CX25822
960H PCI-Express Media Bridge

Multi-Channel Video and Audio to PCIe Bridge

The CX25822 multi-channel media bridge device enables bi-directional digital video and audio transfers to a host PC via a PCIe x1 interface. The CX25822 contains BT.656/VIP2.0 digital video interfaces supporting up to 36 MHz input clock rates and I^2S digital audio interfaces supporting up to 96 kHz sample rates, for uncompressed video and audio data respectively. The CX25822 device is designed for PC-based security Digital Video Recorders (DVRs) supporting 960H applications.

Flexible Architecture

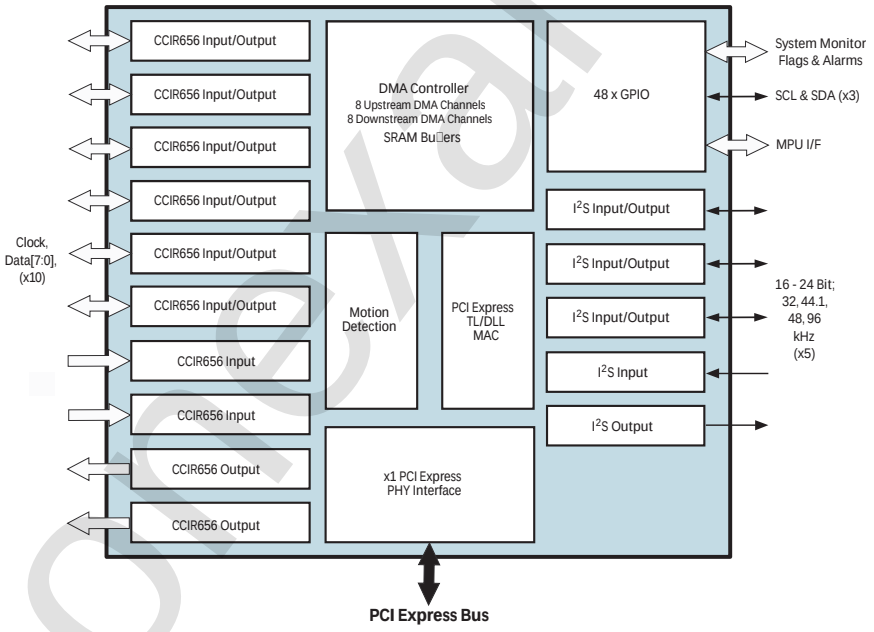
With ten bi-directional video interfaces (maximum of eight in either direction) and five bi-directional audio interfaces (maximum of four in either direction), the CX25822 can bridge multiple streams of BT.656/VIP2.0 video and I^2S audio to/from the PCIe bus.

The video interfaces may be configured to accept video data in a “54 MHz Mode”, which reduces the number of traces routed on the PCB by interleaving 2 data streams on a single digital video port.

The CX25822 contain 48 GPIO pins, which maximize flexibility and allow customization to a variety of applications and designs. The GPIO pins also support I^2C interfaces, interrupts, flags for motion detection, and other features.

Surveillance-Specific Features

The CX25822 contains programmable logic to detect motion on incoming BT.656/VIP2.0 streams. The ability to detect motion on incoming video streams allows the CX25822 to immediately alert the host processor of motion via interrupts over PCIe.



Distinguishing Features

- PCIe 1.1 Compliant
- Bi-directional BT.656 interfaces to PCIe
- Bi-directional I^2S interfaces to PCIe
- Programmable Motion Detection
- Supports “54 MHz Mode” digital video data (2 channel byte-interleaved mode)
- 48 GPIO pins

Applications

- 960H PC-based DVRs

Packages

- 233-pin, 14x14 mm, fpBGA
- 256-pin, 28x28 mm, eLQFP

Part Number CX25822

Description
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