LM231AN

VFC 100kHz 8-Pin PDIP Rail

Manufacturer:	Texas Instruments, Inc
Package/Case:	DIP8
Product Type:	Data Conversion ICs
Lifecycle:	Obsolete

Images are for reference only

Inquiry

General Description

The LMx31 family of voltage-to-frequency converters are ideally suited for use in simple low-cost circuits for analog-to-digital conversion, precision frequency-to-voltage conversion, long-term integration, linear frequency modulation or demodulation, and many other functions. The output when used as a voltage-to-frequency converter is a pulse train at a frequency precisely proportional to the applied input voltage. Thus, it provides all the inherent advantages of the voltage-to-frequency conversion techniques, and is easy to apply in all standard voltage-to-frequency converter applications.

Further, the LMx31A attain a new high level of accuracy versus temperature which could only be attained with expensive voltage-to-frequency modules. Additionally the LMx31 are ideally suited for use in digital systems at low power supply voltages and can provide low-cost analog-to-digital conversion in microprocessor-controlled systems. And, the frequency from a battery-powered voltage-to-frequency converter can be easily channeled through a simple photo isolator to provide isolation against high common-mode levels.

The LMx31 uses a new temperature-compensated band-gap reference circuit, to provide excellent accuracy over the full operating temperature range, at power supplies as low as 4 V. The precision timer circuit has low bias currents without degrading the quick response necessary for 100-kHz voltage-to-frequency conversion. And the output are capable of driving 3 TTL loads, or a high-voltage output up to 40 V, yet is short-circuit-proof against VCC.

Key Features

Ensured Linearity 0.01% Maximum

Improved Performance in Existing Voltage-to-

Frequency Conversion Applications

Split or Single-Supply Operation

Operates on Single 5-V Supply

Pulse Output Compatible With All Logic Forms

Excellent Temperature Stability: ±50 ppm/°C

Maximum

Low Power Consumption: 15 mW Typical at 5 V

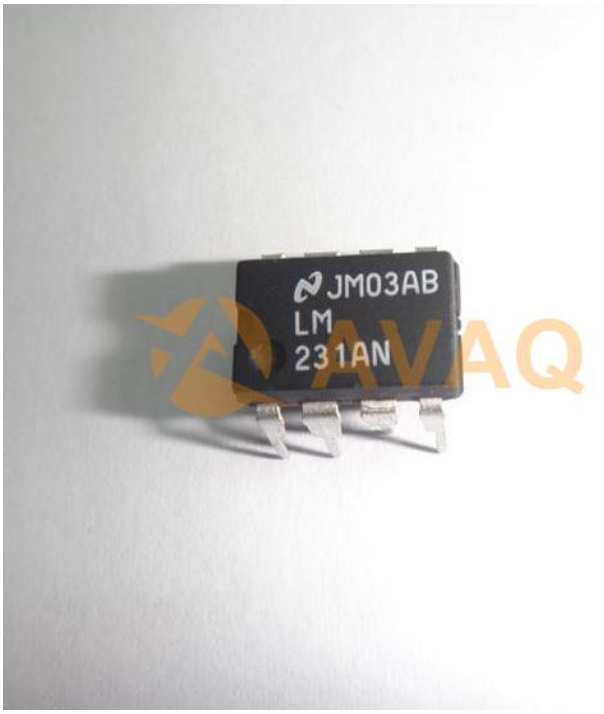
Wide Dynamic Range, 100 dB Minimum at 10-kHz

Full Scale Frequency

Wide Range of Full Scale Frequency:

1 Hz to 100 kHz

Low-Cost



Recommended For You

LM2907N	LM2917M	LM2907M-8
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
DIP14	SOP14	SOP-8

LM2917N-8

Texas Instruments, Inc

DIP8

LM2907MX-8

Texas Instruments, Inc

SOP8

LM2917N

Texas Instruments, Inc

DIP14

LM231AN/NOPB

Texas Instruments, Inc

DIP8

LM2907MX-8/NOPB

Texas Instruments, Inc

SOP8

LM331H

Texas Instruments, Inc

CAN8

LM131AH/883

Texas Instruments, Inc

CAN8

LM231N/NOPB

Texas Instruments, Inc

DIP-8

LM98620VHB/NOPB

Texas Instruments, Inc

QFP80

LM231H

Texas Instruments, Inc

CAN8

LM98640W-MLS

Texas Instruments, Inc

CQFP68

LM2907N-8

Texas Instruments, Inc

DIP8