

January 1995

DESCRIPTION

The SSI 34P3205 is a high performance BiCMOS single chip pulse detector IC that contains all the functions needed to implement pulse detection in tape storage applications. Functional blocks include the AGC, pulse detector with dual and hysteresis qualification, and programmable filter with assymetric 0 filtering.

Programmable functions of the SSI 34P3205 device are controlled through a bi-directional serial port and banks of internal registers. This allows zoned recording applications to be supported without changing external component values from zone to zone.

The SSI 34P3205 utilizes an advanced BiCMOS process technology along with advanced circuit design techniques which result in a high performance device with low power consumption. The SSI 34P3205 supports a sleep mode for minimal power dissipation in non-operational periods.

The SSI 34P3205 is available in a 64-Lead TQFP package and is an ideal replacement for the 32P541 and 32F8130/31 chip set, with the additional functionality of the asymmetrical 0 filtering, lower power, and reduced board space.

FEATURES

General

- Bi-directional serial port for register access
- External and register controlled power management (Sleep mode <10 mW)
- Low Operating Power (200 mW typical @ 5V)
- +5V only power supply

AGC

- Automatic Low_Z and Fast Decay modes for rapid AGC recovery
- Dual rate charge pump and low drift AGC hold circuitry

Filter

- Programmable cutoff frequency of 0.2 to 2 MHz
- Programmable boost from 0 to 13 dB
- Assymetric 0 Filtering

Pulse Detector

- Serial Port programmable Dual and Hysteresis Qualifiers with programmable threshold level
- RDO (Raw Data Output) pin

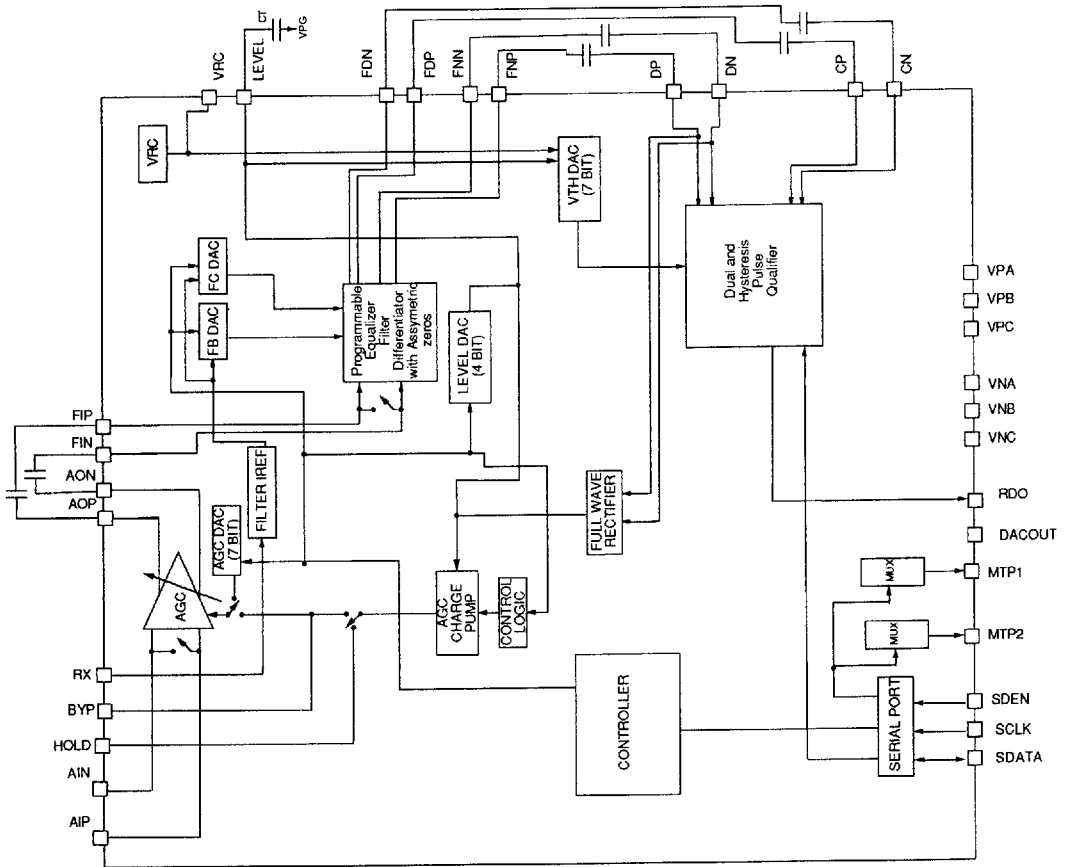
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SSI 34P3205 Pulse Detector for Floppy/Tape Storage

BLOCK DIAGRAM



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