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DESCRIPTION

The SSI 33C3925 device is a CMOS integrated circuit housed in a 128-Lead QFP package options. The device is a member of the Silicon Systems DV25[™] chip set integrating the major portions of the electronics required to build a DVD-ROM drive. Operating at three volts, the SSI 33C3925 capabilities include both CD and DVD data format decoding, buffer management, CLV speed control, error correction, CD-DA audio noise concealment and digital audio interface, DVD-player source decoder port, and ATAPI host interface. Being a member of the Silicon Systems DV25[™] chip set, the SSI 33C3925 is optimized for use with the SSI 33P3725 DVD Channel and SSI 33H3825 Servo Processor. The DV25[™] chip set provides the highest level of integration and performance supporting both DVD-ROM and DVD-player drive implementation.

FEATURES

HOST INTERFACE

- **ATAPI IDE standard support**
- **PIO transfers up to 16.6 Mbits/s**
- **DMA transfers up to 16.6 Mbits/s**
- **Master mode compatible with external interface controllers for 1394 or SCSI**

CHANNEL DECODER

- **Optimized SSI 33P3725 channel interface**
- **EFM and EFM+ decoders**
- **CLV speed control**
- **CD-DA and CD-ROM decoding**
- **Noise concealment and serial interface**
- **CD Yellow Book decode and correction**
- **DVD descrambling and correction**

GENERAL

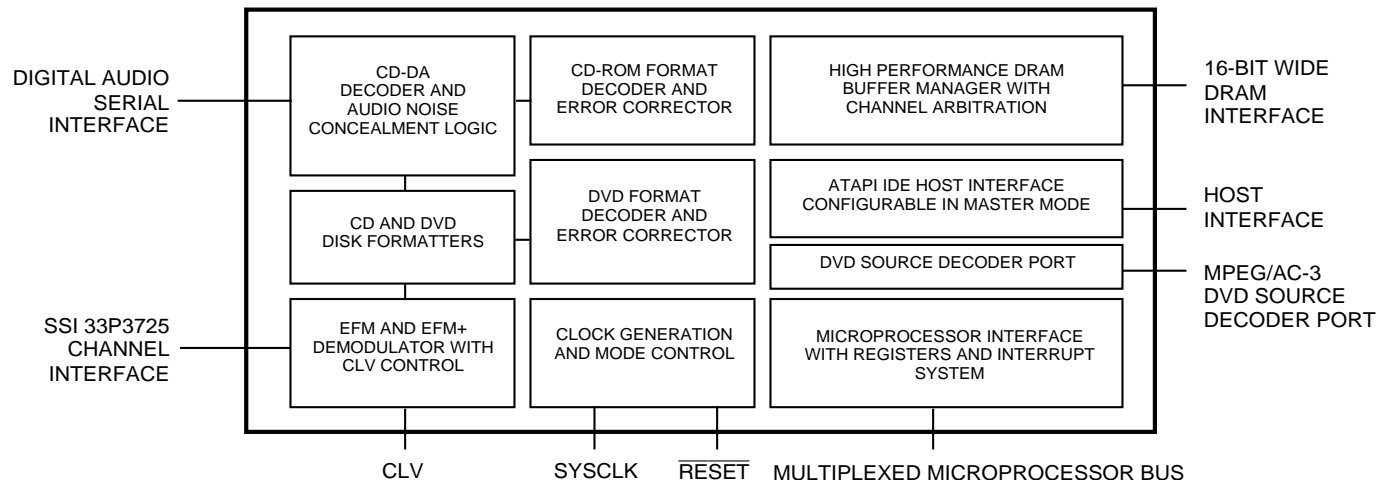
- **16-bit wide DRAM buffer manager**
- **Package options for ROM or player**
- **DVD source decoder interface port**
- **Compatible with 8051 multiplexed bus**
- **DV25[™] chip set member**

SSI 33C3925

DVD-ROM and DVD-Player

Data Path Controller

BLOCK DIAGRAM



Prototype: Indicates a product still in the design cycle, and any specifications are based on design goals only. Do not use for final design.

Silicon Systems reserves the right to make changes in specifications at any time without notice. Accordingly, the reader is cautioned to verify that the data sheet is current before placing orders.

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