

September 1997

DESCRIPTION

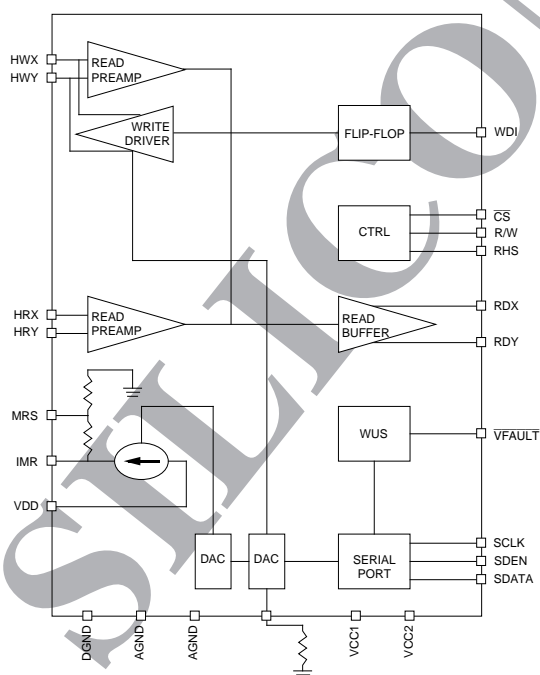
The SSI 34R3436 is a BiCMOS monolithic integrated circuit designed for use with one 2-terminal thin film recording head and one MR sensing element. It provides a low noise read amplifier and write driver for the thin film head, a low noise read amplifier and bias current for the MR element, and data protection circuitry. Power supply fault protection is provided by disabling the write current generator during power sequencing. System write-to-read recovery time is significantly improved by controlling the read channel common mode output voltage shift in the write mode. The SSI34R3436 provides the user with a serial port controllable write-current and MR bias adjustment feature. Fault conditions are indicated through the serial port.

The SSI 34R3436 requires both a +5 V and +12 V power supply.

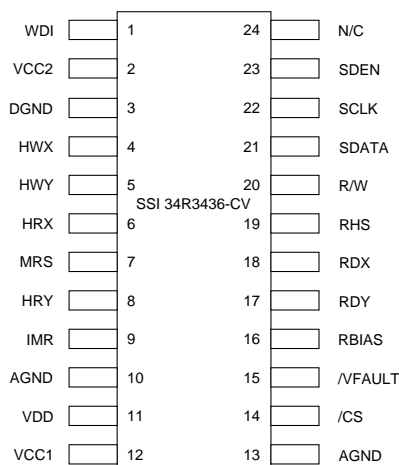
FEATURES

- **+5 V $\pm 10\%$ supply and +12 V $\pm 10\%$ supply**
- **Low power 3 mA ICC (idle mode)**
- **High Performance**
 - MR read mode gain = 100 V/V
 - TFH read mode gain = 300 V/V
 - Input noise = 1.1 nV/Hz max
 - Input capacitance = 5 pF nom
 - Write current range = 5.4-55 mA
- **Write unsafe detection**
- **Power supply fault protection**
- **Head short to ground protection**
- **Increased write-mode head swing 8 Vp-p diff (typical)**
- **24-Pin SOL, VSOP package**
- **Serial port controllable write current and read bias**
- **Serial port controllable flip-flop**
- **Head open or shorted detection**

BLOCK DIAGRAM



PIN DIAGRAM



24-Lead VSOP

CAUTION: Use handling procedures necessary for a static sensitive component.