AL37219 Nine-Channel Video Surveillance Processor

Introduction

The AL37219 is a feature-rich, 9-CH video surveillance processor that provides the foundation for a reliable, flexible, high security surveillance system. A single AL37219 chip can easily support 9 channels of real-time camera video streaming. Features include simultaneous monitor-playback operations, flexible video display modes, bitmapped OSD with dynamic colors, accurate motion detection (16X12 grids) with flexible thresholds and triggers, and replay on all input and playback channels.

Applications

❑ Video Surveillance Multiplexor/Processor

❑ DVR and POS DVR

❑ Video Server

❑ Highway traffic throughput surveillance

❑ Medical inspection/surgery

❑ ATM machine surveillance

❑ Defense surveillance

❑ Recovery room monitors in hospitals

❑ Home stay monitoring

❑ Extended-hours monitoring in biological experimental laboratories

❑ Multiple channel IP cameras

❑ Car rear-vision systems

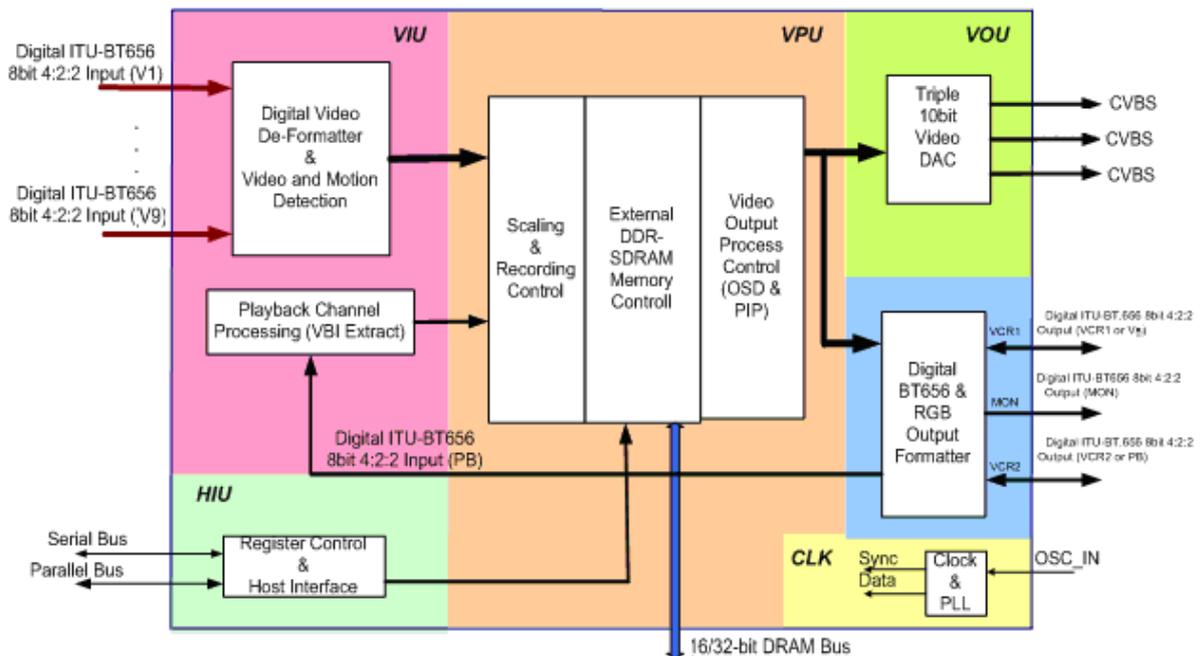❑ High-end TV boxes with channel preview

Features

■ Supports NTSC and PAL standards

■ A single chip supports 9-CH real-time surveillance

■ Supports multi-window display modes of 1,2,4,6,7,8,9,10,13,16 panels

■ Supports PIP/POP display modes

■ Independent linear horizontal/vertical (H/V) scale down factors (1/2, 1/3, 1/4, 2/3, 3/4)

■ Programmable brightness, contrast and saturation

■ Individual channel freeze

■ Replay on individual channels

■ Programmable bitmap type font for embedded OSD display

■ Supports DDR 16/32-bit interfaces up to 8 Gbits of memory

■ Supports motion detection / video loss

■ Motion detection resolution: 16X12 grids

■ Supports channel-switching at front-end TV decoder

■ VBI insertion and extraction

■ Supports external VCR / DMR / DVR signal triggers

■ Three embedded TV encoders with three DACs

Interfaces

- 9 digital ITU-R BT. 656 inputs with another additional input for playback that is shared with the second digital output port.

- 3 independent digital ITU-R BT. 656 output ports.

- 3 independent analog output ports for S-video or Composite signals. The 3 analog outputs can be configured for different combinations of Composite CVBS and S-Video.

- HPI (Host Parallel Interface) and 2-wire serial bus.

- DDR Interface: 16/32-bit up to 8 Gbits memory.

Block Diagram

Ordering Information

Part number	Package	Voltage
AL37219C-LF-PBF	LQFP-256	+1.8/2.5/3.3V

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