

CVE3 NTSC/PAL/SECAM Video Encoder

Product Brief

Zoran Corporation
3112 Scott Boulevard
Santa Clara, CA 95054-3317

Tel 408.919.4111
Fax 408.919.4122
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"

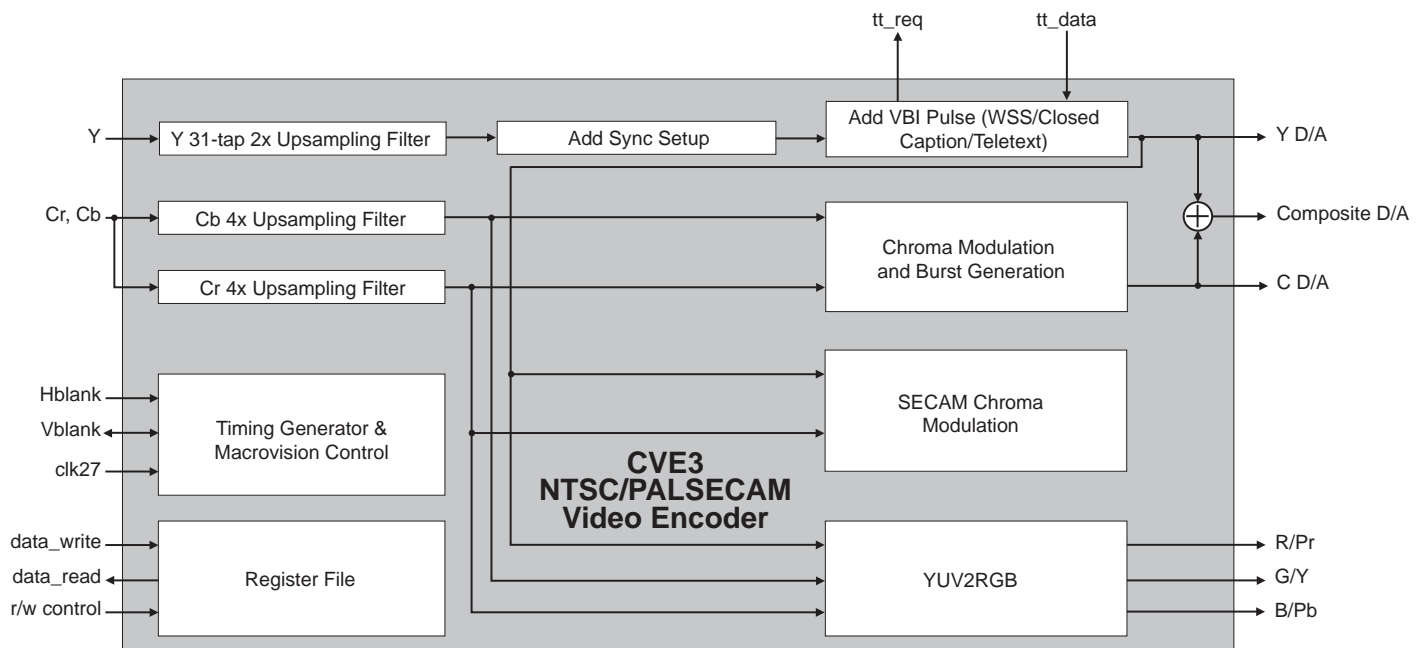
Integrated Circuit Applications

- 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

CVE3 Video Encoder Block Diagram

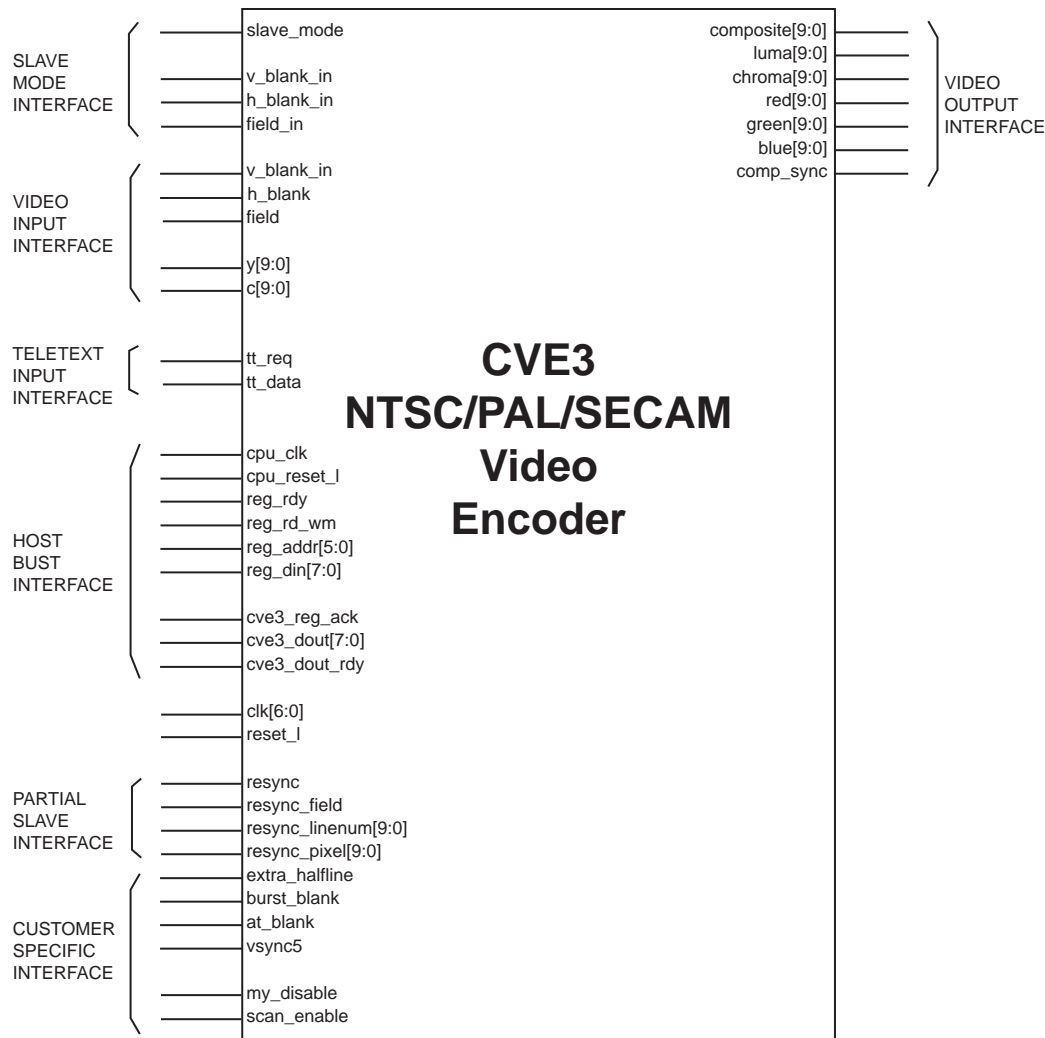


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CVE3 Video Encoder Pinout Diagram



For more information, contact Zoran's Santa Clara office or the office nearest you:

Canada

Zoran Toronto Lab
2175 Queen St. East,
Suite 302
Toronto, Ontario
M4E 1E5 Canada
Tel: (416) 690-3356
Fax: (416) 690-3363

China

Zoran China Office
Suite 2507
Electronics Science &
Tech Building
2070 Central Shennan Rd.
Shenzhen, Guangdong,
518031 P.R. China
Tel: +86-755-378-0319
Fax: +86-755-378-0852

Hong Kong

Zoran Asia Pacific Ltd.
Unit 504-505
New East Ocean Center
No. 9 Science Museum Road
Kowloon, Hong Kong
Tel: +852-2-620-5838
Fax: +852-2-620-5238

Israel

Zoran Microelectronics Ltd.
Advanced Technology Ctr.
P.O. Box 2495
Haifa, 31024 Israel
Tel: +972-4-8545-777
Fax: +972-4-8551-551

Japan

Zoran Japan Office
2-2-8 Roppongi, Minato-ku
Tokyo 106-0032, Japan
Tel: +81-03-5574-7081
Fax: +81-03-5574-7156

Korea

Zoran Korea Office
505, Dongbuk Building
45-20, Yoido-Dong,
Youngdungpo-ku
Seoul, Korea 150-891
Tel: +82-2-761-7471
Fax: +82-2-761-7472

Taiwan

Zoran Taiwan Office
9F-1, No 26, Lane 513
Reikuang Rd., Neihu 114
Taipei, Taiwan R.O.C.
Tel: +886-2-2659-9797
Fax: +886-2-2659-9595