



**LinearDimensions**  
SEMICONDUCTOR

## LND-SENS94

COMPLETE ANALOG SENSOR POLLING SYSTEM

### The LND-SENS94 Complete Analog Sensor Polling System

What is the LND-SENS94?

The LND-SENS94 is every analog designers best friend. This IC contains all of the devices required to poll, filter, amplify and offset AC or DC input signals. The device has outputs after each stage so that it is possible to leave out an unneeded stage (like the filter) or to input additional data to the data stream.

How does it work?

- Connect Vcc and Gnd, connect the clock signal.
- Reset the device by holding M and D low for at least 64 clock cycles. This will clear all registers.
- Load level shift registers A and B, and set all of the appropriate level shifts, gains, filter centre frequency, etc.
- Connect input signal to In.
- Uses a simple 8Mhz or oscillator input.
- Device is extremely simple to use and microcontroller friendly.

How Do I get samples?

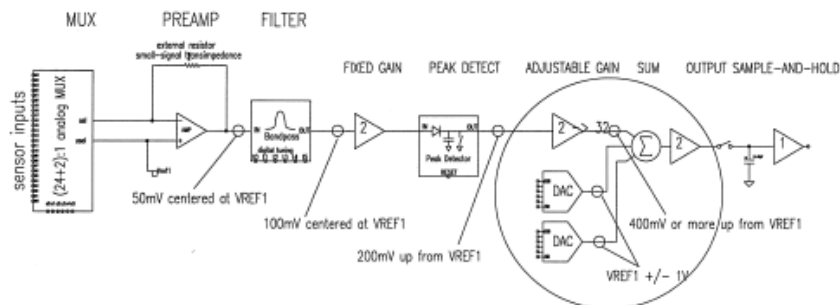
The LND-SENS94 is available in 84 PGA or 64 pin PLCC packages. Please contact your Linear Dimensions representative for more information or contact us directly at the number below. Our web address is [www.lineardimensions.com](http://www.lineardimensions.com).

#### Features

- 48 Channel Mux
- Adjustable Bandpass Filter
- Accurate Peak Detect
- Programmable DC Gain
- Two DC Level Shifters
- All Functions Digitally Controlled Including

#### Applications

- Sensor Polling
- Security Monitors
- Input devices
- Embedded Controllers
- Microcontroller Peripheral Device
- Industrial Device Polling



The sum is done in the gain stage, so the signal won't rail internally.

There are 5 internal registers to control MUX address, filter tuning, signal gain, and DAC settings.