

LVDS Driver/Receiver 100Mbps 0.45V 14-Pin TSSOP T/R



General Description

The TLV246x is a family of low-power rail-to-rail input/output operational amplifiers specifically designed for portable applications. The input common-mode voltage range extends beyond the supply rails for maximum dynamic range in low-voltage systems. The amplifier output has rail-to-rail performance with high-output-drive capability, solving one of the limitations of older rail-to-rail input/output operational amplifiers. This rail-to-rail dynamic range and high output drive make the TLV246x ideal for buffering analog-to-digital converters.

The operational amplifier has 6.4 MHz of bandwidth and 1.6 V/ μ s of slew rate with only 500 μ A of supply current, providing good ac performance with low power consumption. Three members of the family offer a shutdown terminal, which places the amplifier in an ultralow supply current mode (I_{DD} = 0.3 μ A/ch). While in shutdown, the operational-amplifier output is placed in a high-impedance state. DC applications are also well served with an input noise voltage of 11 nV/4 Hz and input offset voltage of 100 μ V.

This family is available in the low-profile SOT23, MSOP, and TSSOP packages. The TLV2460 is the first rail-to-rail input/output operational amplifier with shutdown available in the 6-pin SOT23, making it perfect for high-density circuits. The family is specified over an expanded temperature range ($T_A = -40^{\circ}C$ to 125°C) for use in industrial control and automotive systems, and over the military temperature range ($T_A = -55^{\circ}C$ to 125°C) for use in military systems.

Key Features

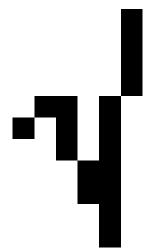
Rail-to-Rail Output Swing

Gain Bandwidth Product ... 6.4 MHz

±80 mA Output Drive Capability

Supply Current...500 µA/channel

Input Offset Voltage...100 μV



Input Noise Voltage ... 11 nV/

Hz

Slew Rate...1.6 V/µs

Micropower Shutdown Mode (TLV2460/3/5)...0.3 µA/Channel

Universal Operational Amplifier EVM

Available in Q-Temp Automotive HighRel Automotive Applications Configuration Control/Print Support Qualification to Automotive Standards

Recommended For You

SN65LVDS3486D

Texas Instruments, Inc

SOP-16

SN65LVDS3487D

Texas Instruments, Inc SOP16

DS90C032TM

Texas Instruments, Inc SOP16

DS90C031BTM

Texas Instruments, Inc SOP16

SN65LVDS32D

Texas Instruments, Inc SOP-16

DS90UB954TRGZTQ1

Texas Instruments, Inc QFN48

DS90UB947TRGCTQ1

Texas Instruments, Inc

VQFN-64

SN65LVDS31PW

Texas Instruments, Inc TSSOP-16

SN65LVDS31D

Texas Instruments, Inc SOP

DS90UB954TRGZRQ1

Texas Instruments, Inc VQFN48

DS90LV011AQMF/NOPB

Texas Instruments, Inc SOT23-5

SN65LVDS33D

Texas Instruments, Inc SOP-16

SN65LVDS32PW Texas Instruments, Inc TSSOP16

SN65DSI83TPAPRQ1

Texas Instruments, Inc HTQFP-64

DS90UB924TRHSTQ1

Texas Instruments, Inc WQFN-48