTAL RESOLUTION
- 720 / 360 pixels per line for both NTSC or PAL

CHANNEL ID
- 11-bits 0x000 to 0x7F0

COMPLIMENTARY HARDWARE
- 2319 ETHIO5

ENCODE TO DECODE LATENCY
- Video Bit Rate 2 Mb = 96ms latency
- Video Bit Rate 4 Mb = 96ms latency
- Video Bit Rate 6 Mb = 135ms latency
- Video Bit Rate 8 Mb = 109ms latency