



Video Subsystem Features

- 10-bit video ADCs
- Global video standards support (NTSC [M, J, 4.43], PAL [B, D, G, H, I, M, N, N-combination], SECAM [K, L])
- Capture resolution up to 768 x 576 (square pixel PAL/SECAM)
- NTSC and PAL adaptive comb filter for 2-D Y/C luminance and chrominance separation
- Multiple YCrCb and RGB pixel formats and YUV planar formats supported on output
- Selectable pixel density: 8, 16, 24, and 32 bits per pixel
- High-quality multi-tap horizontal and vertical image scaler for decoded video or 4:2:2 sources
- Flexible VBI data capture for closed captioning, teletext, and other analog broadcast data types
- Hue, brightness, contrast, and saturation control for video decoder
- Input via four-input multiplexer for four composite source inputs or three composite and an S-Video input
- UltraLock™ technique, enabling the CX2388x to lock onto video signals quickly and accurately, regardless of their source
- Macrovision® Detector, for detection of Macrovision pulses and signals

Audio Subsystem

- Low Intermediate Frequency (IF) sampling direct from tuner
- Global broadcast audio support (NICAM, A2, EIAJ, FM; BTSC-DBX on CX23880 and CX23883 only)

- Decoded 48 kHz audio stream to PCI bus for real-time encoding to MP3
- Integrated 90 dB SNR stereo audio DACs to drive sound card or headphones
- I²S input port for external source connectivity to on-board stereo DACs
- I²S output port to drive coaxial/optical digital audio interface

PCI Subsystem

- Five independent functions, each with target/master and local register space (video, audio, MPEG port, VIP 2.0 host port, GP host port)
- On-chip execution of all RISC/control programs
- On-chip Static Random Access Memory (SRAM) for PCI data buffering up/down
- PCI revision 2.2 compliant

Miscellaneous

- Advanced Configuration and Power Interface (ACPI) and power-down support
- One crystal for all video and audio decoding
- 400 kHz serial bus master
- Compact 176-pin TQFP
- Low-power mode

Feature Comparison Chart

		881	883	882	880
Conexant PCI Decoder	4-Input CVBS ADC	X	X	X	X
Standard Features	Chroma ADC (S-Video)	X	X	X	X
	NTSC/PAL/SECAM	X	X	X	X
	Multiple YCrCb and RGB Formats	X	X	X	X
	Notch and CombY/C Separation	X	X	X	X
	Serial MPEG Port	X	X	X	X
	I ² S Input Port	X	X	X	X
	24-Bit GPIO	X	X	X	X
	Direct Memory Access (DMA) Channels	X	X	X	X
	Windows Hardware Quality Lab (WHQL)	X	X	X	X
CX2388x Family	10-Bit Video ADCs	X	X	X	X
Standard Features	Multi-Line 2D-Adaptive Comb Filter	X	X	X	X
	High-Speed Parallel MPEG Port	X	X	X	X
	I ² S Output Port	X	X	X	X
	Stereo Line Out DACs	X	X	X	X
	EIAJ/NICAM/A2/FM Stereo Decode	X	X	X	X
CX2388x Family	Signaling Controller (SC) with dBx Stereo Decode		X		X
Specialty Features	ITU-R 656 Output Port			X	X
	ITU-R 656 Input Port			X	X
	Intel/Motorola Host Port (I/O)			X	X
	Video Interface Port (VIP) 2.0 Host Master Port (I/O)				X

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