

Can the LM358 be used in a transimpedance amplifier



Overview

The LM358 is primarily used in the signal conditioning stage. The first op-amp within the LM358 package is often configured as a transimpedance amplifier (current-to-voltage converter) for. The LM358B and LM2904B devices are the next-generation versions of the industry-standard operational amplifiers (op amps) LM358 and LM2904, which include two high-voltage (36V) op amps. These devices provide outstanding value for cost-sensitive applications, with features including low offset. To explain in simple words a Transimpedance amplifier is a converter circuit which converts the input current to a proportional output voltage. Any tips on how to reach these constraints?

I know the. The LM324 and LM358 family of op amps are popular and long-lived general purpose amplifiers due to their flexibility, availability, and cost-effectiveness. Its key characteristics for sensor applications include low power consumption, the ability to operate from a single power supply (ranging from 3V to 32V), and a wide input common-mode voltage range. I've been trying for a while to construct a circuit to convert and amplify the current generated by a photodiode with the output as a voltage which ranges from 0-3.



Article Content

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Understanding the LM358 Proximity Sensor: Design, Applications, and ...

The LM358 is primarily used in the signal conditioning stage. The weak current signal from the photodetector is

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Comprehensive Guide To Texas Instruments LM358 Series

Series Overview The LM358 Series consists of a range of low-voltage, dual operational amplifiers designed to provide

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LM358 Dual Op-Amp Features, Pins, Working & Applications

LM358 IC can handle 3V- 32V DC supply and source up to 20 mA per channel. In this guide, we will learn about the

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LM358 Transimpedance Amplifier

There is probably a better chip to amplify this because the input bias current of the LM358 chip can be as high as

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LM358 Op-Amp and Transistor Amplifier Circuit | Cirkuit Designer

Explore comprehensive documentation for the LM358 Op-Amp and Transistor Amplifier Circuit project, including components, wiring,

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LM358 IC and Its Applications

LM358 IC: A Versatile Operational Amplifier and Its Applications The LM358 Integrated Circuit (IC) is one of the most

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LM358 circuits » Structure and functionality explained

The LM358 integrated circuit is a very popular component that belongs to the category of operational amplifiers. Years

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How to Use LM358 OP-AMP: Pinout, Features & Circuits

Explore the LM358 op-amp IC: see its pinout, key specs, and real-world circuit examples. Perfect for beginners and

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AN-116 Use the LM158/LM258/LM358 Dual, Single Supply Op Amp

ABSTRACT This application note discusses the use of the LM158/LM258/LM358 dual op amp when operated from a single supply.

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LM358 OP AMP: Design Guide, PIN Configuration, Common Circuit ...

This comprehensive article will help you understand LM358 op-amp circuit design, PIN configuration, and software

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Non-Inverting Amplifier Using LM358 - Tricky Circuit

A non-inverting amplifier is a widely used operational amplifier (op-amp) configuration that amplifies an input signal

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LM358, Dual Operational Amplifiers

TI's LM358, dual operational amplifiers are designed for applications that include Blu-ray players, home theaters,

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Industry-Standard Dual Operational Amplifiers datasheet (Rev

The LM358B and LM2904B devices are the next-generation versions of the industry-standard operational amplifiers (op amps)

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Introduction to LM358, Working, Pinout & Applications

In this post, we will discuss the Introduction to LM358. LM358 is low power consuming less expensive dual-channel

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How to Use LM358 Op-Amp: Examples, Pinouts, and

Learn how to use the LM358 Op-Amp with detailed documentation, including pinouts, usage guides, and

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Application Design Guidelines for LM324 and LM358 Devices

ABSTRACT The LM324 and LM358 family of op amps are popular and long-lived general purpose amplifiers due to their flexibility,

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Comprehensive Guide to LM358 Operational Amplifiers

Whether you are an electronics enthusiast or a seasoned engineer, understanding the capabilities and applications of

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LM358 circuits » Structure and functionality explained

When you look closely, the inner workings of an LM358 are quite straightforward. This is because there are only two

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LM358 op-amp: A Complete User Guide and More! – PCB COPY

5. Can I replace an LM741 with an LM358 in my circuit? In many cases, you can replace an LM741 with an LM358, as

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Using a LM358 op-amp for a transimpedance amplifier? : r ...

Instead of tying it to ground, you could use a voltage divider to get you the desired offset (be mindful of the power dissipation). You

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Application Design Guidelines for LM324 and LM358 Devices

From this discussion we can conclude that 3-V supply designs can be used successfully. However, applications using 5-V or higher

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How to Use LM358: Examples, Pinouts, and Specs

The LM358 is a versatile dual operational amplifier (op-amp) integrated circuit (IC) that is commonly used in a variety of electronic

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Inverting Amplifier using the LM358

Learning Objectives To interpret critical information from the LM358 datasheet. To use node-voltage analysis to analyze an

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Understanding the Role of Operational Amplifiers and

Understanding the Role of Operational Amplifiers and What Is LM358.: Operational amplifier, is essentially

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From Millivolts to Volts A Practical LM358 Amplifier Tutorial

Build a simple non-inverting amplifier with an LM358 op-amp. This practical tutorial shows you how to use two

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Transimpedance Amplifier Tutorial

The most commonly used Current to Voltage converter is the Transimpedance Amplifier

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