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## LM-HDRSD-ADC-01

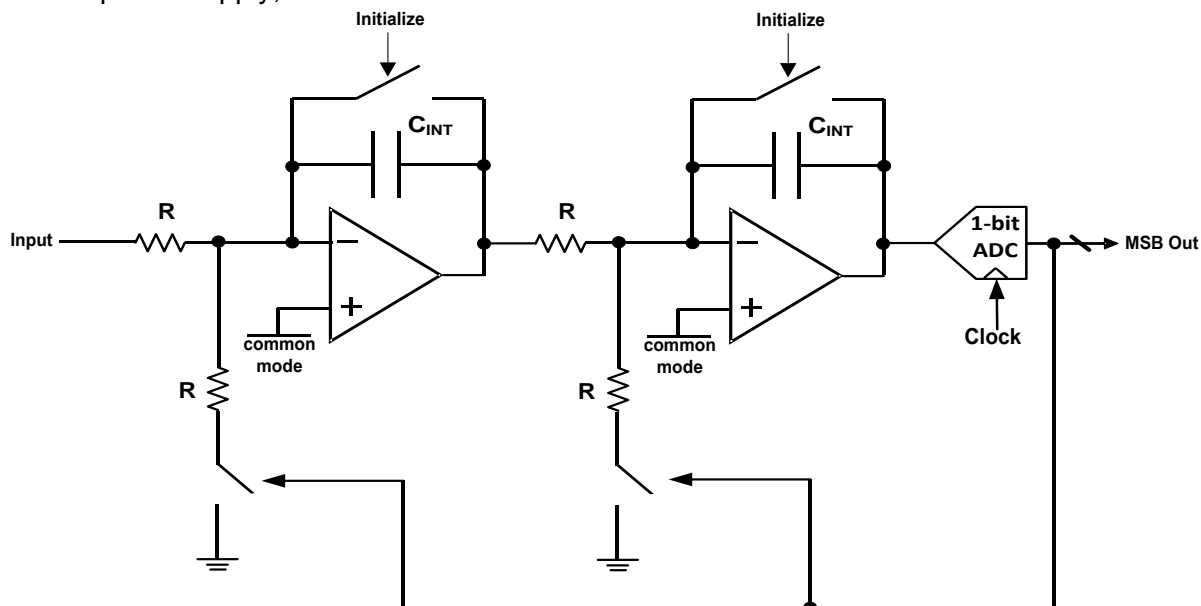
## High Dynamic Range $\Sigma$ - $\Delta$ ADC IP Block

### Introduction

This document describes the features and key specifications of a High Dynamic Range  $\Sigma\Delta$  ADC IP block. The process technology for this block is 180 nm CMOS. Modifications to this circuit and different process options are available. Please contact Linear MicroSystems at [sales@linearmicrosystems.com](mailto:sales@linearmicrosystems.com) for a quotation today.

### Features:

- Second Order 1 bit modulator
- Resolution: 11 bits
- Maximum input frequency: 50 kHz
- ADC clock input frequency: 24 MHz nominal
- Full scale input: 1.25V peak-to-peak single-ended
- Noise density @ 100 kHz, 65 dB, FS, @ 1 MHz, 43 dB, FS
- SNR @ 50 kHz, -2 dB, FS input, > 65 dB, FS
- SFDR @ 50 kHz, -2 dB, FS input, > 65 dB, FS
- 5V power supply, 20 mW



### Deliverables:

- GDSII + LVS Spice netlist
- User documentation

### Ordering Information:

Ordering Part Number	Technology Options	Conditions	Version
LM-HDRSD-ADC_01	180nm CMOS	0 to 70C	1