

LDC1000NHRT

Inductance to Digital Converter 28ksps 24bit 16-Pin WSON EP T/R

Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: WSON16

Product Type: Discrete Semiconductor Modules

RoHS: RoHS Compliant/Lead free

Lifecycle: Obsolete



Images are for reference only

Inquiry

Safety, Industrial, Metering, Computers & Computer Peripherals, Portable Devices,

General Description

Inductive Sensing is a contact-less, short-range sensing technology that enables low-cost, high-resolution sensing of conductive targets in the presence of dust, dirt, oil, and moisture, making it extremely reliable in hostile environments. Using a coil which can be created on a PCB as a sensing element, the LDC1000 enables ultra-low cost system solutions.

Inductive sensing technology enables precise measurement of linear/angular position,

displacement, motion, compression, vibration, metal composition, and many other applications in markets including automotive, consumer, computer, industrial, medical, and communications. Inductive sensing offers better performance and reliability at lower cost than other, competitive solutions.

Medical

Key Features Application

Magnet-free operation
Sub-micron precision

Adjustable sensing range (through coil design)

Remote sensor placement (decoupling LDC from harsh environments)

High durability (by virtue of contact-less operation)

Insensitivity to environmental interference (such as dirt, dust, water, oil)

4.75 to $5.25\mathrm{V}$ (analogue) and 1.8 to $5.25\mathrm{V}$ (IO) Supply voltage

1.7mA Supply current (without LC tank)

16-bit Rp resolution

24-bit L resolution

5kHz to 5MHz LC Frequency range

Green product and no Sb/Br

Recommended For You

LDC1612DNTT

Texas Instruments, Inc

WSON-12

LDC1614QRGHTQ1

Texas Instruments, Inc

WQFN-16

LDC1000NHRJ

Texas Instruments, Inc

WSON16

LDC1312DNTR

Texas Instruments, Inc

WSON-12

LDC1312DNTT

Texas Instruments, Inc

WSON-12

LDC1312QDNTTQ1

Texas Instruments, Inc

WSON-12

LDC1051NHRJ

Texas Instruments, Inc

WSON-16

LDC2112YFDR

Texas Instruments, Inc

DSBGA-16

LDC1041NHRT

Texas Instruments, Inc

16-WSON

LDC2114PWT

Texas Instruments, Inc

TSSOP16

LDC2114YFDR

Texas Instruments, Inc

DSBGA16

LDC1051NHRR

Texas Instruments, Inc

WSON16

LDC1000QPWRQ1

Texas Instruments, Inc

TSSOP16

LDC2114PWR

Texas Instruments, Inc

TSSOP16

LDC1041NHRJ

Texas Instruments, Inc

WSON