

Product Brief

Zoran Corporation  
1390 Kifer Road  
Sunnyvale, CA 94086-5305

Tel 408.523.6500  
Fax 408.523.6501  
www.zoran.com



Description

Zoran's CVE3 NTSC/PAL/SECAM Video Encoder is a silicon-efficient, high-quality Intellectual Property Core for video IC designs requiring the TV output function. The CVE3 encodes YCrCb, 4:2:2 digital video into all NTSC, PAL, or SECAM TV standards. The CVE3 supports vertical blanking interval (VBI) encoding, including closed caption, teletext, WSS and CGMS-A encoding. CVE3 also includes support for Macrovision 7.1.L1, the copy protection scheme used in DVD players and set-top boxes. Six separate output busses for Y, Composite, Chroma, and RGB provide for flexibility in connection and multiplexing to DACs.

Proven in silicon and shipping in the millions, the CVE3 video encoder greatly reduces the risk and time involved when integrating the video encoding function into an IC. Zoran's video encoder technology is incorporated into its own Vaddis DVD playback and COACH digital camera ICs.

VIP-II Demonstration System

The VIP-II is an FPGA demonstration system for Zoran's IP Core products. The VIP-II accepts composite video, S-video and component video inputs and with its user friendly GUI enables customers to thoroughly evaluate the performance of Zoran's IP Core products.

Features

- Encodes 4:2:2 YCrCb into all variations of NTSC, PAL or SECAM TV standards
- Simultaneous output of composite video, S-video and component video supported
- Dual chroma paths for optimal output of both composite video and S-Video component video
- CCIR 601, 604 and 656 and SMTPE 253 standards supported
- Macrovision 7.1.L1 copy protection
- 33-tap luma filter
- Programmable Notch Filter
- Outputs 10-bit data to DACs
- Vertical Blanking Interval (VBI) encoding support including closed caption, teletext, WSS & CGMS Encoding
- Fully synchronous design
- Process technology independent "softcore"

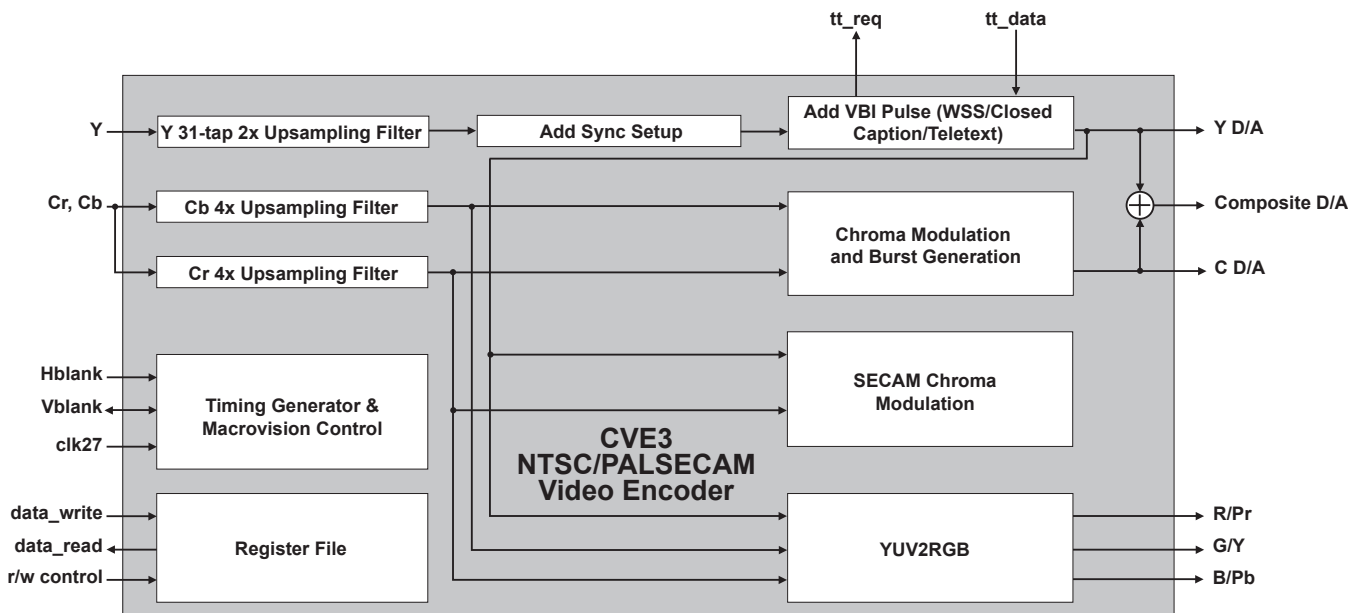
Integrated Circuit Applications

- PC video
- Digital camera processors
- PC graphics
- Set top box decoders
- Gaming systems
- Any system requiring TV output

Deliverables

- Compilable Verilog source code
- Bit accurate, cycle accurate C model
- Synopsis synthesis scripts
- Test input files
- Documentation
- VIP-II FPGA demonstration system available

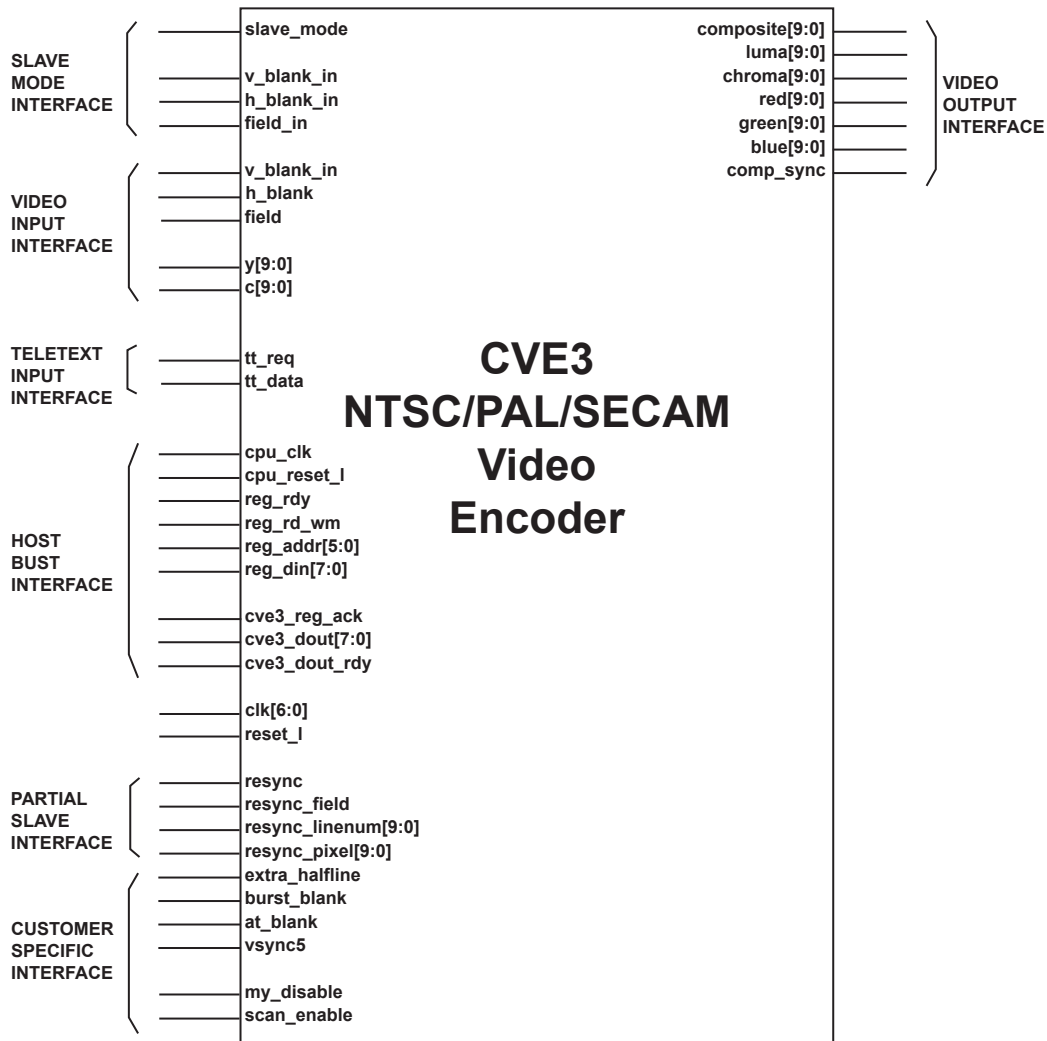
Figure 1. CVE3 Video Encoder Block Diagram



**NTSC/PAL/SECAM Video Encoder**

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**Figure 2. CVE3 Video Encoder Pinout Diagram**



**For more information, contact Zoran's Sunnyvale office or the office nearest you:**

Canada	China	Hong Kong	Israel	Japan	Korea	Taiwan
Zoran Toronto Lab	Zoran China Office	Zoran Asia Pacific Ltd.	Zoran Microelectronics Ltd.	Zoran Japan Office	Zoran Korea Office	Zoran Taiwan Office
Tel: (416) 690-3356	Tel: 86-755-83993777	Tel: +852-2-620-5838	Tel: +972-4-8545-777	Tel: +81-03-5475-1051	Tel: +82-2-761-7471	Tel: +886-2-2659-9797
Fax: (416) 690-3363	Fax: 86-755-83220889	Fax: +852-2-620-5238	Fax: +972-4-8551-551	Fax: +81-03-5475-1053	Fax: +82-2-761-7472	Fax: +886-2-2659-9595