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DESCRIPTION

The SSI 32R1575R is a BiCMOS monolithic integrated circuit designed for use with four-terminal Magneto-Resistive recording heads. The reader architecture is MR current bias/voltage sense. A bi-directional serial port is provided to enable the implementation of on-chip MR bias and write current DACs. It provides a write driver, low noise read amplifier, serial port controlled head selection, servo bank write, write current, MR read bias current, and read and write fault detection circuitry for up to six channels. In a servo write mode 2 or 3 channels can be selected at one time. The device requires +5 V and -5 V and comes in a 64-Lead TQFP package.

FEATURES

- +5 V, -5 V power supplies
- Designed for four-terminal MR heads with minimum external components
- Truly differential current bias/voltage sense MR read amp
- MR head bias current range = 4 - 14.5 mA
- MR read gain = 220 V/V (nom)
- MR read input noise = 0.75 nV/rt. Hz (nom)
- MR read input resistance = 240 Ω (nom)
- Differential PECL write data input
- Head voltage swing = 12 Vp-p (nom)

(continued)

BLOCK DIAGRAM

