The HDCoder-RGB/STANAG is an intelligent high definition video recording solution that accepts analog RGB HD input at up to 1080p60 and encodes it to the H.264 video encoding standard. The CompactPCI-Serial board solution is ideal for demanding applications in Transportation, Military, Communications, mining and Energy industries.

The HDCoder-RGB/STANAG can capture video from a wide range of analog RGB video sources. VGA, RGSB (Sync-on-green) and Stanag3350 sources can all be captured, encoded and then transferred to the host system over the CompactPCI serial bus.

The HDCoder-RGB/STANAG also features optional on-board redundant storage to compliment the host system storage and improve data integrity. This on-board cache acts as a rolling buffer, storing the most recently recorded data. This storage redundancy ensures no mission data is lost even when starved of host CPU attention in heavily loaded system configurations.

The HDCorder-RGB/STANAG is a standard 3U CompactPCI-serial module and supported for Linux and Windows.

Rev A.00- Preliminary Information
Subject to change without notification
HDCorder-RGB/STANAG

CompactPCI-Serial RGB H.264 Video Encoder

Applications

Unmanned vehicles (UAV, ROV)
Mission Recorder
Rugged video recorders for marine, aviation
Situational Awareness
Remote Video Surveillance
Border Security
Traffic Monitoring and Control
Video Acquisition and Analytics
Solid state multi-channel video and sensor recorders
Ideally suited to the demanding applications, space requirements and environmental conditions of Transportation, Military, Mining and Energy Industries

**Features**

1x Analog RGB input up to 1080p60

Real-time HD H.264 encode at 1080p60

Capture from RGB, RGB (Sync on Green), Stanag3350 source

Low Power operation

Optional on-board redundant storage (up to 16GBytes)

Standard 3U CompactPCI-Serial mechanical form factor

Advanced Micro Peripherals Ltd
Cambridge, CB6 2HY, England
Tel (+44) 1353 659500
Fax (+44) 1353 659600
sales@ampltd.com
http://www.ampltd.com

Advanced Micro Peripherals Inc
New York, NY10016, USA
Tel (+1) 212 951 7205
Fax (+1) 212 951 7206
sales@amp-usa.com
http://www.amp-usa.com
**Video Input ports**
- 2x High definition Analog video input ports
- Analog HD from: RGsB (Sync on Green), Stanag3350, VGA (separate Hsync, Vsync)

**Video Capture resolutions**
- Standard resolutions supported include: 1080p, 1080i, 720p, 720i, VGA, SVGA, XGA, SXGA,

**H.264 Video Encoding**
- ITU-T H.264 (ISO/IEC 14496-10), supported profiles:
  - Baseline profile,
  - Main profile (I, P frame coding only)
  - High profile (I, P frame coding only) at level 4.1
- Up to 1080p60 encode
- CAVLC and CABAC coding
- Supports Variable Bit Rate (VBR)
- Supports Constant Bit Rate (CBR)

**JPEG Encoder**
- JPEG (ISO/IEC 10918-1)
- Baseline JPEG with JFIF support

**Additional Features**
- On-board redundant storage (option)

**Mechanical**
- Standard 3U CompactPCI-Serial form factor.
- Operating temp 0˚C to 60˚C
- Operating temp -40˚C to +85˚C (extended temp option)

**Ordering Information**
- HDCORDER-RGB
  - H.264 HD Video Encoder (0 to 60˚C)
- HDCORDER-RGB-EXT
  - H.264 HD Video Encoder (-40˚C to +85˚C)

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**HDCorder-RGB/STANAG Functional Diagram**