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## DESCRIPTION

The SSI 33H3825 device is a CMOS integrated circuit housed in a 100-Lead TQFP package. 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 33H3825 functionality includes both CD and DVD control of focus, tracking, radial positioning, laser, channel mode, CLV and CAV spindle speed. Being a member of the Silicon Systems DV25™ chip set, the SSI 33H3825 is optimized for use with the SSI 33P3725 DVD Channel and SSI 33C3925 Data Path Controller. The DV25™ chip set provides the highest level of integration and performance supporting both DVD-ROM and DVD-player drive implementation.

## FEATURES

### MICROPROCESSOR INTERFACE

- Command interface compatible with all popular microcontrollers
- High level command structure with parameters, results, and status

### CONTROL FUNCTIONS

- High performance embedded DSP
- On chip program and data memory
- 10 bit A/D with analog MUX
- Pulse density motor control outputs
- Programmable input and output pins
- Serial interface optimized for SSI 33P3725 channel modes and data conversion
- CAV and CLV spindle speed control logic
- Jump track counting logic
- Complete servo implementation tunable to different mechanisms

### GENERAL

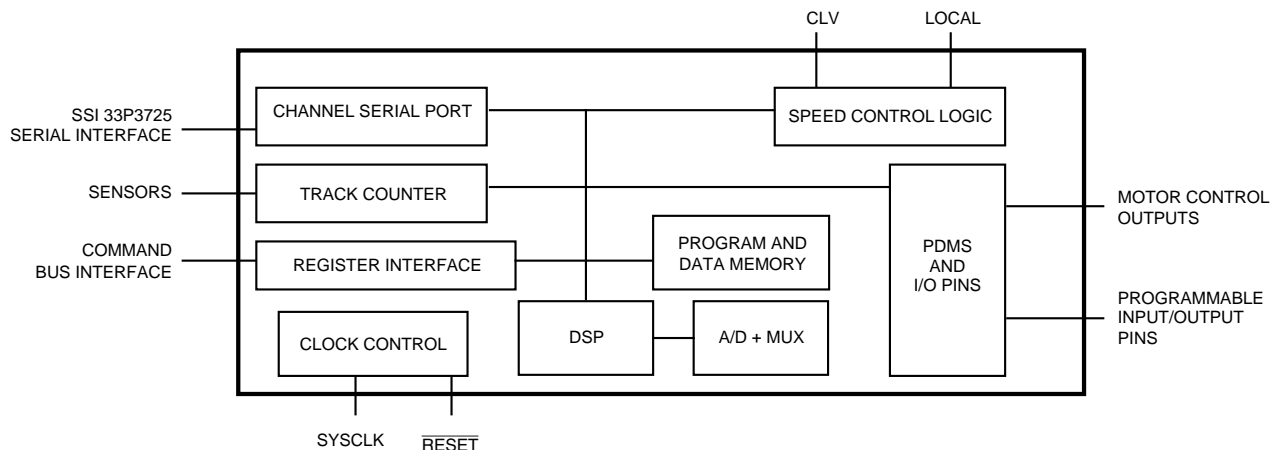
- Service functions including laser power control and IO port control
- On chip frequency synthesizer
- Power management modes
- DV25™ chip set member

# SSI 33P3825

## DVD-ROM and DVD-Player

### Servo DSP Processor

#### 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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