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## Immediate Release

August 16, 2011

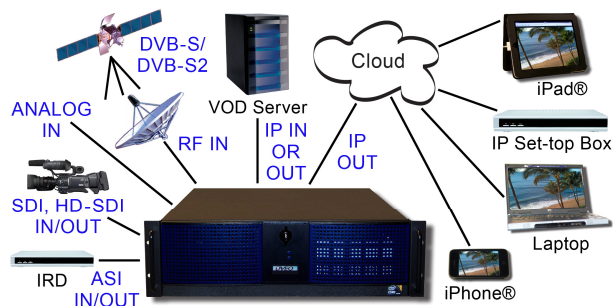
IBC Stand 2.A48

### **DVEO to Showcase Multiformat, Multichannel MPEG-2 to H.264 Adaptive Bitrate Streaming Transcoder at IBC 2011, Stand 2.A48**

#### **MPEG Gearbox™ Streams Concurrent Multiresolution IP Streams with Multiple Wrappers, Containers, and Multiple Protocols**

**San Diego, California** -- DVEO, the broadcast division of Computer Modules, Inc. (CMI), will introduce the latest version of their real time adaptive bitrate streaming transcoder, streamer and integrated RF receiver in Amsterdam at the International Broadcasting Convention (IBC), September 9-13, at Stand 2.A48.

Now shipping, the multi-tasking MPEG Gearbox™ MF is an MPEG-2 to H.264, or H.264 to MPEG-2, transcoder or transcaler. The Intel® 6 core processor based system features multiprotocol, multiresolution, and multiwrapper support including RTMP, RTSP, and HTTP5.



**Adaptive Bitrate Streaming Transcoder  
with RTMP, RTSP, or HTTP Output –  
MPEG Gearbox™ MF**

The system receives simultaneous satellite, IP, SDI, HD-SDI, and terrestrial RF signals, transcodes them to H.264, and streams them to any number of IP devices -- including standard IP capable set-top boxes, streaming video, TV's, smart phones, iPads, or software clients such as VLC or MPlayer.

The newest version of the MPEG Gearbox MF features a wide variety of IP output protocols. The MPEG Gearbox MF streams multiple channels using UDP, RTP, RTSP, HTTP, HTTP Live, HTTP Smooth, HTTP Dynamic, FTP, RTMP (Open Flash), or Windows® Media Video 9 with HTTP/ASF.

DVEO has added SDI and HD-SDI output, plus five new input formats: SDI, HD-SDI, VC-1, QAM, and analog. Other new features include support for M3u8 playlist files, qHD and H.264up resolution, and high quality Ogg Vorbis audio.

The MPEG Gearbox MF can output to HD-SDI, SDI, IP, and/or ASI, at the same time. The inputs can be simultaneous choices from HD-SDI, SDI, DVB-S/S2, 8VSB, QAM, DVB-C, DVB-T, DVB-ASI, Analog, or GigE and IP (H.264, MPEG-2, or VC-1).

“Our customers use the MPEG Gearbox MF for cable broadcasting, telco TV, IPTV, A/V systems, or for university or entertainment (cruise line and in-flight) systems,” stated Scott Grizzle, Product Manager for DVEO. “It delivers full adaptive bit rate streams with a smaller footprint, lower power consumption, and lower cooling requirements than most of our competitors’ products. We make it easier and less expensive for content providers to connect with the major content delivery networks to deliver the high quality video streams that end users expect.”

Typical dedicated transcodes are up to three 1080i HD streams, four to six 720p HD streams, or 10 to 15 SD streams from MPEG-2 to H.264 (CPU dependent), or vice-versa. The system can also mix and match MPEG-2 and H.264 streams.

A real time store and forward (time delay) option for up to 80 streams is available. The MPEG Gearbox MF features a web-based GUI with SNMP support. It is tested to work with Wowza®, Adobe® Flash® and RealNetworks® servers.

Supported resolutions include qHD, H.264up, SQVGA, QCIF, QVGA, SIF, VGA, or any custom size up to 1080i. Audio support is AAC, Ogg Vorbis, or embedded passthrough.

### Supplemental Information for Press Release

#### **Features**

- Supports HTTP adaptive Smooth, Live, and Dynamic Flash streaming protocol for output to mobile devices
- Capable of near real time FTP output of segmented TS streams with I-Frame boundaries
- Input: Simultaneous choices from HD-SDI, SDI, DVB-S, DVB-S2, 8VSB, QAM (digital or analog), DVB-C, DVB-T, DVB-ASI, Analog, or GigE and IP (H.264, MPEG-2, or VC-1)
- **Output: Simultaneous HD-SDI, SDI, IP, or ASI**
- **IP output protocols: UDP, RTP, RTSP, HTTP, HTTP Live, HTTP Smooth, HTTP Dynamic, FTP, RTMP (Open Flash), WMV9 with HTTP/ASF**
- Supports M3u8 playlist files (standalone and through HTTP live)
- Will work as a PAL to NTSC converter
- Transcoding bit rates: 64 Kbps to 50 Mbps
- Resolutions: qHD, H.264up, SQVGA, QCIF, QVGA, SIF, VGA, or any custom size up to 1080i
- Simultaneous demodulation, transcoding, encapsulation, and optional time delay
- Transcodes 4 to 6 720p HD streams, up to 3 1080i HD streams, or 15 SD streams from MPEG-2 to H.264 (CPU dependent) or vice-versa
- SNMP support
- Tested to work with Wowza®, Adobe® Flash®, and RealNetworks® Helix® servers
- Tested to work with Akamai, Limelight, Edgecast, etc. CDN's
- Tested compatible with major brands of IP devices including Amino™, Roku®, Atlanta DTH, and Apple iPad® and iPhone®
- Tested compatible with major brands of H.264 decoders
- Audio support: AAC, Ogg Vorbis, or Dolby Digital® AC-3 passthrough
- Settings are remembered when power cycled
- Based on embedded Linux® (via flashdisk)

**Note:** This system is typically deployed in "closed" systems where bandwidth is dedicated and is used for this purpose only. It is not guaranteed to work over the public internet. Performance depends on available bandwidth.

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#### **Suggested Retail Prices:**

MPEG Gearbox MF: \$9,995 U.S.

MPEG Gearbox MF/S+F – with store and forward (time delay) option: \$14,995 U.S.

MPEG Gearbox MF/ES – with encrypted streams option: \$14,995 U.S.

**About CMI and DVEO**

CMI, founded in 1982, is a privately held company headquartered in San Diego, California. DVEO, the Broadcast Division of Computer Modules, Inc., sells digital video and high definition television (HDTV) products to the top television broadcast companies throughout the world.

For more information on CMI and DVEO, please contact Rebecca Gray at +1 (858) 613-1818 or [rebecca@dveo.com](mailto:rebecca@dveo.com). To download DVEO's press releases and product images, visit the news section at <http://www.dveo.com/>.

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