



## STANDARD FEATURES

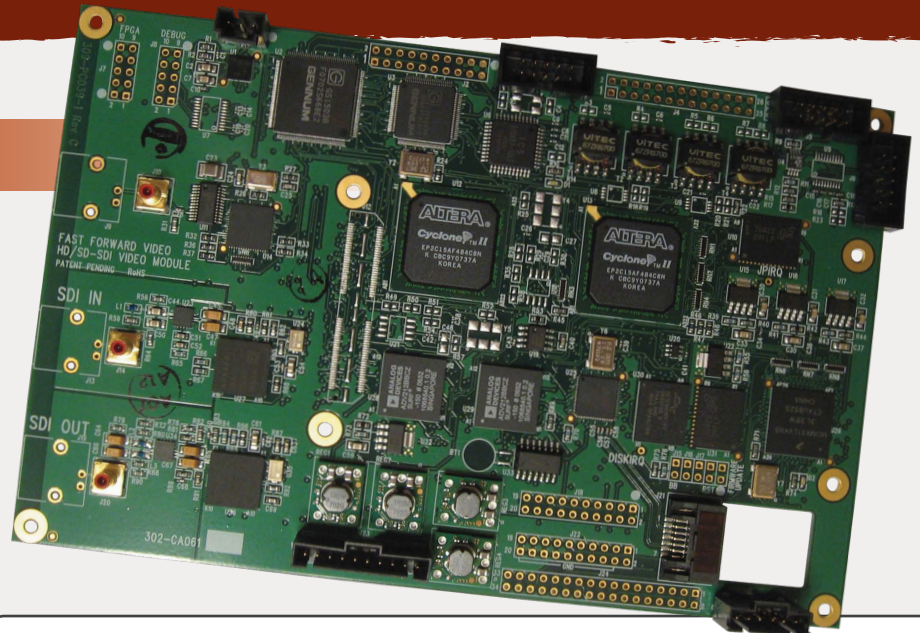
- JPEG 2000 compression
- Records in HD or SD
- Data rates up to 100 Mbit/s per channel
- 8 embedded audio channels per HD video channel
- 4 embedded audio channels per SD video channel
- Up to 4 channels AES audio per video channel
- 10 bit quantization
- 4:2:2 sampling
- RS-422 Machine Control
- SMPTE/EBU longitudinal time code
- Loop record/play feature
- Instant cueing, clip recall

## APPLICATIONS

- OEM
- In Vehicle
- Remote / Portable
- Airborne

## MARKETS

- Military / Intelligence
- Broadcast / Film
- Law Enforcement
- Medical
- Surveillance



The Q HD is a board level high definition digital video recorder based on JPEG 2000 compression. With its broadcast level image quality and near lossless JPEG 2000 compression, it is ideal for high definition recording applications that demand only the very best image quality including: high end surveillance, law enforcement, military and medical.

Q HD is designed with the same cutting-edge digital video recorder technology used in the Omega HD. It provides outstanding image quality at 1080i and 720p, records at data rates up to 100Mbit/s, offers 4:2:2 sampling and a full 10 bit quantization.

With HD-SDI I/O capabilities the Q HD also features RS-422 control using Sony Odetics and FFV serial protocol and an extensive menu of control and configuration options. Q HD is versatile enough to satisfy a variety of demanding DVR applications.

FV:03/20/09Q

**Fast Forward Video**

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**A DVR Technology Company**



# Specifications

## VIDEO INPUT/OUTPUT

Digital Input/Output: SD/HD-SDI  
 Standards: SMPTE 274M (1080i)  
 SMPTE 296M (720p)  
 SMPTE 347M (NTSC & PAL)  
 SMPTE 334M-1 (closed caption)  
 SMPTE 334M-2 (closed caption)  
 SMPTE RP188 (ancillary time code)

Supported Resolutions: 1080i/60/59.94/50/24 pfs  
 (1920 x 1080/60/59.94/50/2:1 Interlace)  
 1080s/23.98/24.00  
 720p/60/59.94/50  
 (1280 x 720/60/59.94/50/Progressive)  
 720p/23.98/24.00  
 NTSC (720 x 486/59.94/2:1 Interlace)  
 PAL (720 x 576/50/2:1 Interlace)  
 Supports 4:3 or 16:9 aspect ratio

Connections: 75 ohm coaxial SMB

## AUDIO INPUT/OUTPUT

Digital Input/Output: 8 Channels embedded HD-SDI  
 4 Channels embedded SD-SDI

## AUDIO SPECIFICATIONS

Resolution: 24 bits  
 Audio Channels: HD embedded 8 in/ 8 out  
 SD embedded 4 in/ 4 out  
 4 channels AES/EBU optional;  
 these replace embedded channels  
 Sampling Rate: 48 KHz

## DISK CONTROLLER

Protocol: SATA I/II  
 Maximum Data Rate: 60 Mbit/s single drive  
 Maximum Hard Drives: 1 SATA converter  
 Preferred SATA HDD Drive: Hitachi Cinema Star 2.5" - C5K320 (120GB)  
 Acceptable SATA HDD Drive: Hitachi Enhanced 2.5" - 0A55263 (120,250,320GB)  
 SSD Drive: Super Talent and RiData  
 Record Time: 1 minute per GB

## TIME CODE

SMPTE/EBU Longitudinal (LTC)

## VIDEO COMPRESSION

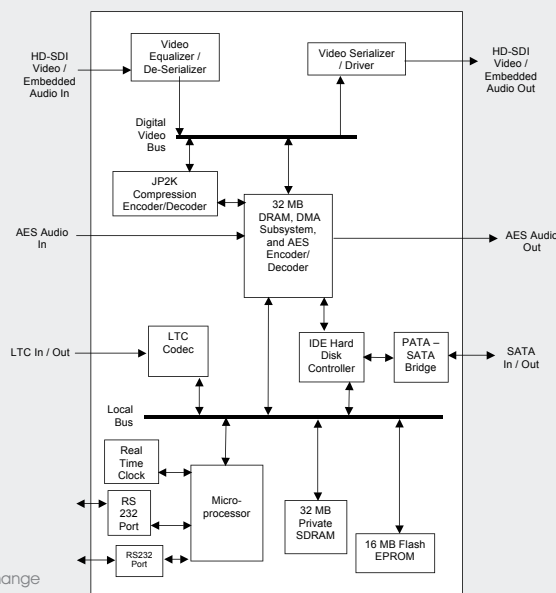
Method: Motion JPEG2000  
 Bit Rate: HD:100Mbit/s  
 SD: 50Mbit/s

## GENERAL

Physical Dimensions: 0.75"H x 4.5" W x 7" D  
 Power Consumption: 10 Watts not including hard disk  
 Operating Temperature: 0c to 50c  
 Humidity: 90% relative humidity with no visible condensation

## WARRANTY

1 Year



Specifications subject to change



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