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## LM-ADC-12B-01

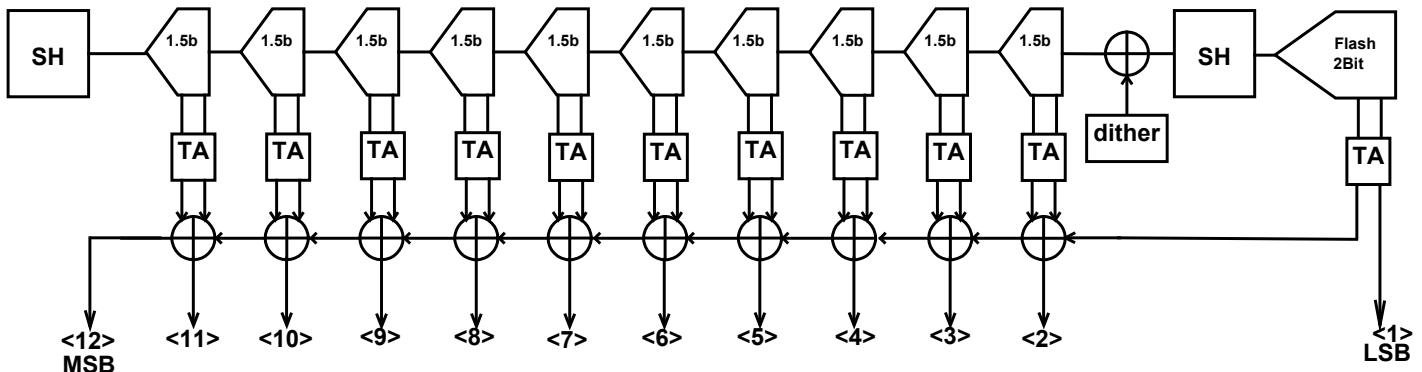
## 12-bit Pipeline ADC IP Block

### Introduction

This document describes the features and key specifications of a 12-bit Pipeline 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:

- Resolution: 12 bits
- ADC clock input frequency: 60 MHz nominal
- Input full scale signal: 1.6V peak-to-peak differential
- < +/- 1 bit DNL
- < +/- 1 bit INL
- THD @ 10 kHz, -0.5 dB, FS input < 70 dB, FS
- SFDR @ 10 kHz, -0.5 dB, FS input < 70 dB, FS
- 3.3V power supply, 20 mW
- Added analog dither for spur reduction – digital ON/OFF control
- Digital trim capability for improved INL and DNL



### Deliverables:

- GDSII + LVS Spice netlist
- User documentation

### Ordering Information:

Ordering Part Number	Technology Options	Conditions	Version
LM-ADC-12B-01	180 nm CMOS	0 to 70C	1