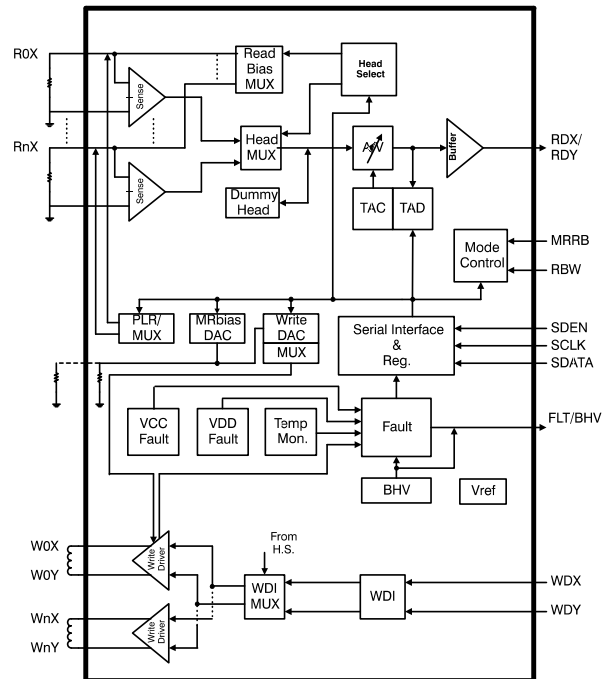


LD3514 +5, +8V GMR Head Preamplifier

LD3514
Advance Product Information



Block Diagram

FEATURES

GENERAL

- Current Bias/Current Sense Architecture
- 5V and 8V supply
- 3 line serial interface with readback (3.3V CMOS compatible) (optional 2 line serial port)
- Power management modes
- On-chip temperature monitor
- Internal reference resistor (2Kohm) (optional)
- Head unsafe fault detection for both read and write
- Fast recovery mode

READER

- 400MHz Read Bandwidth
- One side grounded input, fully differential output
- Programmable Read frequency boost
- Programmable GMR resistance measurement mode (5-bits)
- Programmable GMR Pinned Layer Reset (PLR) pulse circuit
- GMR bias current range 2-9.75 mA (5-bits)
- GMR resistor range = 25 to 75
- Programmable read gain = 170V/V or 225V/V
- Input equivalent noise 0.65 nV/Hz @ Rmr = 45
- Programmable TA detection & compensation
- Integrated Reader low frequency blocking Capacitor

WRITER

- 0.7ns Write rise/fall time (L= 70nH/ 45mA)
- Write current range = 15-60 mA (5-bits)
- Programmable write current overshoot (4-bits) and undershoot (3-bits)
- 200ns Write/Read switching time
- Servo write (half bank or all bank write)