



# ADS931

PRELIMINARY INFORMATION  
SUBJECT TO CHANGE  
WITHOUT NOTICE

## 8-Bit, 30MHz Sampling ANALOG-TO-DIGITAL CONVERTER

### FEATURES

- +3V TO +5V SUPPLY OPERATION
- LOW POWER: 45mW at +3V
- ADJUSTABLE FULL SCALE RANGE
- HIGH SNR: 49dB
- LOW DNL: 0.5LSB
- POWER DOWN
- 28-PIN SSOP PACKAGES

### APPLICATIONS

- BATTERY POWERED EQUIPMENT
- CAMCORDERS
- PORTABLE TEST EQUIPMENT
- COMPUTER SCANNERS
- COMMUNICATIONS
- VIDEO DIGITIZING

### DESCRIPTION

The ADS931 is a high speed pipelined analog-to-digital converter that is specified to operate from +5V down to +3V supplies. This complete converter includes a high bandwidth track/hold and an 8-bit quantizer. The performance is specified with a single-ended input range of 0.5V to 2.5V when operating off of a +3V supply. This device also allows for an industry standard input range of 2V to 4V when operating on 5V supplies. The input range is set by the external reference values.

The ADS931 employs digital error correction techniques to provide excellent differential linearity for demanding imaging applications. Its low distortion and high SNR give the extra margin needed for telecommunications, video and test instrumentation applications. This high performance A/D converter is specified for performance at a 30MHz sampling rate. The ADS931 is available in a 28-pin SSOP package.